

# **PENDING RULES COMMITTEE RULES REVIEW BOOK**

**Submitted for Review Before  
House Environment, Energy  
& Technology Committee  
67th Idaho Legislature  
Second Regular Session – 2024**



*Prepared by:*

*Office of the Administrative Rules Coordinator  
Division of Financial Management*

*January 2024*

**HOUSE ENVIRONMENT, ENERGY, & TECHNOLOGY COMMITTEE**

**ADMINISTRATIVE RULES REVIEW**

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## **IDAPA 24 – DIVISION OF OCCUPATIONAL AND PROFESSIONAL LICENSES**

### **24.05.01 – RULES OF THE BOARD OF DRINKING WATER AND WASTEWATER PROFESSIONALS**

#### **DOCKET NO. 24-0501-2301 (ZBR CHAPTER REWRITE, FEE RULE)**

#### **NOTICE OF RULEMAKING – ADOPTION OF PENDING RULE**

[LINK: LSO Rules Analysis Memo and Cost/Benefit Analysis \(CBA\)](#)

**EFFECTIVE DATE:** This rule has been adopted by the agency and is now pending review by the 2024 Idaho State Legislature and must be approved by concurrent resolution of the Legislature to go into effect, in accordance with Section 67-5224(2)(c), Idaho Code. The pending rule will become final and effective upon the adjournment, *sine die*, of the Second Regular Session of the Sixty-seventh Idaho Legislature after approval.

**AUTHORITY:** In compliance with Section 67-5224, Idaho Code, notice is hereby given that this agency has adopted a pending rule. The action is authorized pursuant to Sections 54-2406, 54-2407, 67-2614, 67-9406, and 67-9409, Idaho Code.

**DESCRIPTIVE SUMMARY:** The following is a concise explanatory statement of the reasons for adopting the pending rule and a statement of any change between the text of the proposed rule and the text of the pending rule with an explanation of the reasons for the change:

The pending rule is being adopted under [Executive Order 2020-01, Zero Based Regulation](#). Changes from the proposed rules have been made to Rule 100.03.e., 100.05, and 200.03.e. as a result of the negotiated rulemaking process.

- Rule 100.03.e. – Pending language allows individuals to qualify for a Class 1 Operator license based upon experience from a Very Small Wastewater System. This language was added to provide a path to licensure for individuals with experience at a Very Small Wastewater System in response to concern that this path to licensure was currently absent from rule.
- Rule 100.05 – Pending language added that continuing education for backflow assembly testers must be in person and board approved. Distance education remains in rule for other licensure types.
- Rule 200.03.e. – Pending language was added to clarify that field tests with calibrated equipment was included in the Code of Conduct.

The text of the pending rule has been amended in accordance with Section 67-5227, Idaho Code. Only those sections that have changes that differ from the proposed text are printed in this bulletin. The complete text of the proposed rule was published in the August 2, 2023, Idaho Administrative Bulletin, [Vol. 23-8, pages 190-211](#).

**FEE SUMMARY:** Pursuant to Section 67-5224(2)(d), Idaho Code, this pending fee rule shall not become final and effective unless affirmatively approved by concurrent resolution of the Legislature. The following is a description of the fee or charge imposed or increased in this rulemaking:

The fees for applications, licenses, certificates, and reinstatement as designated in Rule 400 of these pending rules are authorized in Section 54-2407, Idaho Code. None of these fees are being changed as a result of this rulemaking or since being previously reviewed by the Idaho legislature.

**FISCAL IMPACT:** The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars (\$10,000) during the fiscal year:

There is no anticipated change to the State General Fund.

**ASSISTANCE ON TECHNICAL QUESTIONS:** For assistance on technical questions concerning this pending rule, contact Katie Stuart Bureau Chief- Administration, (208)-577-2489.

DATED this 6th day of December, 2023.

Katie Stuart  
Bureau Chief- Administration  
11341 W. Chinden Blvd., Bldg. #4  
Boise, ID 83714  
Phone: (208) 577-2489  
Email: [katie.stuart@dopl.idaho.gov](mailto:katie.stuart@dopl.idaho.gov)

**THE FOLLOWING NOTICE PUBLISHED WITH THE PROPOSED RULE**

**AUTHORITY:** In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking procedures. The action is authorized pursuant to Section 67-2604, Idaho Code, and Sections 54-2406, 54-2607, 67-2614, 67-9406, and 67-9609, Idaho Code.

**PUBLIC HEARING SCHEDULE:** A public hearing concerning this rulemaking will be held as follows:

**Thursday, August 10, 2023, 9:00 a.m. MT**

**Division of Occupational and Professional Licenses  
Chinden Campus Building 4  
11341 W. Chinden Blvd., Bldg. #4  
Boise, ID 83714**

**Telephone and web conferencing information will be posted on:  
<https://dopl.idaho.gov/calendar/> and <https://townhall.idaho.gov/>**

The hearing site will be accessible to persons with disabilities, if needed. Requests for accommodation must be made not later than five (5) days prior to the meeting to the agency address below.

**DESCRIPTIVE SUMMARY:** The following is a nontechnical explanation of the substance and purpose of the proposed rulemaking:

Under [Executive Order 2020-01, Zero-Based Regulation](#), the State Board of Drinking Water and Wastewater Professionals is striving to prevent the accumulation of costly, ineffective, and outdated regulations and reduce regulatory burden to achieve a more efficient operation of government. In conjunction with stakeholders, the proposed rule changes reflect a comprehensive review of this chapter by collaborating with the public to streamline or simplify the rule language in this chapter and to use plain language for better understanding. This proposed rulemaking updates the rules to comply with governing statute and Executive Order 2020-01.

**FEE SUMMARY:** The following is a specific description of the fee or charge imposed or increased:

The fees for applications, licenses, certificates, and reinstatement as designated in Rule 400 of these proposed rules are authorized in Section 54-2407, Idaho Code. None of these fees are being changed as a result of this rulemaking or since being previously reviewed by the Idaho legislature.

**FISCAL IMPACT:** The following is a specific description, if applicable, of any negative fiscal impact on the State General Fund greater than ten thousand dollars (\$10,000) during the fiscal year as a result of this rulemaking:

This rulemaking is not anticipated to have any negative fiscal impact on the State General Fund.

**NEGOTIATED RULEMAKING:** Pursuant to Section 67-5220, Idaho Code, negotiated rulemaking was conducted under Docket No. 24-ZBRR-2301. The Notice of Intent to Promulgate Rules - Negotiated Rulemaking was published in the April 5, 2023 Idaho Administrative Bulletin, Vol. 23-4, pp. 42-46.

**INCORPORATION BY REFERENCE:** Pursuant to Section 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the materials cited are being incorporated by reference into this rule: N/A.

**ASSISTANCE ON TECHNICAL QUESTIONS, SUBMISSION OF WRITTEN COMMENTS:** For assistance on technical questions concerning the proposed rule, contact Michael Hyde, Bureau Chief, at (208) 332-7133.

Anyone may submit written comments regarding this proposed rulemaking. All written comments must be directed to the undersigned and must be delivered on or before August 23, 2023.

DATED this 6th day of July, 2023.

**THE FOLLOWING IS THE TEXT OF ZBR DOCKET NO. 24-0501-2301**

## **24.05.01 – RULES OF THE BOARD OF DRINKING WATER AND WASTEWATER PROFESSIONALS**

### **000. LEGAL AUTHORITY.**

These rules are promulgated pursuant to Sections 54-2406, 54-2607, 67-2614, 67-9406, 67-9609, Idaho Code.

( )

### **001. SCOPE.**

These rules govern the practice of drinking water operators, wastewater operators, and backflow assembly testers.

( )

### **002. DEFINITIONS.**

**01. Very Small Public Drinking Water System.** A community or non-transient non-community public water system that serves five hundred (500) persons or less and has no treatment other than disinfection or has only treatment which does not require any chemical treatment, process adjustment, backwashing or media regeneration by an operator (e.g. calcium carbonate filters, granular activated carbon filters, cartridge filters, ion exchangers).

( )

**02. Very Small Wastewater System.** A public wastewater system that serves five hundred (500) connections or less and includes a collection system with a system size of six (6) points or less on the Idaho Department of Environmental Quality (DEQ) system classification rating form and is limited to only one (1) of the following wastewater treatment processes: aerated lagoons; non-aerated lagoon(s); primary treatment; or primary treatment discharging to a large soil absorption system (LSAS).

( )

### **003. -- 099. (RESERVED)**

### **100. LICENSURE.**

#### **01. Classifications.**

License Type	Classification
Drinking Water Distribution Operator Drinking Water Treatment Operator	Operator-In-Training, Very Small System, Class I Restricted, Class I, II, III, or IV
Wastewater Treatment Operator Wastewater Collections Operator	Operator-In-Training, Very Small System, Class I Restricted, Class I, II, III, IV, or Land Application
Wastewater Laboratory Analyst	Class I, II, III, or IV
Backflow Assembly Tester	

( )

**02. Examination Requirement.** Applicants must pass a written examination for each license type and classification. ( )

**03. Education and Experience Requirements.** Applicants must present proof of the following: ( )

**a. Operator-In-Training.** Passage of the board-approved examination or enrollment in a board-approved apprenticeship program. The Operator-In-Training license is valid for five (5) years. ( )

**b. Very Small Water.** Eighty-eight (88) hours of on-site operating experience at a water system and twelve (12) hours of chlorination and water distribution course(s). ( )

**c. Very Small Wastewater.** Eighty-eight (88) hours of on-site operating experience at a wastewater collection or treatment system; six (6) hours of pumps and motors or collection course(s); and six (6) hours of lagoon operation and maintenance, large soil absorption system, or wastewater treatment course(s). ( )

**d. Class I Restricted.** Two hundred sixty (260) hours of on-site operating experience at a Class I or higher system during twelve (12) consecutive months with the system and sixteen (16) hours of continuing education relevant to the license. A restricted license is limited to a specific system. ( )

**e. Class I Operator.** One thousand six hundred (1,600) hours of on-site operating experience at a Class I or higher system, or 3200 hours of experience at a Very Small Wastewater System, or successful completion of one (1) year of an approved apprenticeship program. ( )

**f. Class II Operator.** Four thousand eight hundred (4,800) hours of on-site operating experience at a Class I or higher system or successful completion of an approved apprenticeship program. ( )

**g. Class III Operator.** Two (2) years of postsecondary education in environmental control, engineering or related science or successful completion of an approved apprenticeship program and six thousand four hundred (6,400) hours of on-site operating experience, including three thousand two hundred (3,200) hours of responsible charge of a major segment of the system, at a Class II or higher system. ( )

**h. Class IV Operator.** Four (4) years of postsecondary education in environmental control, engineering or related science or successful completion of an approved apprenticeship program; and six thousand four hundred (6,400) hours of on-site operating experience, including three thousand two hundred (3,200) hours of responsible charge of a major segment of the system, at a Class III or higher system. ( )

**i. Wastewater Land Application.** A wastewater Class I or higher operation license and eight hundred (800) hours of on-site operating experience at a wastewater land application system. A wastewater land application operator who is in responsible charge must be licensed at a class equal to or greater than the wastewater system classification. The wastewater treatment license must be maintained to renew the wastewater land application. ( )

**j. Backflow Assembly Tester.** Successful completion of a Board-approved training program and

passage of a practical examination using University of Southern California (USC) testing procedures. ( )

**k.** Class I Wastewater Laboratory Analyst. One thousand six hundred (1,600) hours of lab experience at a Class I or higher system. ( )

**l.** Class II Wastewater Laboratory Analyst. Four thousand eight hundred (4,800) hours of lab experience at a Class I or higher system. ( )

**m.** Class III Wastewater Laboratory Analyst. Two (2) years of postsecondary education in environmental control, engineering or related science and six thousand four hundred (6,400) hours of lab experience at a Class II or higher system. ( )

**n.** Class IV Wastewater Laboratory Analyst. Four (4) years of postsecondary education in environmental control, engineering or related science and six thousand four hundred (6,400) hours of lab experience at a Class III or higher system. ( )

**04. Substitutions.** An applicant may substitute education and experience requirements as follows: ( )

**a.** Completion of an apprenticeship program will be accepted in lieu of education or experience requirements as identified in Rule 100.03 if the program provides experience and education related to the operation of Class I-IV systems; is registered with the U.S. Department of Labor, Office of Apprenticeship; meets the Standards of Apprenticeship developed by the U.S. Department of Labor; and fulfills the requirements in Rules 100.03. ( )

**b.** Education for Experience. For Classes I, II, III and IV, postsecondary education in environmental control, engineering or related science can be substituted for up to fifty percent (50%) of the required experience, at a rate of thirty (30) college semester credits or forty-five (45) hours of continuing education for one thousand six hundred (1,600) hours of experience. Education substituted for experience must be in addition to the minimum education requirement. ( )

**c.** Experience for Education. One thousand six hundred (1,600) hours of on-site operating experience may be substituted for one (1) year of high school. For Class III and IV, responsible charge experience may be substituted for postsecondary education at a rate of one thousand six hundred (1,600) hours of experience for one (1) year postsecondary education. Experience substituted for education must be in addition to the minimum experience requirement. ( )

**d.** Experience for Experience. ( )

**i.** Experience as a laboratory analyst may count towards one-half (1/2) of the required wastewater operating experience and experience as a wastewater operator may count towards one-half (1/2) of the required laboratory analyst experience. ( )

**ii.** The following experience may be substituted for one-half (1/2) of the operating experience requirement for Class I, II, III and IV: environmental or operations consultant; environmental or engineering branch of federal, state, county, or local government; wastewater collection system operator; wastewater treatment plant operator; water distribution system operator or manager; and/or waste treatment operation or maintenance. ( )

**iii.** The following experience may be substituted for one-half (1/2) of the operating experience requirement for Class I and II: construction of a water or wastewater distribution or collections system if such experience is documented in a declaration from a system owner or licensed operator. ( )

**05. Continuing Education.** To renew, a licensee must complete, during the prior licensing period, and retain proof of completion of six (6) classroom hours (0.6 CEUs) of continuing education germane to the license type, except that backflow assembly testers must complete an eight (8) hour refresher course every two (2) years. A licensee holding both drinking water and wastewater licenses must complete six (6) classroom hours for each license type. A remote or distant study course is acceptable if it is germane to the license type, except that backflow assembly testers must complete in-person and board-approved continuing education. ( )

**101. -- 199. (RESERVED)**

**200. PRACTICE STANDARDS.**

**01. Operator-in-Training.** Operators-in-training must practice under the direct supervision of a licensed operator of a type, category, and classification higher than the operator-in-training. No operator-in-training can accept or perform the designated responsible charge duties at any system. ( )

**02. Grandparent License.** The licensee may operate in responsible charge of the specific facility identified in the original application. The license is site specific, non-transferable, and does not grant authority for the holder to practice as an operator at any other system. The license becomes invalid when the classification of the system changes to a higher classification. ( )

**03. Operators and Backflow Assembly Testers Code of Conduct.** Operators and backflow assembly testers must: ( )

a. Perform duties with due care and diligence to protect the safety, health, and welfare of the public. ( )

b. Comply with all applicable local, state, and federal laws relating to their respective profession(s). ( )

c. Perform only those duties within their education, training, and experience and scope of licensure. ( )

d. Prepare reports which are accurate, objective, and include all relevant information. ( )

e. Use standard test procedures, operating procedures, methods, and equipment when conducting inspections, sampling, and field tests with calibrated equipment. ( )

f. Backflow assembly testers will observe or inspect existing installations of backflow prevention assemblies to identify whether the assembly is properly installed the assembly is adequate for the degree of hazard. ( )

g. When a backflow prevention assembly passes a field test, the report will be submitted to the consumer and relevant public water system within fifteen (15) business days of the field test. When a backflow prevention assembly is defective or fails to pass the field test, the report will be submitted to the consumer and relevant public water system within two (2) business days of the field test. ( )

**201. -- 399. (RESERVED)**

**400. FEES.**

<b>TYPE</b>	<b>AMOUNT (Not to Exceed)</b>
Application	\$25
License or Certificate	\$30 annually
Reinstatement	\$35

( )

**401. -- 999. (RESERVED)**



[Agency redlined courtesy copy]

*Italicized text indicates changes between the text of the proposed rule as adopted in the pending rule.*

## **24.05.01 – RULES OF THE BOARD OF DRINKING WATER AND WASTEWATER PROFESSIONALS**

### **000. LEGAL AUTHORITY.**

These rules are promulgated pursuant to Sections 54-2406, ~~54-2407, 67-2604, 67-2614, 67-9406, 67-9609~~, Idaho Code. ( )

### **001. SCOPE.**

These rules govern the practice of drinking water operators, wastewater operators, and backflow assembly testers. ( )

### ~~002. 009. (RESERVED)~~

### ~~010~~**002. DEFINITIONS.**

~~01. **Class I Restricted License.** Class I restricted license means a water or wastewater license associated with a specific class I system. A restricted license is available for water distribution or treatment or for wastewater collection or treatment. A restricted license is not transferable and does not qualify for endorsement. ( )~~

~~02. **DEQ.** The Idaho Department of Environmental Quality. ( )~~

~~03. **Direct Supervision.** Supervision in a way that will ensure the proper operation and maintenance of the public drinking water or public wastewater system. Supervision shall include, but not be limited to, providing written, hands on, or oral instruction as well as verification that the instructions are being completed. The supervisor has an active on-site or on-call presence at the specific facility. ( )~~

~~04. **Endorsement.** Endorsement (often referred to as “reciprocity”) is that process by which a person licensed in another jurisdiction may apply for a license in Idaho. ( )~~

~~05. **EPA.** The United States Environmental Protection Agency. ( )~~

~~06. **Experience.** One (1) year of experience is based upon a minimum of one thousand six hundred hours (1,600) worked. ( )~~

~~07. **On-Site Operating Experience.** On-site operating experience means experience obtained while physically present at the location of the system. ( )~~

~~08. **Operating Personnel.** Operating personnel means any person who is employed, retained, or appointed to conduct the tasks associated with the day to day operation and maintenance of a public drinking water system or a public wastewater system. Operating personnel shall include every person making system control or system integrity decisions about water quantity or water quality that may affect public health. ( )~~

~~09. **Person.** A human being, municipality, or other governmental or political subdivision or other public agency, or public or private corporation, any partnership, firm, association, or other organization, any receiver, trustee, assignee, agent or other legal representative of the foregoing or other legal entity. ( )~~

~~10. **Responsible Charge Operator.** An operator of a public drinking water system or wastewater system, designated by the system owner, who holds a valid license at a class equal to or greater than the drinking water system or wastewater classification, who is in responsible charge of the public drinking water system or the wastewater system. ( )~~

~~11. **Substitute or Back-Up Responsible Charge Operator.** An operator of a public drinking water or wastewater system who holds a valid license at a class equal to or greater than the drinking water or wastewater system classification, designated by the system owner to replace and to perform the duties of the responsible charge operator when the responsible charge operator is not available or accessible.(—)~~

~~1201. **Very Small Public Drinking Water System.** A community or non-transient non-community public water system that serves five hundred (500) persons or less and has no treatment other than disinfection or has only treatment which does not require any chemical treatment, process adjustment, backwashing or media regeneration by an operator (e.g. calcium carbonate filters, granular activated carbon filters, cartridge filters, ion exchangers). ( )~~

~~1302. **Very Small Wastewater System.** A public wastewater system that serves five hundred (500) connections or less and includes a collection system with a system size of six (6) points or less on the Idaho Department of Environmental Quality (DEQ) system classification rating form and is limited to only one (1) of the following wastewater treatment processes:(—)~~

- ~~a. **A**aerated lagoons;:(—)~~
- ~~b. **N**on-aerated lagoon(s);:(—)~~
- ~~c. **p**Primary treatment; or:(—)~~
- ~~d. **P**primary treatment discharging to a large soil absorption system (LSAS).( )~~

~~011.—149.(RESERVED)~~

~~150. **APPLICATION.**~~

~~Each applicant for licensure must submit a complete application together with the required fees. The applicant must provide or facilitate the provision of any supplemental third party documents that may be required. The Board will not review an application until all required information is furnished and the required fees paid.~~

~~01. **Licensure by Examination.** An application is made on the uniform application form adopted by the Board and furnished to the applicant by the Division. All applications will include:(—)~~

- ~~a. Documentation of having met the appropriate educational requirement:(—)~~
- ~~b. Documentation of all actual applicable experience giving kind and type of work done, together with dates of employment, and verification by affidavit of the most current applicable experience, signed by the person under whose supervision the work was performed.(—)~~

~~02. **Licensure by Endorsement.** An application is made on the uniform application form adopted by the Board and furnished to the applicant by the Division. All applications must include:(—)~~

- ~~a. Official documentation of licensure sent to the Division directly from each regulatory authority from which the applicant has obtained licensure. Documentation will include name, address, current status, date originally issued, expiration date, and any disciplinary action imposed:(—)~~
- ~~b. A copy of the current regulations governing licensure in each jurisdiction from which the applicant obtained licensure.(—)~~

~~03. **Application Required.** Applicants seeking licensure in any type or classification of licensure must submit a separate application for each type and classification of licensure being sought. Applicants holding a current type and classification of license and who are seeking a classification upgrade within the same license type and category are not required to submit an original license fee with their application.(—)~~

~~151003. -- 174099.(RESERVED)~~

**~~175~~ 100. LICENSURE TYPES AND CLASSIFICATIONS.**

The Board issues the following licenses under the provisions of Chapter 24, Title 54, Idaho Code.(—)

~~01. License Type Classifications.~~

<u>License Type</u>	<u>Classifications</u>
<u>Drinking Water Distribution Operator</u>	<u>Class Operator-In-Training, Very Small, Class I</u>
<u>Drinking Water Treatment Operator</u>	<u>Restricted, Class I, II, III, or IV</u>
<u>Wastewater Collections Operator</u>	
<u>Wastewater Treatment Operator</u>	<u>Class Operator-In-Training, Very Small, Lagoon, Class I</u>
<u>Wastewater Collections Operator</u>	<u>Restricted, Class I, II, III, IV, or Land Application</u>
<u>Wastewater Laboratory Analyst</u>	<u>Class I, II, III, or IV</u>
<u>Backflow Assembly Tester</u>	
<u>Drinking Water Very Small System Operator</u>	
<u>Wastewater Very Small Systems Operator</u>	

~~01. Drinking Water Distribution Operator.(—)~~

~~a. Class Operator In Training, Class I Restricted, Class I, Class II, Class III, or Class IV.(—)~~

~~02. Drinking Water Treatment Operator.(—)~~

~~a. Class Operator In Training, Class I Restricted, Class I, Class II, Class III, or Class IV.(—)~~

~~03. Wastewater Treatment Operator.(—)~~

~~a. Class Operator In Training, Lagoon, Class I Restricted, Class I, Class II, Class III, Class IV, or Land Application.(—)~~

~~04. Wastewater Collection Operator.(—)~~

~~a. Class Operator In Training, Class I Restricted, Class I, Class II, Class III, or Class IV.(—)~~

~~05. Wastewater Laboratory Analyst.(—)~~

~~a. Class I, Class II, Class III, or Class IV.(—)~~

~~06. Backflow Assembly Tester.(—)~~

~~07. Drinking Water Very Small System Operator.(—)~~

~~08. Wastewater Very Small System Operator.(—)~~

~~176.—199.(RESERVED)~~

**~~200~~ 400. FEES FOR EXAMINATION AND LICENSURE.**

Application and examination fees are non-refundable.

<b>FEE-TYPE</b>	<b>AMOUNT (Not to Exceed)</b>
Application	\$25
Examination	Amount set by examination provider
Endorsement	\$30
Original License <u>or Certificate</u>	\$30 <u>annually</u>
Annual renewal	\$30
Reinstatement	As provided in Section 67-2614, Idaho Code, <del>\$35</del> <b>\$35</b>

( )

~~201.—249.(RESERVED)~~

~~250~~ **200. LICENSE REQUIRED—SCOPE OF PRACTICE STANDARDS.**

All water and wastewater operating personnel, including those in responsible charge and those in substitute responsible charge, of public water systems and public wastewater systems, and all backflow assembly testers, shall be licensed under the provisions of these rules and Chapter 24, Title 54, Idaho Code.(—)

~~01. Drinking Water and Wastewater Operator Scope.~~ Operating personnel shall only act in accordance with the nature and extent of their license. Those in responsible charge or substitute of a public drinking water or wastewater system must hold a valid license equal to or greater than the classification of the public water system, where the responsible charge or substitute responsible charge operator is in responsible charge. The types of drinking water systems are distribution and treatment. The types of wastewater systems are collections, laboratory analyst, treatment, and land application.(—)

~~02. Wastewater Operator Scope.~~ Operating personnel may only act in accordance with the nature and extent of their license. Those in responsible charge or substitute responsible charge of a public wastewater system must hold a valid license equal to or greater than the classification of the public wastewater system where the responsible charge or substitute responsible charge operator is in responsible charge. The types of wastewater systems are collection, laboratory analyst, and treatment.(—)

~~03. Backflow Assembly Tester.~~ Individuals licensed as backflow assembly testers may inspect and test backflow prevention assemblies, as defined in Title 54, Chapter 24, Idaho Code.(—)

~~04~~ **01. Operator-in-Training.** Operators-in-training ~~may~~ must practice ~~only~~ under the direct supervision of a licensed operator of a type, category, and classification higher than the operator-in-training. No operator-in-training can accept or perform the designated responsible charge duties at any system.( )

~~02. Grandparent License.~~ The licensee may operate in responsible charge of the specific facility identified in the original application. The license is site specific, non-transferable, and does not grant authority for the holder to practice as an operate at any other system. The license becomes invalid when the classification of the system changes to a higher classification.

~~251.—299.(RESERVED)~~

~~300. GENERAL REQUIREMENTS FOR LICENSE.~~

Applicants must submit an application together with the required fees and required documentation.(—)

Rule 100.01 ~~2.~~ **Examination Requirement.** Applicants must pass a written examination for each individual

~~license type and classification in each type of licensure, with a minimum score of seventy percent (70%).( )~~

~~a. The examination will reflect different levels of knowledge, ability and judgment required for the established license type and class. The Board will administer examinations at such times and places as the Board may determine. ( )~~

~~b. The examination for all types and classes of licensure will be validated and provided by the Association of Boards of Certification (ABC). The American Backflow Prevention Association (ABPA) backflow assembly tester examination is also approved for backflow assembly tester licensure.( )~~

~~e. Applicants who fail an examination must make application to retake the same type and class examination and pay the required examination fees prior to retaking the examination.( )~~

~~d. Applicants must take and pass the examination within one (1) year of application approval. After one (1) year a new application and applicable application fees must be submitted.( )~~

~~02. Education Requirements. Documentation must be provided showing proof of education required for the type and level of license being sought.( )~~

~~023. Experience Requirement. Only actual verified on site operating experience at a treatment, distribution or collection system will be acceptable except as may be allowed by substitution, as set forth in these rules. Experience as a laboratory analyst can be counted as wastewater operating experience for up to one half (1/2) of the wastewater operating experience requirement but cannot be counted as responsible charge experience. Experience as a wastewater operator can be counted as laboratory analyst experience for up to one half (1/2) of the laboratory analyst experience. Applicants may not receive more than one (1) year of experience for hours worked in excess of one thousand six hundred (1,600) hours of experience in a calendar year unless specifically approved by the Board based upon documentation submitted by the Applicant.( )~~

~~034. Apprenticeship Program. The Board may approve Apprenticeship Programs that are designed to provide either experience or experience and education for individuals seeking licensure in Idaho as an Operator In-Training, or a Class I, II, III, or IV Water or Wastewater Operator. A basic An Apprenticeship Program is designed to provide hands on experience and education related to the operation of Class I and through Class IV II facilities. An advanced Apprenticeship Program is designed to provide hands on experience and education related to Class III and IV facilities. All approved Apprenticeship Programs will be registered with the U.S. Department of Labor, Office of Apprenticeship, meet the Standards of Apprenticeship developed by the U.S. Department of Labor, and meet the intent of these rules regarding the education and experience necessary for Operator In-Training, Class I, II, III, and IV licensure. Sponsors of Apprenticeship Programs must seek Board approval by application along with all supporting documentation necessary to establish the program meets the intent of these rules regarding education and experience. The Board may revoke the approval of any program, that fails to comply with the Board's rules.( )~~

~~301.—309.(RESERVED)~~

~~100.03. Education and Experience Requirements. Applicants must present proof of the following:~~

~~310 a. REQUIREMENTS FOR Operator-In-Training LICENSE.~~

~~Each applicant for an Operator In-Training License must meet the following requirements:( )~~

~~01. Education. Possess a high school diploma or GED; and( )~~

~~02. Examination. Applicants must submit an application together with the required fees and Pass a of the board-approved written examination, the relevant Class I examination or be enrolled in an board-approved Apprenticeship pProgram approved by the Board. The Operator-In-Training license is valid for five (5) years.( )~~

~~311.—314.(RESERVED)~~

~~315B. Requirements For A Very Small Water System License.~~

~~TO QUALIFY FOR A VERY SMALL WATER SYSTEM LICENSE AN OPERATOR MUST MEET THE FOLLOWING REQUIREMENTS:(—)~~

~~01. EDUCATION. POSSESS A HIGH SCHOOL DIPLOMA OR GED AND;(—)~~

~~012. EXPERIENCE. DOCUMENT EIGHTY-EIGHT (88) HOURS OF ACCEPTABLE ON-SITE OPERATING EXPERIENCE AT A WATER SYSTEM; AND,(—)~~

~~A. COMPLETE AN APPROVED SIX TWELVE HOURS WATER TREATMENT COURSE OR AN APPROVED SIX HOUR CHLORINATION COURSE OR A COMBINATION OF SAID APPROVED CHLORINATION AND WATER DISTRIBUTION COURSE(S) EQUALING SIX (6) HOURS; AND(—)~~

~~B. COMPLETE AN APPROVED SIX HOUR WATER DISTRIBUTION COURSE; AND (—)~~

~~03. EXAMINATION. PASS THE RELEVANT VERY SMALL WATER SYSTEM EXAMINATION.(—)~~

~~316.—319.(RESERVED)~~

~~320c. Requirements For A Very Small Wastewater System License.~~

~~To qualify for a Very Small Wastewater System license, an operator must meet the following requirements:~~

~~(—)~~

~~01. Education. Possess a high school diploma or GED; and(—)~~

~~02. Experience. Document fifty (50) Eighty-eight (88) hours of acceptable on-site operating experience at a wastewater collection or treatment system; and(—)~~

~~a. Fifty (50) hours of acceptable relevant on-site operating experience at a wastewater treatment system or lagoon; and(—)~~

~~b. Complete an approved six (6) hours of pumps and motors or collection course(s) or an approved six hour collection course or a combination of said approved courses equaling six (6) hours; and,(—)~~

~~e. Complete an approved six (6) hours of lagoon operation and maintenance, large soil absorption system, or wastewater treatment course(s); or an approved six hour large soil absorption system course or an approved six hour wastewater treatment course or a combination of said approved courses equaling six (6) hours; and ( )~~

~~03. Examination. Pass the relevant lagoon examination.(—)~~

~~321.—324.(RESERVED)~~

~~325. d. REQUIREMENTS FOR Class I Restricted WATER OR WASTEWATER LICENSE.~~

~~To qualify for a Class I Restricted water or wastewater license an operator must meet the following requirements:~~

~~(—)~~

~~01. Education. Possess a high school diploma or GED; and(—)~~

~~02. Experience. Document two hundred sixty (260) hours of acceptable relevant on-site operating experience at a Class I or higher system during twelve (12) consecutive months with the system and complete sixteen (16) hours of continuing education relevant to the license; and(—)~~

~~03. Examination. Pass the relevant Class I examination.(—)~~

~~304. **Restricted License Upgrade.** Upon obtaining one thousand six hundred (1,600) hours of supervised on-site operating experience for each license, the operator shall be eligible to apply for an unrestricted Class I license. There is no limit on the amount of time needed to obtain the necessary experience to qualify for the unrestricted license. A restricted license is limited to a specific system.( )~~

~~326.—327.(RESERVED)~~

~~328. Requirements For A~~

~~e. Class I Operator License.~~

~~To qualify for a Class I operator license an applicant must meet the following requirements:(—)~~

~~01. Education. Possess a high school diploma or GED; and(—)~~

~~02. **EXPERIENCE. DOCUMENT A MINIMUM OF ONE THOUSAND SIX HUNDRED HOURS (1,600) HOURS ONE (1) YEAR OF ACCEPTABLE RELEVANT ON-SITE OPERATING EXPERIENCE AT A CLASS I OR HIGHER SYSTEM OR SUCCESSFULLY COMPLETION OF ONE (1) YEAR OF AN APPROVED APPRENTICESHIP PROGRAM.** AND(—)~~

**PENDING TEXT 100.03.e.**

e. Class I Operator. One thousand six hundred (1,600) hours of on-site operating experience at a Class I or higher system, *or 3200 hours of experience at a Very Small Wastewater System*, or successful completion of one (1) year of an approved apprenticeship program.( )

~~03. **EXAMINATION. PASS THE RELEVANT CLASS I EXAMINATION.**(—)~~

~~329. (Reserved)~~

~~330 f. Requirements For A Class II Operator License.~~

~~TO QUALIFY FOR A CLASS II LICENSE AN APPLICANT MUST MEET THE FOLLOWING REQUIREMENTS:(—)~~

~~01. **EDUCATION. POSSESS A HIGH SCHOOL DIPLOMA OR GED; AND(—)**~~

~~02. **EXPERIENCE. DOCUMENT A MINIMUM OF FOUR THOUSAND EIGHT HUNDRED (4,800) HOURS THREE (3) YEARS OF ACCEPTABLE RELEVANT ON-SITE OPERATING EXPERIENCE AT A CLASS I OR HIGHER SYSTEM OR SUCCESSFULLY COMPLETION OF AN APPROVED APPRENTICESHIP PROGRAM.** AND(—)~~

~~03. **EXAMINATION. PASS THE RELEVANT CLASS II EXAMINATION.**(—)~~

~~331.—334.(RESERVED)~~

~~335. Requirements For A~~

~~G. Class III Operator License.~~

~~TO QUALIFY FOR A CLASS III LICENSE AN APPLICANT MUST MEET THE FOLLOWING REQUIREMENTS:(—)~~

~~01. **Education.** Possess a high school diploma or GED and two (2) years of post-high school **postsecondary** education in the environmental control field, engineering or related science or successful completion of an approved apprenticeship program; and( )~~

~~02. **Experience.** Document a minimum of four (4) years of acceptable relevant **six thousand four hundred (6,400) hours** on-site operating experience, including **a minimum of two (2) years three thousand two**~~

~~hundred (3,200) hours~~ of responsible charge of a major segment of ~~the~~ system, ~~in the same~~ at a Class II or next lower higher system class, of a Class I or higher system for collection or distribution or Class II or higher system for treatment; and(~~—~~)

**03. Examination.** Pass the relevant Class III examination.(~~—~~)

~~336.—339.(Reserved)~~

~~340H. Requirements For A Class IV Operator License.~~

~~TO QUALIFY FOR A CLASS IV LICENSE AN APPLICANT MUST MEET THE FOLLOWING REQUIREMENTS:(—)~~

~~01. Education.~~ Possess a high school diploma or GED and ~~four~~ (4) years of ~~post high school~~ postsecondary education in the environmental control field, engineering or related science or successful completion of an approved apprenticeship program; and(~~—~~)

~~02. Experience.~~ Document a minimum of four (4) years of acceptable relevant ~~six thousand four hundred (6,400) hours of~~ on-site operating experience, including a minimum of two (2) years of ~~in three thousand two hundred (3,200) hours of~~ responsible charge of a major segment of ~~the~~ system, at a Class III or higher system, in the same or next lower class, at a Class I or higher system for collection or distribution or Class III or higher system for treatment; and(~~—~~)

**03. Examination.** Pass the relevant Class IV examination.(~~—~~)

~~341.—344.(Reserved)~~

~~345. Requirements For A Lagoon Operator License.~~

~~To qualify for a lagoon license, an operator must meet the following requirements:(—)~~

~~01. Education.~~ Possess a high school diploma or GED; and(~~—~~)

~~02. Experience.~~ Document twelve (12) consecutive months of acceptable on-site operating experience at a Lagoon system; and(~~—~~)

**03. Examination.** Pass the relevant Lagoon examination.(~~—~~)

~~346.—349.(Reserved)~~

~~350 i. Requirements For A Wastewater Land Application~~ LICENSE.

~~TO QUALIFY FOR A WASTEWATER LAND APPLICATION LICENSE, AN OPERATOR MUST MEET THE FOLLOWING REQUIREMENTS:(—)~~

~~01. EDUCATION. POSSESS A HIGH SCHOOL DIPLOMA OR GED; AND(—)~~

~~02. EXPERIENCE. DOCUMENT A MINIMUM OF E A WASTEWATER CLASS I OR HIGHER OPERATION LICENSE and eight hundred (800) hours—SIX (6) MONTHS OF ON-SITE OPERATING EXPERIENCE AT A WASTEWATER LAND APPLICATION SYSTEM; AND(—)~~

~~03. EXAMINATION. PASS THE RELEVANT WASTEWATER LAND APPLICATION EXAMINATION; AND(—)~~

~~04. Other.~~ Possess a wastewater Class I or higher operation license. The A wastewater land application operator that who is in responsible charge operator or substitute responsible charge operator must be licensed at the type and a class equal to or greater than the classification of the wastewater system classification. The wastewater treatment license must be maintained to renew the wastewater land application.( )

~~351.—354.(RESERVED)~~



**355.J. REQUIREMENTS FOR A ~~Backflow Assembly Tester License.~~  
TO QUALIFY FOR A BACKFLOW ASSEMBLY TESTER LICENSE, AN APPLICANT MUST MEET THE  
FOLLOWING REQUIREMENTS:(~~---~~)**

**01.** EDUCATION. ~~POSSESS A HIGH SCHOOL DIPLOMA OR GED, AND(~~---~~)~~

**02.** Experience. ~~Document S~~successful completion of a Board-approved backflow assembly tester training program, ~~in compliance with the Cross Connection Control Accepted Procedure and Practice Manual and consisting of theory instruction, practical instruction, and~~ passage of a practical examination ~~in compliance with the using University of Southern California (USC) T~~testing procedures, ~~and( )~~

**03.** Examination. ~~Pass the relevant Backflow Assembly Tester examination.(~~---~~)~~

**356.---359.(RESERVED)**

**360. Requirements For Wastewater Laboratory Analyst LICENSE.**

To qualify for a wastewater laboratory analyst license, an applicant must meet the following requirements for the relevant class: (~~---~~)

**01k.** Class I Wastewater Laboratory Analyst.(~~---~~)

**a.** Possess a high school diploma or GED; and(~~---~~)

**b.** ~~Document a minimum of e~~One thousand six hundred (1,600) hours ~~one (1) year of acceptable lab experience at a e~~Class I or higher system, ~~and( )~~

**e.** ~~Pass the relevant class I laboratory analyst examination.(~~---~~)~~

**02l.** Class II Wastewater Laboratory Analyst.(~~---~~)

**a.** Possess a high school diploma or GED; and(~~---~~)

**b.** ~~Document a minimum of f~~Four thousand eight hundred (4,800) hours ~~three (3) years of acceptable lab experience at a C~~class I or higher system, ~~and( )~~

**e.** ~~Pass the relevant class II laboratory analyst examination.(~~---~~)~~

**03m.** Class III Wastewater Laboratory Analyst.(~~---~~)

**a.** ~~Possess a high school diploma or GED and t~~Two (2) years of postsecondary post high school education in the environmental control field, engineering or related science; and(~~---~~)

**b.** ~~Document a minimum of six thousand four hundred (6,400) hours four (4) years of acceptable lab experience at a C~~class II or higher system, ~~and( )~~

**e.** ~~Pass the relevant class III laboratory analyst examination.(~~---~~)~~

**04n.** Class IV Wastewater Laboratory Analyst.(~~---~~)

**a.** ~~Possess a high school diploma or GED and f~~Four (4) years of postsecondary post high school education in the environmental control field, engineering or related science; and(~~---~~)

**b.** ~~Document a minimum of six thousand four hundred (6,400) hours four (4) years of acceptable lab experience at a e~~Class III or higher system, ~~and( )~~

**e.** ~~Pass the relevant class IV laboratory analyst examination.(~~---~~)~~

~~361. — 374.(RESERVED)~~

~~375~~**04. Substitutions.** An applicant may substitute education and experience requirements as follows:

**a.** Completion of an apprenticeship program will be accepted in lieu of education or experience requirements as identified in Rule 100.03 if the program provides experience and education related to the operation of Class I-IV systems; is registered with the U.S. Department of Labor, Office of Apprenticeship; meets the Standards of Apprenticeship developed by the U.S. Department of Labor; and fulfills the requirements in Rules 100.03.

~~**01b.** **Substituting**—Education for Experience. Applicants may substitute approved education for operating and responsible charge experience as specified below.( )~~

For Classes I, II, III and IV, postsecondary education in environmental control, engineering or related science can be substituted for up to fifty percent (50%) of the required experience, at a rate of thirty (30) college semester credits or forty-five (45) hours of continuing education for one thousand six hundred (1,600) hours of experience.

~~**a.** No substitution for on-site operating experience shall be permitted for licensure as a very small system operator or a Class I operator.( )~~

~~**b.** For Classes II, III and IV, substitution shall will only be allowed for the required experience when fifty percent (50%) of all stated experience (both on-site operating and responsible charge) has been met by actual on-site operating experience.( )~~

~~**e.** For Class II, a maximum of one and one half (1½) years of post high school education in the environmental control field, engineering or related science may be substituted for two thousand four hundred (2,400) hours one and one half (1½) years of operating experience.( )~~

~~**d.** For Class III and IV, a maximum of two (2) years of post high school education in the environmental control field, engineering or related science may be substituted for three thousand two hundred (3,200) hours (2) years of on-site operating experience; however the applicant for Class III must still have a minimum of one thousand six hundred (1,600) hours (1) year of responsible charge experience and the applicant for Class IV must have minimum of three thousand two hundred (3,200) hours (2) years of responsible charge experience.( )~~

~~**e.** Education substituted for on-site operating experience may not be also credited must be in addition to toward the education requirement. ( )~~

~~**f.** One (1) year of post high school education may be substituted for one thousand six hundred (1,600) hours (1) year experience up to a maximum of fifty percent (50%) of the required on-site operating or responsible charge experience.( )~~

~~**02c.** **Substituting**—Experience for Education. Where applicable, approved on-site operating and responsible charge experience may be substituted for education as specified below:( )~~

~~**a.** One thousand six hundred (1,600) hours (1) year of on-site operating experience may be substituted for two (2) years of grade school or one (1) year of high school with no limitation.( )~~

~~**b.** For Classes III and IV, additional responsible charge experience (that exceeding the two-year class requirements) may be substituted for postsecondary post high school education on a one (1) for one (1) basis: one (1) year additional at a rate of one thousand six hundred (1,600) hours of responsible charge experience is equal to for one (1) year of postsecondary post high school education. Experience substituted for education must be in addition to the minimum experience requirement.( )~~

~~**03d.** **Substituting**—Experience for Experience. Related~~

i. Experience as a laboratory analyst may count towards one-half (1/2) of the required wastewater operating experience and experience as a wastewater operator may count towards one-half (1/2) of the required laboratory analyst experience.

~~ii. The following experience may be substituted for experience up to one-half (1/2) (1/2) of the operating experience requirement for Classes I, II, III and IV: Experience that may be substituted includes, but is not limited to, the following:(—)~~

- ~~a. Experience as an environmental or operations consultant;(—)~~
- ~~b. Experience in an environmental or engineering branch of federal, state, county, or local government;(—)~~
- ~~c. Experience as a wastewater collection system operator;(—)~~
- ~~d. Experience as a wastewater treatment plant operator;(—)~~
- ~~e. Experience as a water distribution system operator and/or manager; and/or(—)~~
- ~~f. One (1) year of post high school education may be substituted for one thousand six hundred (1,600) hours (1) year experience up to a maximum of fifty percent (50%) of the required operating or responsible charge experience.(—)~~
- ~~g. Experience in waste treatment operation and/or maintenance.(—)~~
- ~~h. Experience as a laboratory analyst can be counted as wastewater operating experience for up to one half (1/2) of the wastewater operating experience requirement but cannot be counted as responsible charge experience.(—)~~
- ~~i. Experience as a wastewater operator can be counted as laboratory analyst experience for up to one half (1/2) of the laboratory analyst experience requirement.(—)~~

~~iii. Experience for  
iii. The following experience may be substituted for one-half (1/2) of the operating experience requirement for Classes I and II: construction of a water and/or wastewater distribution and/or collections systems if such experience is documented with an affidavit in a declaration from a system owner or licensed operator.~~

~~04. Equivalency Policy. Substitutions for education or experience requirements needed to meet minimum requirements for license will be evaluated upon the following equivalency policies:(—)~~

- ~~a. High School—High School diploma equals GED or equivalent as approved by the Board equals four (4) years.(—)~~
- ~~b. College—Thirty (30) credits equal one (1) year (limited to curricula in environmental engineering, environmental sciences, water/wastewater technology, and/or other courses as determined by the Board).(—)~~
- ~~e. Continuing Education Units (CEU) for operator training courses, seminars, related college courses, and other training activities. Ten (10) classroom hours equal one (1) CEU; forty five (45) CEUs equal one (1) year of college.(—)~~

~~376.—399.(RESERVED)~~

~~400. ENDORSEMENT.~~

~~The board may waive the examination requirements and issue the appropriate license for applicants holding licenses issued by other States that have equivalent license requirements and who otherwise meet the requirements set forth in Subsections 150.02 and 150.03.(—)~~

~~401.—449.(RESERVED)~~

~~450. DRINKING WATER AND WASTEWATER GRANDPARENT PROVISION.~~

The board issued grandparent licenses to ~~water and~~ wastewater operators who provided documentation satisfactory to the board of being in responsible charge of an existing public wastewater system on or before April 15, 2006. (—)

**01. Grandparent License.** A grandparent license allowed the licensee to operate in responsible charge of the specific facility identified in the original application. The license is site specific and non transferable and does not grant authority for the holder to practice at any other system in any capacity as an operator. (—)

**02. License Requirements.** A grandparent licensed wastewater operator is required to meet all other requirements including the continuing education and renewal requirements. (—)

**03. Wastewater System Classification Limitations.** The grandparent license becomes invalid any time the classification of the wastewater ~~the~~ system changes to a higher classification. (—)

~~451.—499.(RESERVED)~~

~~500~~**100.05.** Continuing Education.

~~01. Continuing Education Requirement. Each~~ **To renew, a** licensee must ~~successfully~~ complete, **during the prior licensing period, and retain proof of completion of** ~~a minimum of~~ six (6) **classroom** hours (0.6 CEUs) of approved continuing education **annually for license renewal** ~~germane to the license type~~, except that backflow assembly testers ~~will~~ **must** complete an eight (8) hour refresher course every two (2) years ~~for license renewal~~. Continuing education ~~must be earned in a subject matter relevant to the field in which the license is issued. A licensee holding one (1) or more drinking water license(s) only needs to complete the annual continuing education requirement for one (1) license. A licensee holding one (1) or more wastewater license(s) only needs to complete the annual continuing education requirement for one (1) license. A licensee holding both drinking water and wastewater class licenses will~~ **must** complete **a minimum of** six (6) **classroom** hours **annually for the drinking water license plus six (6) hours annually for the wastewater license** ~~for each license type. A remote or distant study course is acceptable if it is germane to the license type.~~ ( )

#### **PENDING TEXT 100.05**

**05. Continuing Education.** To renew, a licensee must complete, during the prior licensing period, and retain proof of completion of six (6) classroom hours (0.6 CEUs) of continuing education germane to the license type, except that backflow assembly testers must complete an eight (8) hour refresher course every two (2) years. A licensee holding both drinking water and wastewater licenses must complete six (6) classroom hours for each license type. A remote or distant study course is acceptable if it is germane to the license type, ***except that backflow assembly testers must complete in-person and board-approved continuing education.*** ( )

~~a. Each licensee will submit to the Board an annual license renewal application form, together with the required fees, certifying by signed affidavit that compliance with the CE requirements have been met. The Board may conduct such continuing education audits and require verification of attendance as deemed necessary to ensure compliance with the CE requirements. (—)~~

~~b. A licensee will be considered to have satisfied their CE requirements for the first renewal of their license. (—)~~

~~c. A water or wastewater licensee may carryover a maximum of six (6) hours of continuing education to meet the next year's continuing education requirement. The same hours may not be carried forward more than one (1) renewal cycle. (—)~~

~~d. Continuing Education hours for approved operator training courses, seminars, related college courses, and other training activities may be converted to Continuing Education Units (CEU) as follows: Six (6) classroom hours = point six (0.6) CEU. (—)~~

**02. Subject Material.** The subject material of the continuing education requirement will be relevant to

~~the license for which the continued education is required. “Relevant” will be limited to material germane to the operation, maintenance and administration of drinking water and wastewater systems as referenced in Chapter 24, Title 54, Idaho Code, and includes those subjects identified in the “need to know” criteria published by the Associations of Boards of Certification.(—)~~

~~**03. Course Approval.** All course providers will submit requests for approval of continuing education courses to the Board in writing no less than thirty (30) days prior to the course being offered, on a form approved by the Board, that includes:(—)~~

- ~~a. The name and qualifications of the instructor or instructors;(—)~~
- ~~b. The date, time and location of the course;(—)~~
- ~~c. The specific agenda for the course;(—)~~
- ~~d. The type and number of continuing education credit hours requested;(—)~~
- ~~e. A statement of how the course is believed to be relevant as defined;(—)~~
- ~~f. Any certificate of approval from a governmental agency if the course has been previously approved for continuing education;(—)~~
- ~~g. The training materials;(—)~~
- ~~h. Other information as may be requested by the Board.(—)~~
- ~~i. Upon review of all information requested, the Board may either approve or deny any request for a course. Board approval of a course will be granted for a period not to exceed five (5) years or until the course materials or instructors are changed.(—)~~

~~**04. Approved Courses.** Those continuing education courses which are relevant and approved by the states of Nevada, Oregon, Montana, Utah, Wyoming, and Washington are deemed approved by the Board.(—)~~

~~**05. Verification of Attendance.** It will be necessary for each licensee to maintain verification of attendance by securing authorized signatures or other documentation from the course instructors or sponsoring institution substantiating any and all hours attended by the licensee. This Verification of attendance will be maintained by the licensee and provided upon request of the Board or its agent.(—)~~

~~**06. Distance Learning and Independent Study.** The Board may approve a course of study for continuing education credit that does not include require the actual licensee to attend in person, physical attendance of the licensee in a face to face setting with the course instructor. The licensee will maintain documentation of the nature and details of the course and evidence that the licensee successfully completed the course, which will be made available to the Board upon request.(—)~~

~~**07. Failure to Fulfill the Continuing Education Requirements.** The license will not be renewed for those licensees who fail to certify or otherwise provide acceptable documentation of meeting the CE requirements. Licensees who make a false attestation regarding compliance with the CE requirements is subject to disciplinary action by the Board.(—)~~

~~**08. Exemptions.** The Board may waive the continuing education requirement or extend the deadline up to ninety (90) days for good cause, any one (1) or more of the following circumstances. The licensee requests the exemption and provides any information requested to assist the Board in making a determination. An exemption may be granted at the sole discretion of the Board.(—)~~

- ~~a. The licensee is a resident of another jurisdiction recognized by the Board having a continuing professional education requirement for licensure renewal and has complied with the requirements of that state or district. (—)~~

~~b. The licensee is a government employee working outside the continental United States.(—)~~

~~c. The licensee documents individual hardship, including health (certified by a medical doctor) or other good cause.(—)~~

~~501.—599.(Reserved)~~

~~600. Renewal Or Reinstatement Of License.~~

~~01. **Expiration Date.** All licenses expire and must be renewed annually on forms approved by the Board, in accordance with Section 67-2614, Idaho Code. Licenses not so renewed will be cancelled in accordance with Section 67-2614, Idaho Code.(—)~~

~~02. **Reinstatement.** Any license cancelled for failure to renew may be reinstated in accordance with Section 67-2614, Idaho Code, with the exception that the applicant shall submit proof of having completed the total number of required continuing education for each year the license or certificate was cancelled.(—)~~

~~013. **Operator in Training License.** Applicants for the operator in training license shall, upon compliance with the requirements of Subsections 300.01 and 300.02, be issued a “one time” non-renewable license for the purpose of gaining supervised experience as an operator in training (OIT). This license will be valid for five (5) ~~three (3)~~ years from the date of issue.(—)~~

~~04. **Backflow Assembly Testers.** Backflow assembly testers shall complete a Board-approved eight (8) hour refresher course every two (2) years for license renewal.(—)~~

~~025. **Wastewater Land Application License.** Wastewater land application licenses shall not be renewed unless the licensee also maintains a current wastewater treatment license.(—)~~

~~601.—649.(Reserved)~~

~~650. **Backflow Assembly Tester Code Of Ethics And Standards Of Conduct.** All backflow assembly tester licensees shall comply with the Idaho Backflow Assembly Tester Code of Ethics and Standards of Conduct as approved by the Board and attached to these rules as Appendix A.(—)~~

~~651.—699.(Reserved)~~

~~700. Discipline.~~

~~01. **Civil Fine.** The Board may impose a civil fine not to exceed one thousand dollars (\$1,000) upon a licensee for each violation of Chapter 24, Title 54, Idaho Code.(—)~~

~~02. **Costs and Fees.** The Board may order a licensee to pay the costs and fees incurred by the Board in the investigation or prosecution of the licensee for violation of Chapter 24, Title 54, Idaho Code.(—)~~

~~701.—999.(Reserved)~~

~~APPENDIX A  
IDAHO DRINKING WATER, WASTEWATER AND BACKFLOW ASSEMBLY TESTER CODE OF ETHICS AND STANDARDS OF CONDUCT~~

~~The purpose of this rule is to protect public health by setting minimum requirements and standards for licensed drinking and wastewater operators and Backflow Assembly Testers in Idaho who inspect and field test backflow assemblies, backflow prevention devices and air gaps that protect public water systems.~~

~~1. **Code of Ethics** —~~

**200.03** ~~A licensed Operator and/or~~ Backflow Assembly Testers ~~Code of Conduct.~~ ~~shall.~~ Operators and backflow assembly testers must: ( )

- a. ~~At all times, act in accordance with his/her primary obligation to p~~ Perform his/her duties with due care and diligence to protect the safety, health and welfare of the public.;
- b. Comply with ~~the laws and rules governing Backflow Assembly Testers and~~ all applicable local, state, and federal laws ~~and regulations~~ relating to their respective profession(s), backflow assembly testing;
- c. Perform only those duties ~~consistent with and appropriate to~~ within his/her ~~their~~ education, experience, training, and experience and scope of skills, abilities, and licensure.;
- d. ~~Be objective and truthful in all professional reports, statements, or testimony and include all relevant and pertinent information in such reports, statements, or testimony.~~ Prepare reports which are accurate, objective, and include all relevant information.

**2. Definitions:**

- a. ~~Backflow Prevention Assembly: an approved assembly such as a Double Check Valve Assembly (DCVA), a Pressure Vacuum Breaker Assembly (PVBA), a Reduced Pressure Backflow Assembly (RPBA), or a Spill-Resistant Pressure Vacuum Breaker Assembly (SVBA) used for the protection of the public water supply according to the provisions of IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems," as administered by DEQ.~~
- b. ~~Backflow Prevention Device: an approved device such as an Atmospheric Vacuum Breaker (AVB), which does not contain valves or test ports, or a method, such as an air gap, that is utilized to prevent cross connections to a public water supply.~~
- c. ~~Calibration/Verification: the annual verification, calibration, or both of a backflow assembly field test kit by an instrument calibration laboratory/facility or by a person qualified to verify and calibrate a field test kit such as a manufacturer, dealer licensed to calibrate or verify field test kits, or calibration technician.~~
- d. ~~Customer: means the owner of the property or his/her authorized or appointed agent.~~
- e. ~~Field Test Kit: an instrument, either mechanical or electronic in design, and all related fittings, tools, equipment and appurtenances necessary to perform field verification tests on backflow prevention assemblies.~~

**23. Standards of Conduct**

- a. ~~Principle 1—An Operator or Backflow Assembly Tester shall act only within the scope of practice as set forth in the Board's laws and rules. A Backflow Assembly Tester and must use due care and diligence in performing their his/her duties.~~
- b. ~~Principle 2—Use standard test procedures, operating procedures, methods, and equipment~~ When conducting inspections, sampling, and field tests, of backflow prevention assemblies, an Operator or Backflow Assembly Tester must use test procedures that comply with standard field test procedures.

**PENDING TEXT 200.03.e.**

- e. Use standard test procedures, operating procedures, methods, and equipment when conducting inspections, sampling, and field tests with calibrated equipment.( )
- f. ~~Principle 3—The Backflow a~~ Assembly ~~t~~esters ~~will shall o~~observe or inspect existing installations of backflow prevention assemblies to identify whether the assembly is properly installed and ~~and whether, in the opinion of the Backflow Assembly Tester, the assembly is adequate and appropriate~~ for the degree of hazard posed to



~~the Public Water System having jurisdiction over the assembly.~~

~~d. The Backflow Assembly Tester shall be responsible for performing accurate field tests and for making reports of such field tests to the consumer and responsible authorities on forms approved by the administrative authority having jurisdiction. The tester shall be equipped with and be capable of using all the necessary tools, gagesgages, and other equipment to properly field test backflow prevention assemblies. A certified tester shall perform and be responsible for the accuracy of all tests and reports.~~

~~i. A Backflow Assembly Tester must report improperly installed assemblies to the customer and the Public Water System having jurisdiction over the backflow prevention assembly and also must note the discrepancy on the test report and submit the test report to the customer and the Public Water System having jurisdiction over the backflow prevention assembly.~~

~~ii. A Backflow Assembly Tester must note discrepancies regarding inadequate or inappropriate backflow prevention assemblies on the test report and submit the test report to the customer and the Public Water System having jurisdiction over the backflow prevention assembly.~~

~~d. Principle 4—A Backflow Assembly Tester shall use a properly working and calibrated field test kit that meets the requirements of the Pacific Northwest Section of the American Water Works Association Cross Connection Control Manual, Seventh Edition, November 2012. When requested by a Public Water System, a Backflow Assembly Tester shall submit the most recent calibration report that verifies the accuracy of the field kit. When requested by a Public Water System, a Backflow Assembly Tester shall submit proof of current licensure in Idaho as a Backflow Assembly Tester.~~

~~e. Principle 5—The Backflow Assembly Tester must competently use a field test kit, all tools, and other equipment and appurtenances necessary to inspect and field test backflow prevention assemblies, inspect air gaps and backflow prevention devices.~~

~~f. Principle 6—~~

~~g. When a backflow prevention assembly passes a field test, the Backflow Assembly Tester shall submit the report will be submitted to the consumer and relevant public water system within fifteen (15) business days of performing the field test, a passing test report to the customer and the Public Water System having jurisdiction over the backflow prevention assembly.~~

~~g. Principle 7—When a backflow prevention assembly is defective or fails to pass the field test, the Backflow Assembly Tester shall report will be submitted to the consumer and relevant public water system within submit immediately, if possible, but no later than within two (2) business days of the field test, a failing field test report to the customer and the Public Water System having jurisdiction over the backflow prevention assembly.~~

~~h. Principle 8—The Backflow Assembly Tester shall complete a test report for each backflow prevention assembly for which the Backflow Assembly Tester conducts a field test. A test report must be legible and contain all relevant and pertinent information pertaining to the field test including, at a minimum, the make, model, size, serial number, orientation, and test results for each test conducted.~~

~~i. A Backflow Assembly Tester shall record data and sign test reports only for backflow prevention assemblies for which the Backflow Assembly Tester has personally conducted the field test.~~

~~ii. A Backflow Assembly Tester shall not falsify the results of a backflow prevention assembly field test or inspection.~~



# IDAPA 58 – DEPARTMENT OF ENVIRONMENTAL QUALITY

## 58.01.01 – RULES FOR THE CONTROL OF AIR POLLUTION IN IDAHO

DOCKET NO. 58-0101-2301

### NOTICE OF RULEMAKING – ADOPTION OF PENDING RULE

[LINK: LSO Rules Analysis Memo and Incorporation By Reference Synopsis \(IBRS\)](#)

**EFFECTIVE DATE:** This rule has been adopted by the Idaho Board of Environmental Quality (Board) and is now pending review by the 2024 Idaho State Legislature for final approval. Pursuant to Section 67-5224(2)(c), Idaho Code, this pending rule must be approved by concurrent resolution of the Legislature. Pursuant to Section 67-5291(2), Idaho Code, all temporary, pending, and final rules of any nature may be approved or rejected by a concurrent resolution of the Legislature. The concurrent resolution shall state the effective date of the approval or rejection.

**AUTHORITY:** In compliance with Section 67-5224, Idaho Code, notice is hereby given that the Board has adopted a pending rule. This action is authorized by Sections 39-105 and 39-107, Idaho Code. This rulemaking updates federal regulations incorporated by reference as mandated by the U.S. Environmental Protection Agency (EPA) for approval of Idaho's Title V Operating Permit Program pursuant to 40 CFR Part 70 and fulfilling the requirements of Idaho's delegation agreement with EPA under Section 112(l) of the Clean Air Act. It also updates citations to other federal regulations necessary to retain state primacy of Clean Air Act programs.

**DESCRIPTIVE SUMMARY:** A detailed summary of the reason for adopting the rule is set forth in the initial proposal published in the Idaho Administrative Bulletin, September 6, 2023, [Vol. 23-9, pages 628 through 632](#).

No comments were received, and the rule has been adopted as initially proposed. The board meeting documents are available at <https://www.deq.idaho.gov/air-quality-docket-no-58-0101-2301/>.

**FISCAL IMPACT STATEMENT:** The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars (\$10,000) during the fiscal year: Not applicable.

**ASSISTANCE ON TECHNICAL QUESTIONS:** For assistance on questions concerning the rulemaking, contact the undersigned.

Dated this 6th day of December, 2023.

Kristin Ryan  
Deputy Director  
Department of Environmental Quality  
1410 N. Hilton Street  
Boise, Idaho 83706  
208-373-0194  
[Kristin.Ryan@deq.idaho.gov](mailto:Kristin.Ryan@deq.idaho.gov)

**THE FOLLOWING NOTICE PUBLISHED WITH THE PROPOSED RULE**

**AUTHORITY:** In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking. The action is authorized by Sections 39-105 and 39-107, Idaho Code. This rulemaking updates federal regulations incorporated by reference as mandated by the U.S. Environmental Protection Agency (EPA) for approval of Idaho's Title V Operating Permit Program pursuant to 40 CFR Part 70 and fulfilling the requirements of Idaho's delegation agreement with EPA under Section 112(l) of the Clean Air Act. It also updates citations to other federal regulations necessary to retain state primacy of Clean Air Act programs.

**PUBLIC HEARING SCHEDULE:** Pursuant to Section 67-5222(2), Idaho Code, a public hearing has been scheduled and will be held as follows:

**Tuesday, October 10, 2023, at 2:30 p.m. MT**

**ATTEND IN PERSON OR VIA MICROSOFT TEAMS**

**DEQ State Office  
Conference Rooms A & B  
1410 N. Hilton  
Boise, ID 83706**

**The Teams meeting link is available at:  
<https://www.deq.idaho.gov/docket-no-58-0101-2301/>**

The meeting location will be accessible to persons with disabilities, and language translators will be made available upon request. Requests must be made no later than five (5) business days prior to the meeting date. For arrangements, contact the undersigned.

**DESCRIPTIVE SUMMARY:** The purpose of this rulemaking is to ensure that the state rules remain consistent with federal regulations. The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01, are updated annually to maintain consistency with federal regulations implementing the Clean Air Act. This proposed rule updates federal regulations incorporated by reference with the July 1, 2023 Code of Federal Regulations (CFR) effective date. The July 1, 2023 CFR is a codification of federal regulations published in the Federal Register as of July 1, 2023. Section 107, Incorporations by Reference, has been streamlined per suggestions made by the Division of Financial Management, Office of the Governor (DFM), for consistency with [Zero-Based Executive Order 2020-01](#).

This rulemaking also adds the definition of "excess emissions" to Section 130 of the rule. During negotiated rulemaking for Docket No. 58-0101-2101, this definition, along with other definitions relating to excess emission events, was struck from Section 006 with the intention of moving them to Section 130. While the other definitions were moved to Section 130, definition of "excess emissions" was inadvertently overlooked. DEQ is now adding it to Section 130 as originally intended. For increased manageability and ease of use, the terms and definitions in Section 130 have been moved to a list and alphabetized.

Members of the regulated community who may be subject to Idaho's air quality rules, special interest groups, public officials, and members of the public who have an interest in the regulation of air emissions from sources in Idaho may be interested in commenting on this proposed rule. The proposed rule text is in legislative format. Language the agency proposes to add is underlined. Language the agency proposes to delete is struck out. It is these additions and deletions to which public comment should be addressed. The rule is expected to be final and effective upon adjournment of the 2024 legislative session if adopted by the Board and approved by the Idaho Legislature. DEQ will submit the final rule to EPA.

**INCORPORATION BY REFERENCE:** Pursuant to Section 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the incorporation by reference is necessary:

Adoption of federal regulations is necessary for EPA approval of Idaho's Title V Operating Permit Program and state primacy of Clean Air Act programs. Incorporation by reference allows DEQ to keep its rules up to date with federal regulation changes and simplifies compliance for the regulated community. Information for obtaining a copy of the federal regulations is included in the rule.

In compliance with Idaho Code 67-5223(4), DEQ prepared a brief synopsis detailing the substantive differences between the previously incorporated material and the latest revised edition or version of the incorporated material being proposed for incorporation by reference. The Overview of Incorporations by Reference can be obtained at <https://www.deq.idaho.gov/docket-no-58-0101-2301/>.

**NEGOTIATED RULEMAKING:** Negotiated rulemaking was not conducted. DEQ determined that negotiated rulemaking is not feasible due to the simple nature of this rulemaking and because DEQ has no discretion with respect to adopting federal regulations that are necessary for EPA approval of Idaho's Title V Operating Permit Program and state primacy of Clean Air Act programs. Whenever possible, DEQ incorporates federal regulations by reference to ensure that the state rules are consistent with federal regulations.

**IDAHO CODE SECTION 39-107D STATEMENT:** This proposed rule does not regulate an activity not regulated by the federal government, nor is it broader in scope or more stringent than federal regulations.

**FISCAL IMPACT STATEMENT:** The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars (\$10,000) during the fiscal year: Not applicable.

**ASSISTANCE ON TECHNICAL QUESTIONS AND SUBMISSION OF WRITTEN COMMENTS:** For assistance on technical questions concerning this rulemaking, contact Tiffany Floyd at [tiffany.floyd@deq.idaho.gov](mailto:tiffany.floyd@deq.idaho.gov) or (208) 373-0552.

**SUBMISSION OF WRITTEN COMMENTS:** Anyone may submit written comments regarding this proposed rule. The Department will consider all written comments received on or before October 10, 2023. Submit comments to:

Tiffany Floyd  
Department of Environmental Quality  
1410 N. Hilton Street  
Boise, Idaho 83706  
[Tiffany.floyd@deq.idaho.gov](mailto:Tiffany.floyd@deq.idaho.gov)

Dated this 6th day of September, 2023.

**THE FOLLOWING IS THE TEXT OF DOCKET NO. 58-0101-2301**

**107. INCORPORATIONS BY REFERENCE.**

~~**01. General.** Unless expressly provided otherwise, any reference in these rules to any document identified in Subsection 107.03 constitutes the full incorporation into these rules of that document for the purposes of the reference, including any notes and appendices therein. The term "documents" includes codes, standards or rules which have been adopted by an agency of the state or of the United States or by any nationally recognized organization or association.~~ (3-28-23)

~~02. Availability of Referenced Material.~~ Copies of the documents incorporated by reference into these rules are available at the following locations: (3-28-23)

and; ~~a.~~ All federal publications: U.S. Government Printing Office at <http://www.ecfr.gov/cgi-bin/ECFR>; (3-28-23)

~~b.~~ Statutes of the state of Idaho: <http://legislature.idaho.gov/idstat/TOC/IDStatutesTOC.htm>; and (3-28-23)

~~e.~~ All documents herein incorporated by reference: (3-28-23)

~~i.~~ Department of Environmental Quality, 1410 N. Hilton, Boise, Idaho 83706-1255 at [www.deq.idaho.gov](http://www.deq.idaho.gov). (3-28-23)

~~ii.~~ State Law Library, 451 W. State Street, P.O. Box 83720, Boise, Idaho 83720-0051 at [www.isll.idaho.gov](http://www.isll.idaho.gov). (3-28-23)

~~03. Documents Incorporated by Reference.~~ The following documents are incorporated by reference into these rules: (3-28-23)

~~a01.~~ Requirements for Preparation, Adoption, and Submittal of Implementation Plans; 40 CFR Part 51 revised as of July 1, 2022~~3~~. All sections included in 40 CFR Part 51, Subpart P, Protection of Visibility, are excluded from incorporation except 51.301, 51.304(a), 51.307, and 51.308 are incorporated by reference into these rules. (3-28-23)( )

~~b02.~~ National Primary and Secondary Ambient Air Quality Standards; 40 CFR Part 50, revised as of July 1, 2022~~3~~. (3-28-23)( )

~~e03.~~ Approval and Promulgation of Implementation Plans; 40 CFR Part 52, Subparts A and N and Appendices D and E, revised as of July 1, 2022~~3~~. (3-28-23)( )

~~d04.~~ Ambient Air Monitoring Reference and Equivalent Methods; 40 CFR Part 53, revised as of July 1, 2022~~3~~. (3-28-23)( )

~~e05.~~ Ambient Air Quality Surveillance; 40 CFR Part 58, revised as of July 1, 2022~~3~~. (3-28-23)( )

~~f06.~~ Standards of Performance for New Stationary Sources; 40 CFR Part 60, revised as of July 1, 2022~~3~~. (3-28-23)( )

~~g07.~~ National Emission Standards for Hazardous Air Pollutants; 40 CFR Part 61, revised as of July 1, 2022~~3~~. (3-28-23)( )

~~h08.~~ Federal Plan Requirements for Hospital/Medical/Infectious Waste Incinerators Constructed on or Before December 1, 2008; 40 CFR Part 62, Subpart HHH, revised as of July 1, 2022~~3~~. (3-28-23)( )

~~i09.~~ Federal Plan Requirements for Municipal Solid Waste Landfills That Commenced Construction On or Before July 17, 2014 and Have Not Been Modified or Reconstructed Since July 17, 2014; 40 CFR Part 62, Subpart OOO, revised as of July 1, 2022~~3~~. (3-28-23)( )

~~j10.~~ National Emission Standards for Hazardous Air Pollutants for Source Categories; 40 CFR Part 63, revised as of July 1, 2022~~3~~. (3-28-23)( )

~~k11.~~ Compliance Assurance Monitoring; 40 CFR Part 64, revised as of July 1, 2022~~3~~. (3-28-23)( )

~~l12.~~ State Operating Permit Programs; 40 CFR Part 70, revised as of July 1, 2022~~3~~. (3-28-23)( )

- ~~m~~13. Permits, 40 CFR Part 72, revised as of July 1, 2022~~3~~. (3-28-23)( )
- ~~n~~14. Sulfur Dioxide Allowance System, 40 CFR Part 73, revised as of July 1, 2022~~3~~. (3-28-23)( )
- ~~o~~15. Protection of Stratospheric Ozone, 40 CFR Part 82, revised as of July 1, 2022~~3~~. (3-28-23)( )
- ~~p~~16. Clean Air Act, 42 U.S.C. Sections 7401 through 7671g (1997). (3-28-23)( )

**(BREAK IN CONTINUITY OF SECTIONS)**

**130. STARTUP, SHUTDOWN, SCHEDULED MAINTENANCE, SAFETY MEASURES, UPSET AND BREAKDOWN.**

**01. Procedures.** Sections 130 through 136 establish procedures to be implemented in all excess emissions events and establish criteria to be applied by the Department in determining whether to take enforcement action to impose penalties for an excess emissions event where the excess emissions are caused by startup, shutdown, scheduled maintenance, upset, or breakdown of any emissions unit or that occur as a direct result of the implementation of any safety measure. ~~Startup is defined as the normal and customary time period required to bring air pollution control equipment or an emissions unit, including process equipment, from a nonoperational status into normal operation. Shutdown is defined as the normal and customary time period required to cease operations of air pollution control equipment or an emissions unit beginning with the initiation of procedures to terminate normal operation and continuing until the termination is completed. Upset is defined as an unplanned disruption in the normal operations of any equipment or emissions unit that may cause excess emissions. Breakdown is defined as an unplanned failure of any equipment or emissions unit that may cause excess emissions. Scheduled maintenance is defined as planned upkeep, repair activities and preventative maintenance on any air pollution control equipment or emissions unit, including process equipment, and including shutdown and startup of such equipment. Safety measure is defined as any shutdown (and related startup) or bypass of equipment or processes undertaken to prevent imminent injury or death or severe damage to equipment or property which may cause excess emissions.~~ (3-28-23)( )

**02. Definitions.** ( )

**a. Breakdown.** An unplanned failure of any equipment or emissions unit that may cause excess emissions. ( )

**b. Excess Emissions.** Emissions that exceed an applicable emissions standard established for any facility, source or emissions unit by statute, regulation, rule, permit, or order. ( )

**c. Safety Measure.** Any shutdown (and related startup) or bypass of equipment or processes undertaken to prevent imminent injury or death or severe damage to equipment or property which may cause excess emissions. ( )

**d. Scheduled Maintenance.** Planned upkeep, repair activities and preventative maintenance on any air pollution control equipment or emissions unit, including process equipment, and including shutdown and startup of such equipment. ( )

**e. Shutdown.** The normal and customary time period required to cease operations of air pollution control equipment or an emissions unit beginning with the initiation of procedures to terminate normal operation and continuing until the termination is completed. ( )

**f. Startup.** The normal and customary time period required to bring air pollution control equipment or an emissions unit, including process equipment, from a nonoperational status into normal operation. ( )

**g. Upset.** An unplanned disruption in the normal operations of any equipment or emissions unit that may cause excess emissions. ( )

## IDAPA 58 – DEPARTMENT OF ENVIRONMENTAL QUALITY

### 58.01.07 – RULES REGULATING UNDERGROUND STORAGE TANK SYSTEMS

#### DOCKET NO. 58-0107-2301 (ZBR CHAPTER REWRITE, FEE RULE)

#### NOTICE OF RULEMAKING – ADOPTION OF PENDING RULE

[LINK: LSO Rules Analysis Memo and Cost/Benefit Analysis \(CBA\)](#)

**EFFECTIVE DATE:** This rule has been adopted by the Idaho Board of Environmental Quality (Board) and is now pending review by the 2024 Idaho State Legislature for final approval. Pursuant to Section 67-5224(2)(d), Idaho Code, this pending fee rule shall not become final and effective unless affirmatively approved by concurrent resolution of the Legislature. Pursuant to Section 67-5291(2), Idaho Code, all temporary, pending, and final rules of any nature may be approved or rejected by a concurrent resolution of the Legislature. The concurrent resolution shall state the effective date of the approval or rejection.

**AUTHORITY:** In compliance with Section 67-5224, Idaho Code, notice is hereby given that the Board has adopted a pending rule. This action is authorized by Chapters 1 and 88, Title 39, Idaho Code.

**DESCRIPTIVE SUMMARY:** A detailed summary of the reason for adopting the rule is set forth in the initial proposal published in the Idaho Administrative Bulletin, August 2, 2023, [Vol. 23-8, pages 343 through 357](#).

No public comments were received, and the rule has been adopted as initially proposed. The board meeting documents are available at <https://www.deq.idaho.gov/underground-storage-tanks-docket-no-58-0107-2301/>.

**FEE SUMMARY:** This rulemaking does not impose or increase a fee beyond what was previously submitted to and reviewed by the Idaho Legislature in prior rules but does impose the current fee on newly regulated tanks, per the adopted Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (40 CFR Part 280) required for state program approval. The annual fee statutory authority is established by Idaho Code §§ 39-118 and 39-8802(d).

**FISCAL IMPACT STATEMENT:** The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars (\$10,000) during the fiscal year: Not applicable.

**ASSISTANCE ON TECHNICAL QUESTIONS:** For assistance on questions concerning the rulemaking, contact the undersigned.

Dated this 6th day of December, 2023.

Kristin Ryan  
Deputy Director  
Department of Environmental Quality  
1410 N. Hilton Street  
Boise, Idaho 83706  
208-373-0194  
[Kristin.Ryan@deq.idaho.gov](mailto:Kristin.Ryan@deq.idaho.gov)

**THE FOLLOWING NOTICE PUBLISHED WITH THE PROPOSED RULE**

**AUTHORITY:** In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking. This action is authorized by Chapters 1 and 88, Title 39, Idaho Code.

**PUBLIC HEARING SCHEDULE:** No hearings have been scheduled. Pursuant to Section 67-5222(2), Idaho Code, a public hearing will be held if requested in writing by twenty-five (25) persons, a political subdivision, or an agency. Written requests for a hearing must be received by the undersigned on or before August 18, 2023. If no such written request is received, a public hearing will not be held. Two public meetings were held during the negotiated rulemaking process.

**DESCRIPTIVE SUMMARY:** DEQ initiated this rulemaking in compliance with [Executive Order No. 2020-01, Zero-Based Regulation \(EO 2020-01\)](#), issued by Governor Little on January 16, 2020. Pursuant to EO 2020-01, each rule chapter effective on June 30, 2020, shall be reviewed by the agency that promulgated the rule. The review will be conducted according to a schedule established by the Division of Financial Management, Office of the Governor (DFM), posted at [https://adminrules.idaho.gov/forms\\_menu.html](https://adminrules.idaho.gov/forms_menu.html). This is one of the DEQ rule chapters up for review in 2023.

This rulemaking removes sections that are no longer applicable and includes updates consistent with the adopted Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (40 CFR Part 280) required for state program approval. The “revised as of date” of 40 CFR Part 280 has been updated to 2023 even though 40 CFR Part 280 has not been revised since its incorporation by reference into IDAPA 58.01.07, Rules Regulating Underground Storage Tank Systems, in 2017. The purpose of this update is to simplify compliance for the regulated community by making the CFR more accessible.

The goal of the rulemaking is to perform a critical and comprehensive review of the entire chapter in an attempt to reduce overall regulatory burden, streamline various provisions, increase clarity and ease of use, and maintain state program approval.

Citizens of the state of Idaho, environmental groups, owners and operators of underground storage tanks, cities, counties, bankers, lenders, realtors, petroleum marketers, consultants, and representatives of the Idaho Petroleum Storage Tank Fund Board of Trustees may be interested in commenting on this proposed rule. The rule is expected to be final and effective upon the conclusion of the 2024 legislative session if adopted by the Board and approved by the Idaho Legislature.

**FEE SUMMARY:** This rulemaking does not impose or increase a fee beyond what was previously submitted to and reviewed by the Idaho Legislature in prior rules but does impose the current fee on newly regulated tanks, per the adopted Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (40 CFR Part 280) required for state program approval. The annual fee statutory authority is established by Idaho Code §§ 39-118 and 39-8802(d).

**FISCAL IMPACT:** The following is a specific description, if applicable, of any negative fiscal impact on the State General Fund greater than ten thousand dollars (\$10,000) during the fiscal year resulting from this rulemaking: Not applicable.

**NEGOTIATED RULEMAKING:** On March 1, 2023, the notice of negotiated rulemaking was published in the Idaho Administrative Bulletin and on March 2, 2023 a preliminary draft rule was posted on DEQ’s website. Meetings were held on March 30 and May 11, 2023. Stakeholders and members of the public participated by receiving email notifications, attending the meetings, and reviewing DEQ’s presentations. Key information was posted on DEQ’s website and distributed to persons who participated in the negotiated rulemaking.



No comments were received during the negotiated rulemaking process. At the conclusion of the negotiated rulemaking process, DEQ submitted the draft rule to the Division of Financial Management for review. DEQ formatted the draft for publication as a proposed rule and is now seeking public comment. The negotiated rulemaking record, which includes the negotiated rule drafts, documents distributed during the negotiated rulemaking process, and the negotiated rulemaking summary, is available at <https://www.deq.idaho.gov/underground-storage-tanks-docket-no-58-0107-2301/>.

**INCORPORATION BY REFERENCE:** Pursuant to Section 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the materials cited are being incorporated by reference into this rule: Not applicable

**IDAHO CODE SECTION 39-107D STATEMENT:** This proposed rule does not regulate an activity not regulated by the federal government, nor is it broader in scope or more stringent than federal regulations.

**ASSISTANCE ON TECHNICAL QUESTIONS:** For assistance on questions concerning this proposed rulemaking, contact Kristi Lowder at [kristi.lowder@deq.idaho.gov](mailto:kristi.lowder@deq.idaho.gov) or (208) 373-0347.

**SUBMISSION OF WRITTEN COMMENTS:** Anyone may submit written comments regarding this proposed rule. The Department will consider all written comments received on or before September 1, 2023. Submit written comments to:

Kristi Lowder  
Department of Environmental Quality  
1410 N. Hilton, Boise, ID 83706  
[kristi.lowder@deq.idaho.gov](mailto:kristi.lowder@deq.idaho.gov)

Dated this 2nd day of August, 2023.

**THE FOLLOWING IS THE TEXT OF ZBR DOCKET NO. 58-0107-2301**

**58.01.07 – RULES REGULATING UNDERGROUND STORAGE TANK SYSTEMS**

**000. LEGAL AUTHORITY.**

Chapters 1 and 88, Title 39, Idaho Code. ( )

**001. SCOPE.**

These rules have the scope and applicability provided in Section 39-8804, Idaho Code. ( )

**002. ADMINISTRATIVE PROVISIONS.**

Persons may be entitled to appeal agency actions authorized under these rules pursuant to IDAPA 58.01.23, “Contested Case Rules and Rules for Protection and Disclosure of Records.” ( )

**003. INCORPORATION BY REFERENCE.**

**01. Documents Incorporated by Reference.** Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks, [40 CFR Part 280](#), revised as of July 1, 2023 with the following exclusions: ( )

- a. 40 CFR 280.12, the definition of “Replaced”; ( )



- b. 40 CFR 280.12, the definition of “Under-dispenser containment or UDC”; ( )
- c. 40 CFR 280.20, the introductory paragraph sentence, “In addition, except for suction piping that meets the requirements of Section 280.41(b)(1)(ii)(A) through (E), tanks and piping installed or replaced after April 11, 2016 must be secondarily contained and use interstitial monitoring in accordance with Section 280.43(g);” ( )
- d. 40 CFR 280.20(f); ( )
- e. 40 CFR 280.34(b)(9), the citation to Section 280.245; ( )
- f. 40 CFR 280.41(a)(1), “installed on or before April 11, 2016...”; ( )
- g. 40 CFR 280.41(a)(2); ( )
- h. 40 CFR 280.41(b)(1), “installed on or before April 11, 2016...”; ( )
- i. 40 CFR 280.41(b)(2); ( )
- j. 40 CFR 280.42, Note to paragraph (a), “for tank installed on or before October 13, 2015.”; ( )
- k. 40 CFR 280.42(e), “installed on or before October 13, 2015...”; and ( )
- l. 40 CFR Part 280. Subpart J. ( )
- 02. Consistency.** In the event of conflict or inconsistency between the language in IDAPA 58.01.07 and that found in [40 CFR Part 280](#), IDAPA 58.01.07 will prevail. ( )
- 03. Stringency.** IDAPA 58.01.07 will be no more stringent than federal law or regulations governing UST systems. ( )
- 004. -- 009. (RESERVED)**
- 010. DEFINITIONS.**  
The term “department” has the meaning provided for that term in [Section 39-103, Idaho Code](#). ( )
- 01. Community Water System.** As defined in IDAPA 58.01.08, “Idaho Rules for Public Drinking Water Systems,” Section 003. ( )
- 02. Existing.** Solely for purposes of determining when secondary containment is required, existing is when a UST, piping, motor fuel dispensing system, facility, public drinking water system or potable drinking water well is in place when a new installation or replacement of a tank, piping, or motor fuel dispensing system begins. ( )
- 03. Installation of a New Motor Fuel Dispenser System.** The installation of a new motor fuel dispenser and the equipment necessary to connect the dispenser to the UST system. This equipment may include flexible connectors, risers, or other transitional components that are beneath the dispenser, below the shear valve, and connect the dispenser to the piping. It does not mean the installation of a motor fuel dispenser installed separately from the equipment needed to connect the dispenser to the UST system. ( )
- 04. Installer.** Any person who installs a new or replacement UST system. ( )
- 05. New Underground Storage Tank (UST).** Has the same meaning as “underground storage tank or UST” in 40 CFR 280.12, except that such term includes tanks that have been previously used and meet the provisions of 40 CFR 280.20(a). ( )
- 06. Non-Community Water System.** As defined in IDAPA 58.01.08, “Idaho Rules for Public

Drinking Water Systems,” Section 003. ( )

**07. Potable Drinking Water Well.** Any hole (dug, driven, drilled, or bored) that extends into the earth until it meets ground water which supplies water for a non-community public drinking water system or otherwise supplies water for household use (consisting of drinking, bathing, and cooking, or other similar uses). Such wells may provide water to entities such as a single-family residence, group of residences, businesses, schools, parks, campgrounds, and other permanent or seasonal communities. ( )

**08. Product Deliverer.** Any person who delivers or deposits product into a UST. This term may include major oil companies, jobbers, transportation companies, or other product delivery entities. ( )

**09. Public Drinking Water System.** As defined in IDAPA 58.01.08, “Idaho Rules for Public Drinking Water Systems,” Section 003. ( )

**10. Red Tag.** A tamper-resistant tag, device, or mechanism attached to the tank’s fill pipes that clearly identifies a UST as ineligible for product delivery. The tag or device must be visible to the product deliverer and clearly state that it is unlawful to deliver to, deposit into, or accept product into the ineligible UST. ( )

**11. Replace.** As it applies to USTs and piping, replace is defined as follows: ( )

**a.** To remove an existing tank and install a new tank. ( )

**b.** To remove and put back in one hundred (100) percent of the piping, excluding connectors, connected to a single UST system. This definition does not alter the requirement in 40 CFR 280.33(c) to replace metal pipe sections and fittings that have released product as a result of corrosion or other damage. A replacement of metal pipe section and fittings pursuant to 40 CFR 280.33(c) will be considered a replacement under this definition only if one hundred (100) percent of the metal piping, excluding connectors, is replaced. ( )

**12. Under-Dispenser Spill Containment.** Containment underneath a dispenser that will prevent leaks from the dispenser from reaching soil or ground water. Such containment must: ( )

**a.** At installation or modification, be liquid-tight on its sides, bottom, and at any penetrations; and ( )

**b.** Be compatible with the substance conveyed by the piping; and either ( )

**c.** Allow for visual inspection and access to the components in the containment system; or ( )

**d.** Be monitored for releases using a release detection method that meets the provisions of 40 CFR 280.43(g). ( )

**011. – 099. (RESERVED)**

**100. ADDITIONAL MEASURES TO PROTECT GROUND WATER FROM CONTAMINATION.**

**01. Notification.** An owner, operator, or designee must provide to the Department: ( )

**a.** Written notice using forms provided by the Department thirty (30) days prior to the installation of a new piping system or a new or replacement UST. ( )

**b.** Notice twenty-four (24) hours prior to the installation of a replacement piping system. ( )

**02. Requirements for Petroleum UST Systems.** Owners, operators, and installers of a new or replacement UST or piping system must comply with the following provisions. ( )

**a.** Each new or existing UST or piping installed or replaced after February 23, 2007, will have secondary containment and be monitored for leaks in accordance with 40 CFR 280.43(g) if the new or replaced UST

or piping is within one thousand (1,000) feet of any existing public drinking water system or any existing potable drinking water well. At a minimum, secondary containment systems must be designed, constructed, and installed to contain regulated substances released from the tank system until they are detected and removed, prevent the release of regulated substances to the environment at any time during the operational life of the UST system, and be checked for evidence of a release at least every thirty (30) days. The following conditions are excluded: ( )

- i. Suction piping that meets the provisions of 40 CFR 280.41(b)(1)(ii)(A) through (E); ( )
- ii. Piping that manifolds two (2) or more USTs together; ( )
- iii. Existing piping to which new piping is connected to install a dispenser; and ( )
- iv. Tanks identified in 40 CFR 280.10(b). ( )

**b.** If the owner installs, within one (1) year, a potable drinking water well at the new facility that is within one thousand (1,000) feet of the USTs, piping, or motor fuel dispenser system as part of the new UST facility installation, secondary containment and under-dispenser containment are required, regardless of whether the well is installed before or after the USTs, piping, and motor fuel dispenser system are installed. ( )

**c.** The notice described in Subsection 100.01 will indicate whether the new or replacement installation is within one thousand (1,000) feet of an existing public drinking water system or any existing potable drinking water well. If the owner and installer certify that the installation is not within one thousand (1,000) feet of an existing public drinking water system or any existing potable drinking water well, the owner, operator or designee will provide and maintain documentation showing that a reasonable investigation of water systems and drinking water wells was undertaken. A reasonable investigation includes, but is not limited to, a search of the records of: ( )

- i. The public or private water service provider in the area which the new or replacement installation is located (if any); ( )
- ii. The city or county in which the new or replacement installation is located; ( )
- iii. The Idaho Department of Water Resources; and ( )
- iv. The Department. ( )

**d.** In the case of a replacement of an existing UST or existing piping, Section 100 applies only to the specific UST or piping being replaced, not to other USTs and piping. ( )

**e.** Each installation of a new motor fuel dispenser system will include under-dispenser spill containment if the new dispenser is within one thousand (1,000) feet of any existing public drinking water system or any existing potable drinking water well. ( )

**101. ALTERNATIVE PERIODIC TESTING OF CONTAINMENT SUMPS USED FOR INTERSTITIAL MONITORING OF PIPING.**

**01. Applicability.** ( )

**a.** The alternative test method in Subsection 101.02 may only be used for containment sumps that are performing continuous interstitial monitoring as a piping release detection method where an electronic sump sensor is installed and connected to an electronic monitoring device, such as an automatic tank gauge, or where the piping within a containment sump is continuous to a containment sump that has an electronic sump sensor installed and connected to an electronic monitoring device, such as an automatic tank gauge. ( )

i. The sump sensor in Subsection 101.01.a. must be positioned in the containment sump according to manufacturer instructions and at the lowest possible point in the containment sump. ( )

ii. The sump sensor in Subsection 101.01.a. must be wired and programmed appropriately to shut down power to the submersible turbine pump (positive shutdown) when the sensor is in contact with liquid in any containment sump. ( )

b. The Department may not allow the alternative test method in Subsection 101.02 if it determines the containment sump, penetration fittings, or containment sump sensors are not constructed or positioned in a manner that will accommodate the alternative testing or prevent releases to the environment (i.e., penetration fittings are too close to the containment sump bottom). ( )

**02. Alternative Test Method Allowed.** ( )

a. As an alternative to the allowable test method in 40 CFR 280.35(a)(1)(ii)(A)-(C), containment sumps used for interstitial monitoring of piping may be tested as follows: ( )

i. Temporarily remove any interstitial monitoring containment sump sensors before conducting the test; ( )

ii. Add water to the containment sump up to a point directly beneath the first containment sump penetration fitting from the bottom of the containment sump. The water must be allowed to settle for at least fifteen (15) minutes; ( )

iii. Place a measuring stick that has one sixteenth (1/16th) inch increments into the lowest point in the containment sump and extending above the water level in the sump; and ( )

iv. Document the initial water level measurement as measured from the bottom of the containment sump. After one (1) hour, document the ending water level measurement. If the water level changes less than one eighth (1/8th) inch, the containment sump passes the integrity test. If the water level changes one eighth (1/8th) inch or greater, the containment sump fails the integrity test. ( )

b. Upon completion of the test, remove all water and properly dispose of it. Reinstall any interstitial monitoring sensors. Reinstall all containment sump lids, gaskets, and covers. ( )

**102. -- 199. (RESERVED)**

**200. RELEASE REPORTING.**

**01. Information to be Reported.** In addition to the provisions in 40 CFR Part 280, Subpart E, and IDAPA 58.01.02, "Water Quality Standards," Sections 851 and 852, owners or operators must report to the Department, on forms provided by the Department, the following information regarding confirmed UST releases within ninety (90) days of a confirmed release: ( )

a. The release source; and ( )

b. The release cause. ( )

**02. Release Sources.** Release sources may include, but are not limited to the following: ( )

a. USTs; ( )

b. Piping; ( )

c. Dispensers, which include the dispenser and equipment used to connect the dispenser to the piping. A release from a suction pump or components located above the shear valve would be an example of a release from the dispenser; ( )

d. Submersible turbine pump area, which includes the submersible turbine pump head (typically located in the tank sump), the line leak detector, and the piping that connects the submersible turbine pump to the

UST; and ( )

e. Delivery problem, which identifies releases that occurred during product delivery to the UST. Typical causes associated with this source are spills and overfills. ( )

**03. Release Causes.** Release causes may include, but are not limited to the following: ( )

a. Spills which may occur when the delivery hose is disconnected from the fill pipe of the UST or when the nozzle is removed from the vehicle at the dispenser; ( )

b. Overfills which may occur from the fill pipe at the UST or when the nozzle fails to shut off at the dispenser; ( )

c. Physical or mechanical damage of all types except corrosion. Examples include a puncture of the UST or piping, loose fittings, broken components, and components that have changed dimension like elongation or swelling; ( )

d. Corrosion of a metal tank, piping, flex connector, or other component; and ( )

e. Installation problem that occurs specifically because the UST system was not installed properly. ( )

**201. -- 299. (RESERVED)**

**300. TRAINING.**

**01. Operator Designation.** For each UST system regulated under these rules, the owner or operator must: ( )

a. Designate: ( )

i. The class A operator, who is the individual(s) having primary responsibility for on-site operation and maintenance of the UST system. It is not necessary that the class A operator be on site; ( )

ii. The class B operator, who is the individual(s) having daily on-site responsibility for the operation and maintenance of the UST system. It is not necessary that the class B operator be on site at all times; and ( )

iii. The class C operator, who is the daily, on-site individual(s) having primary responsibility for addressing emergencies presented by a spill or release from the UST system. The class C operator may be designated by the class A or B operator. ( )

b. Maintain a record at the facility where the UST is located listing each person designated in Subsections 300.01.a.i. through iii. ( )

c. Notify the Department in writing of the individual(s) designated in Subsections 300.01.a.i. and ii. within thirty (30) days of the designation. ( )

**02. Individual Training.** The owner or operator of each UST system regulated under these rules must ensure that the individual(s) identified in: ( )

a. Subsections 300.01.a.i. and ii. participate in the training conducted by the Department or a state of Idaho approved third party; ( )

b. Subsections 300.01.a.i. or ii. provide training to the persons identified in Subsection 300.01.a.iii; ( )

c. Subsection 300.01.a.iii. be trained before assuming responsibility for responding to emergencies;

( )

**d.** Subsections 300.01.a.i. and ii. repeat the training within thirty (30) days if the UST system for which they have responsibility is determined to be out of compliance with these rules; and ( )

**e.** Subsections 300.01.a.i. and 300.01.a.ii. be trained within thirty (30) days of assuming operation and maintenance duties. ( )

**03. Unattended Sites.** In the case of unattended sites, a sign must be posted in a location visible from the dispensers indicating emergency shut-off procedures and emergency contact phone numbers. ( )

**301. -- 499. (RESERVED)**

**500. DELIVERY PROHIBITION.**

**01. Classification as Ineligible.** The Department will classify a UST as ineligible for delivery, deposit, or acceptance of a regulated substance as soon as practicable after the Department determines one (1) or more of the following is not installed: ( )

**a.** Spill prevention equipment; ( )

**b.** Overfill protection equipment; ( )

**c.** Leak detection equipment; or ( )

**d.** Corrosion protection equipment. ( )

**02. Warning of Violations.** The Department may classify a UST as ineligible for delivery, deposit, or acceptance of a regulated substance if the owner or operator of the tank has been issued a written warning for failure to comply with any of the following items, and the owner or operator fails to initiate corrective action within thirty (30) days of the issuance of the written warning, unless the deadline is extended by the Department: ( )

**a.** Properly operate or maintain leak detection equipment; ( )

**b.** Properly operate or maintain spill, overfill, or corrosion protection equipment; or ( )

**c.** Maintain financial responsibility. ( )

**03. Service of Notice.** If the Department classifies a UST as ineligible for delivery, deposit, or acceptance of a regulated substance pursuant to Subsections 500.01 or 500.02, the Department will provide a written notice of the determination to the owner or operator prior to prohibiting the delivery, deposit, or acceptance of a regulated substance. Notice is considered properly served by the Department in any of the following ways: ( )

**a.** Personally delivered to the owner or operator; or ( )

**b.** Clearly posted at a public entrance to the facility where the UST is located and a copy sent by certified mail to the last known address of the owner or operator. ( )

**04. Red-Tagging.** Once service of the written notice of the ineligible determination is complete, the Department will: ( )

**a.** Attach a red tag to each fill pipe of the ineligible UST clearly identifying the tank as ineligible; ( )

**b.** Maintain a list of all USTs that are classified as ineligible; ( )

**c.** Make the list available to the public by posting the list at [www.deq.idaho.gov](http://www.deq.idaho.gov). ( )

- 05. Written Notice.** The written notice required by Subsection 500.03 must include: ( )
- a.** The specific reasons or violations that led to the ineligible classification; ( )
  - b.** A statement notifying the owner and operator that the UST is ineligible for delivery and it is unlawful for any person to deliver to, deposit into, or accept a regulated substance into the UST; ( )
  - c.** The effective date the UST is deemed ineligible for delivery; ( )
  - d.** The name and address of the department representative to whom a written request for re-inspection can be made, if a re-inspection is necessary; ( )
  - e.** A statement regarding the right to appeal the Department’s action regarding ineligible classification pursuant to IDAPA 58.01.23, “Contested Case Rules and Rules for Protection and Disclosure of Records”; and ( )
  - f.** The option to request a compliance conference pursuant to Subsection 500.06. ( )
- 06. Compliance Conference.** The owner or operator may request a compliance conference with the Department within fifteen (15) days of receipt of the notice. A compliance conference will be scheduled within twenty (20) days and conducted in an informal manner by the Department. At the compliance conference, the owner or operator may explain why he believes the UST should not be classified as ineligible. During the compliance conference, the owner or operator and the Department will identify and establish appropriate acts and a time schedule for compliance as necessary. ( )
- 07. Duration of Ineligible Classification.** The classification of a UST as ineligible remains in effect until the conditions cited in the notice no longer exist. If the Department determines that an ineligible storage tank has returned to compliance and is now eligible for delivery, deposit, or acceptance of a regulated substance, the Department or an authorized designee will: ( )
- a.** As soon as practicable, remove the red tag from the UST; ( )
  - b.** Remove the UST from the ineligible list posted on its website; and ( )
  - c.** Send a written notice to the owner and operator that an ineligible storage tank has returned to compliance and is now eligible for delivery, deposit, or acceptance of a regulated substance. ( )
- 08. Declining Classification.** The Director may decline to classify a UST as ineligible if the Director decides that it is not in the best interest of the public. ( )
- a.** The Director may only defer application of delivery prohibition for up to one hundred eighty (180) days after determining a UST is ineligible. ( )
  - b.** The Director may authorize the delivery, deposit, or acceptance of product into an ineligible UST if such activity is necessary to test or calibrate the UST or dispenser system. ( )
- 09. Department Authority.** Nothing in Section 500 will affect or preempt the authority of the Department to prohibit the delivery, deposit, or acceptance of a regulated substance to a UST under other existing authorities. ( )
- 10. Proper Notice.** A person will not be in violation of Section 39-8809(1), Idaho Code, if the Department fails to provide the notice described in Subsections 500.03 and 500.04. ( )
- 11. Unlawful to Tamper with Red Tag.** It is unlawful for any person to tamper with or remove the red tag without the Department’s approval. ( )

**501. -- 600. (RESERVED)**

**601. FEE SCHEDULE FOR USTS.**

Owners or operators of all regulated USTs must pay an annual, nonrefundable fee. ( )

**01. Fee Criteria.** ( )

**a.** Compartment, emergency generator day and belly tanks, and siphon-manifolded USTs will be treated as separate underground storage tanks. ( )

**b.** Temporarily out of use tanks are included. ( )

**02. Fee Amount and Schedule.** ( )

**a.** Annual fees must be paid for each fee year beginning January 2, 2018, and continuing for each succeeding year. ( )

**b.** The annual fee per UST is one hundred dollars (\$100). The annual fee will not exceed one hundred dollars (\$100) and will be re-calculated each year if the fee balance exceeds thirty-five thousand dollars (\$35,000). Any fee balance above thirty-five thousand dollars (\$35,000) will be used to reduce the following year's fee. ( )

**c.** New USTs installed after January 2 will not pay a fee until the following January. ( )

**03. Billing.** ( )

**a.** An annual fee invoice will be generated and mailed in November for each owner listed in the Department's Underground Storage Tank Database. ( )

**b.** Owners will have one (1) month to notify the Department in writing if the number of USTs is incorrect. ( )

**04. Payment.** Payment of the annual fee is due on January 2, unless it is a Saturday, a Sunday, or a legal holiday, in which event the payment will be due on the successive business day. Make checks or money orders payable to the Department and send to 1410 North Hilton Street, Boise, ID 83706. ( )

**05. Delinquent Unpaid Fees.** An owner will be delinquent in payment if the annual fee has not been received by the Department by March 1. ( )

**06. Fee Report.** Prior to February 1 of each year, the Director will report to the Governor and the Idaho Legislature on the use of fees collected the previous year. At a minimum, the report must include: ( )

**a.** A list of all tanks subject to inspection; ( )

**b.** The type of inspection and regulatory authority or guidance used; and ( )

**c.** A detailed accounting of how fee funds were spent. ( )

**602. -- 999. (RESERVED)**



[Agency redlined courtesy copy]

## 58.01.07 – RULES REGULATING UNDERGROUND STORAGE TANK SYSTEMS

### 000. LEGAL AUTHORITY.

Chapters 1 and 88, Title 39, Idaho Code, ~~grant authority to the Board of Environmental Quality to promulgate rules for the regulation of underground storage tank systems within the state of Idaho.~~ (3-24-22)(    )

### 001. TITLE AND SCOPE.

~~01. Title.~~ These rules are titled IDAPA 58.01.07, “Rules Regulating Underground Storage Tank Systems.” (3-24-22)

~~02. Scope.~~ These rules ~~establish standards and procedures necessary for the regulation of underground storage tank systems. Compliance with these rules shall not relieve persons from the obligation to comply with other applicable state or federal laws~~ have the scope and applicability provided in Section 39-8804, Idaho Code. (3-24-22)(    )

### 002. WRITTEN INTERPRETATIONS.

~~As described in Section 67-5201(19)(b)(iv), Idaho Code, the Department of Environmental Quality may have written statements which pertain to the interpretation of these rules. If available, such written statements can be inspected and copied at cost at the Department of Environmental Quality, 1410 N. Hilton, Boise, Idaho 83706-1255.~~ (3-24-22)

### 003. ADMINISTRATIVE PROVISIONS.

~~Persons may be entitled to appeal agency actions authorized under these rules pursuant to IDAPA 58.01.23, “Contested Case Rules and Rules for Protection and Disclosure of Records.”~~ ( )

### 004. INCORPORATION BY REFERENCE.

~~Any reference to any document identified in Subsection 004.01 shall constitute the full adoption by reference into IDAPA 58.01.07.~~ (3-24-22)

**01. Documents Incorporated by Reference.** Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks, 40 CFR Part 280, revised as of July 1, 2017 2023 with the following ~~exceptions~~ exclusions: (3-24-22)(    )

- a. 40 CFR 280.12, the definition of “Replaced” ~~is excluded~~; (3-24-22)(    )
- b. 40 CFR 280.12, the definition of “Under-dispenser containment or UDC” ~~is excluded~~; (3-24-22)(    )
- c. 40 CFR 280.20, the introductory paragraph sentence, “In addition, except for suction piping that meets the requirements of Section 280.41(b)(1)(ii)(A) through (E), tanks and piping installed or replaced after April 11, 2016 must be secondarily contained and use interstitial monitoring in accordance with Section 280.43(g),” ~~is excluded~~; (3-24-22)(    )
- d. 40 CFR 280.20(f), ~~is excluded~~; (3-24-22)(    )
- e. 40 CFR 280.34(b)(9), the citation to Section 280.245 ~~is excluded~~; (3-24-22)(    )
- f. 40 CFR 280.41(a)(1), “installed on or before April 11, 2016...” ~~is excluded~~; (3-24-22)(    )
- g. 40 CFR 280.41(a)(2), ~~is excluded~~; (3-24-22)(    )

- h. 40 CFR 280.41(b)(1), “installed on or before April 11, 2016...” ~~is excluded;~~ (3-24-22)(    )
- i. 40 CFR 280.41(b)(2), ~~is excluded;~~ (3-24-22)(    )
- j. 40 CFR 280.42, Note to paragraph (a), “for tank installed on or before October 13, 2015.” ~~is excluded;~~ (3-24-22)(    )
- k. 40 CFR 280.42(e), “installed on or before October 13, 2015...” ~~is excluded;~~ and (3-24-22)(    )
- l. 40 CFR Part 280, Subpart J ~~is excluded.~~ (3-24-22)(    )
- ~~02. Hazardous Substance Underground Storage Tank Systems. (3-24-22)~~
- ~~a. The following items only apply to hazardous substance underground storage tank systems and do not apply to petroleum underground storage tank systems: (3-24-22)~~
- ~~i. The definition of “Hazardous substance UST system” in 40 CFR 280.12 and use of this term or regulations regarding hazardous substance in 40 CFR Part 280; and (3-24-22)~~
- ~~ii. 40 CFR 280.42 and any reference to 40 CFR 280.42 in 40 CFR Part 280. (3-24-22)~~
- ~~b. All other provisions of 40 CFR Part 280 and all provisions of IDAPA 58.01.07 shall apply to hazardous substance underground storage tank systems. (3-24-22)~~
- ~~032. Consistency.~~ In the event of conflict or inconsistency between the language in IDAPA 58.01.07 and that found in 40 CFR Part 280, IDAPA 58.01.07 ~~shall~~ will prevail. (3-24-22)(    )
- ~~043. Stringency.~~ IDAPA 58.01.07 ~~shall~~ will be no more stringent than federal law or regulations governing ~~underground storage tank~~ UST systems. (3-24-22)(    )
- ~~05. Availability of Referenced Material.~~ The federal regulations adopted by reference can be obtained at the following locations: (3-24-22)
- ~~a. U.S. Government Printing Office, www.ecfr.gov; and (3-24-22)~~
- ~~b. Department of Environmental Quality, Hearing Coordinator, 1410 N. Hilton, Boise, ID 83706-1255, (208)373-0502. (3-24-22)~~
- ~~005. OFFICE HOURS — MAILING ADDRESS AND STREET ADDRESS.~~ The state office of the Department of Environmental Quality and the office of the Board of Environmental Quality are located at 1410 N. Hilton, Boise, Idaho 83706-1255, (208) 373-0502, www.deq.idaho.gov. The office hours are 8 a.m. to 5 p.m. Monday through Friday. (3-24-22)
- ~~006. CONFIDENTIALITY OF RECORDS.~~ Information obtained by the Department under these rules is subject to public disclosure pursuant to the provisions of Title 74, Chapter 1, Idaho Code, and IDAPA 58.01.21, “Rules Governing the Protection and Disclosure of Records in the Possession of the Idaho Department of Environmental Quality.” (3-24-22)
- ~~0074. -- 009. (RESERVED)~~
- ~~010. DEFINITIONS.~~ For the purpose of the rules contained in IDAPA 58.01.07, “Rules Regulating Underground Storage Tank Systems,” the following definitions apply: The term “department” has the meaning provided for that term in Section 39-103, Idaho Code. (3-24-22)(    )
- ~~01. Board.~~ The Idaho Board of Environmental Quality. (3-24-22)

~~021.~~ **Community Water System.** ~~A public water system that serves at least fifteen (15) service connections used by year round residents of the area served by the system or regularly serves at least twenty five (25) year round residents~~ As defined in IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems," Section 003.  
(3-24-22)(    )

~~03.~~ **Department.** The Idaho Department of Environmental Quality. (3-24-22)

~~04.~~ **Director.** The Director of the Idaho Department of Environmental Quality or his authorized agent.  
(3-24-22)

~~052.~~ **Existing.** Solely for purposes of determining when secondary containment is required, existing is when a ~~petroleum underground storage tank~~ UST, piping, motor fuel dispensing system, facility, public drinking water system or potable drinking water well is in place when a new installation or replacement of a tank, piping, or motor fuel dispensing system begins.  
(3-24-22)(    )

~~06.~~ **EPA.** The United States Environmental Protection Agency. (3-24-22)

~~073.~~ **Installation of a New Motor Fuel Dispenser System.** The installation of a new motor fuel dispenser and the equipment necessary to connect the dispenser to the ~~petroleum underground storage tank~~ UST system. This equipment may include flexible connectors, risers, or other transitional components that are beneath the dispenser, below the shear valve, and connect the dispenser to the piping. It does not mean the installation of a motor fuel dispenser installed separately from the equipment needed to connect the dispenser to the ~~petroleum underground storage tank~~ UST system.  
(3-24-22)(    )

~~084.~~ **Installer.** Any person who installs a new or replacement ~~petroleum underground storage tank~~ UST system.  
(3-24-22)(    )

~~095.~~ **New Underground Storage Tank (UST).** Has the same meaning as "underground storage tank or UST" in 40 CFR 280.12, except that such term includes tanks that have been previously used and meet the requirements provisions of 40 CFR 280.20(a).  
(3-24-22)(    )

~~106.~~ **Non-Community Water System.** ~~A public water system that is not a community water system. A non-community water system is either a transient non-community water system or a non-transient non-community water system~~ As defined in IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems," Section 003.  
(3-24-22)(    )

~~11.~~ **Piping.** ~~A hollow cylinder or a tubular conduit constructed of non-earthen materials that routinely contains and conveys regulated petroleum substances from the petroleum underground storage tank(s) to the dispenser(s) or other end-use equipment. It does not mean vent, vapor recovery, or fill lines that do not routinely contain regulated petroleum substances.~~  
(3-24-22)

~~1207.~~ **Potable Drinking Water Well.** Any hole (dug, driven, drilled, or bored) that extends into the earth until it meets ground water which supplies water for a non-community public drinking water system or otherwise supplies water for household use (consisting of drinking, bathing, and cooking, or other similar uses). Such wells may provide water to entities such as a single-family residence, group of residences, businesses, schools, parks, campgrounds, and other permanent or seasonal communities.  
(3-24-22)(    )

~~1308.~~ **Product Deliverer.** Any person who delivers or deposits product into a ~~petroleum underground storage tank~~ UST. This term may include major oil companies, jobbers, petroleum transportation companies, or other product delivery entities.  
(3-24-22)(    )

~~1409.~~ **Public Drinking Water System.** ~~A system for the provision to the public of water for human consumption through pipes or, after August 5, 1998, other constructed conveyances, if such system has at least fifteen (15) service connections or regularly serves an average of at least twenty five (25) individuals daily at least sixty (60) days out of the year. Such term includes: any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system; and, any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Such term does not~~

~~include any “special irrigation district.” A public water system is either a “community water system” or a “non-community water system.” As defined in IDAPA 58.01.08, “Idaho Rules for Public Drinking Water Systems,” Section 003.~~ (3-24-22)( )

**150. Red Tag.** A tamper-resistant tag, device, or mechanism attached to the tank’s fill pipes that clearly identifies a ~~petroleum underground storage tank~~ UST as ineligible for product delivery. The tag or device ~~shall~~ must be visible to the product deliverer and clearly state that it is unlawful to deliver to, deposit into, or accept product into the ineligible ~~petroleum underground storage tank~~ UST. (3-24-22)( )

**161. Replace.** As it applies to ~~petroleum underground storage tanks~~ USTs and piping, replace is defined as follows: (3-24-22)( )

**a.** ~~Petroleum Underground Storage Tank. Replace means t~~To remove an existing tank and install a new tank. (3-24-22)( )

**b.** ~~Piping. Replace means t~~To remove and put back in one hundred (100) percent of the piping, excluding connectors, connected to a single ~~petroleum underground storage tank~~ UST system. This definition does not alter the requirement in 40 CFR 280.33(c) to replace metal pipe sections and fittings that have released product as a result of corrosion or other damage. A replacement of metal pipe section and fittings pursuant to 40 CFR 280.33(c) ~~shall~~ will be considered a replacement under this definition only if one hundred (100) percent of the metal piping, excluding connectors, is replaced. (3-24-22)( )

**172. Under-Dispenser Spill Containment.** Containment underneath a dispenser that will prevent leaks from the dispenser from reaching soil or ground water. Such containment must: ( )

**a.** At installation or modification, be liquid-tight on its sides, bottom, and at any penetrations; and ( )

**b.** Be compatible with the substance conveyed by the piping; and either ( )

**c.** Allow for visual inspection and access to the components in the containment system; or ( )

**d.** Be monitored for releases using a release detection method that meets the ~~requirements~~ provisions of 40 CFR 280.43(g). (3-24-22)( )

**011. – 099. (RESERVED)**

**100. ADDITIONAL MEASURES TO PROTECT GROUND WATER FROM CONTAMINATION.**

**01. Notification.** An owner, operator, or designee must ~~provide to the Department:~~ (3-24-22)( )

**a.** ~~Provide w~~Written notice ~~to the Department using forms provided by the Department~~ thirty (30) days prior to the installation of a new piping system or a new or replacement ~~petroleum underground storage tank~~ UST. (3-24-22)( )

**b.** ~~Provide n~~Notice ~~to the Department~~ twenty-four (24) hours prior to the installation of a replacement piping system. (3-24-22)( )

~~**02. Notification Forms.** The written notice required in Subsection 100.01.a. shall be made upon forms provided by the Department.~~ (3-24-22)

**032. Requirements for Petroleum UST Systems.** Owners, operators, and installers of a new or replacement ~~petroleum underground storage tank~~ UST or piping system ~~shall~~ must comply with the following ~~requirements~~ provisions. (3-24-22)( )

**a.** Each new ~~petroleum underground storage tank,~~ or existing UST or piping ~~connected to any such new tank,~~ installed or replaced after February 23, 2007, ~~or any existing petroleum underground storage tank, or~~

~~existing piping connected to such existing tank, that is replaced after February 23, 2007, shall will~~ have secondary containment and be monitored for leaks in accordance with 40 CFR 280.43(g) if the new or replaced ~~petroleum underground storage tank UST~~ or piping is within one thousand (1,000) feet of any existing public drinking water system or any existing potable drinking water well. At a minimum, secondary containment systems must be designed, constructed, and installed to contain regulated substances released from the tank system until they are detected and removed, prevent the release of regulated substances to the environment at any time during the operational life of the ~~petroleum underground storage tank UST~~ system, and be checked for evidence of a release at least every thirty (30) days. The following conditions are excluded: ~~(3-24-22)( )~~

- i. Suction piping that meets the requirements provisions of 40 CFR 280.41(b)(1)(ii)(A) through (E); ~~(3-24-22)( )~~
- ii. Piping that manifolds two (2) or more ~~petroleum underground storage tanks USTs~~ together; ~~(3-24-22)( )~~
- iii. Existing piping to which new piping is connected to install a dispenser; and ( )
- iv. Tanks identified in 40 CFR 280.10(b). ( )

**b.** If the owner installs, within one (1) year, a potable drinking water well at the new facility that is within one thousand (1,000) feet of the ~~petroleum underground tanks USTs~~, piping, or motor fuel dispenser system as part of the new ~~underground storage tank UST~~ facility installation, secondary containment and under-dispenser containment are required, regardless of whether the well is installed before or after the ~~petroleum underground tanks USTs~~, piping, and motor fuel dispenser system are installed. ~~(3-24-22)( )~~

**c.** The notice required described in Subsection 100.01 ~~shall will~~ indicate whether the new or replacement installation is within one thousand (1,000) feet of an existing public drinking water system or any existing potable drinking water well. If the owner and installer certify that the installation is not within one thousand (1,000) feet of an existing public drinking water system or any existing potable drinking water well, the owner, operator or designee ~~shall will~~ provide and maintain documentation showing that a reasonable investigation of water systems and drinking water wells was undertaken. A reasonable investigation includes, but is not limited to, a search of the records of: ~~(3-24-22)( )~~

- i. The public or private water service provider in the area which the new or replacement installation is located (if any); ( )
- ii. The city or county in which the new or replacement installation is located; ( )
- iii. The Idaho Department of Water Resources; and ( )
- iv. The ~~Idaho~~ Department of Environmental Quality. ~~(3-24-22)( )~~

**d.** In the case of a replacement of an existing ~~petroleum underground storage tank UST~~ or existing piping ~~connected to the petroleum underground storage tank~~, Section 100 ~~shall apply~~ ies only to the specific ~~petroleum underground storage tank UST~~ or piping being replaced, not to other ~~petroleum underground storage tanks USTs~~ and ~~connected pipes comprising such system piping~~. ~~(3-24-22)( )~~

**e.** Each installation of a new motor fuel dispenser system ~~shall will~~ include under-dispenser spill containment if the new dispenser is within one thousand (1,000) feet of any existing public drinking water system or any existing potable drinking water well. ~~(3-24-22)( )~~

~~**04. Requirements for Hazardous Substance UST Systems.** Owners, operators, and installers of a new or replacement hazardous substance underground storage tank or piping system shall have secondary containment as required in 40 CFR 280.42. (3-24-22)~~

~~**05. Certification.** Owners and operators shall also comply with the certification requirements of 40 CFR 280.22(f) as incorporated by reference into these rules. (3-24-22)~~

**101. ALTERNATIVE PERIODIC TESTING OF CONTAINMENT SUMPS USED FOR INTERSTITIAL MONITORING OF PIPING.**

**01. Applicability.** ( )

**a.** The alternative test method in Subsection 101.02 ~~shall~~ may only be used for containment sumps that are performing continuous interstitial monitoring as a piping release detection method where an electronic sump sensor is installed and connected to an electronic monitoring device, such as an automatic tank gauge, or where the piping within a containment sump is continuous to a containment sump ~~which~~ that has an electronic sump sensor installed and connected to an electronic monitoring device, such as an automatic tank gauge. (3-24-22)( )

**i.** The sump sensor in Subsection 101.01.a. must be positioned in the containment sump according to manufacturer instructions and at the lowest possible point in the containment sump. ( )

**ii.** The sump sensor in Subsection 101.01.a. must be wired and programmed appropriately to shut down power to the submersible turbine pump (positive shutdown) when the sensor is in contact with liquid in any containment sump. ( )

~~**iii.** If new dispensers are added and Subsection 101.01.a.ii. cannot be achieved (no electrical conduit, not enough sensor ports, etc.), an electronic stand-alone dispenser containment sump sensor may be used if it is wired appropriately to shut down power to the dispenser when the sensor is in contact with liquid in the dispenser containment sump.~~ (3-24-22)

**b.** The Department may not allow the alternative test method in Subsection 101.02 if it determines the containment sump, penetration fittings, or containment sump sensors are not constructed or positioned in a manner that will accommodate the alternative testing or prevent releases to the environment (i.e., penetration fittings are too close to the containment sump bottom). ( )

**02. Alternative Test Method Allowed.** ( )

**a.** As an alternative to the allowable test method in 40 CFR 280.35(a)(1)(ii)(A)-(C), containment sumps used for interstitial monitoring of piping may be tested as follows: ( )

**i.** Temporarily remove any interstitial monitoring containment sump sensors before conducting the test; ( )

**ii.** Add water to the containment sump up to a point directly beneath the first containment sump penetration fitting from the bottom of the containment sump. The water must be allowed to settle for at least fifteen (15) minutes; ( )

**iii.** Place a measuring stick that has one sixteenth (1/16th) inch increments into the lowest point in the containment sump and extending above the water level in the sump; and ( )

**iv.** Document the initial water level measurement as measured from the bottom of the containment sump. After one (1) hour, document the ending water level measurement. If the water level changes less than one eighth (1/8th) inch, the containment sump passes the integrity test. If the water level changes one eighth (1/8th) inch or greater, the containment sump fails the integrity test. ( )

**b.** Upon completion of the test, remove all water and properly dispose of it. Reinstall any interstitial monitoring sensors. Reinstall all containment sump lids, gaskets, and covers. ( )

**102. -- 199. (RESERVED)**

**200. RELEASE REPORTING REQUIREMENTS.**

**01. Information to be Reported.** (3-24-22)

~~a.~~ In addition to the requirements provisions in 40 CFR Part 280, Subpart E, and IDAPA 58.01.02, “Water Quality Standards,” Subsections 851-04 and 852, owners or operators shall must report to the Department, on forms provided by the Department, the following information regarding confirmed petroleum underground storage tank UST releases to the Department on forms provided by the Department within ninety (90) days of a confirmed release: (3-24-22)(    )

~~i.a.~~ The release source; and ( )

~~i.b.~~ The release cause. ( )

~~b.~~ Releases less than twenty-five (25) gallons that are cleaned up within twenty-four (24) hours, and which do not cause a sheen on nearby surface water, do not need to be reported. (3-24-22)

**02. Release Sources.** Release sources may include, but are not limited to the following: ( )

~~a.~~ Petroleum Underground Storage Tanks USTs; (3-24-22)(    )

~~b.~~ Piping; ( )

~~c.~~ Dispensers, which include the dispenser and equipment used to connect the dispenser to the piping. A release from a suction pump or components located above the shear valve would be an example of a release from the dispenser; ( )

~~d.~~ Submersible turbine pump area, which includes the submersible turbine pump head (typically located in the tank sump), the line leak detector, and the piping that connects the submersible turbine pump to the petroleum underground storage tank UST; and (3-24-22)(    )

~~e.~~ Delivery problem, which identifies releases that occurred during product delivery to the petroleum underground storage tank UST. Typical causes associated with this source are spills and overfills. (3-24-22)(    )

**03. Release Causes.** Release causes may include, but are not limited to the following: ( )

~~a.~~ Spills which may occur when the delivery hose is disconnected from the fill pipe of the petroleum underground storage tank UST or when the nozzle is removed from the vehicle at the dispenser; (3-24-22)(    )

~~b.~~ Overfills which may occur from the fill pipe at the petroleum underground storage tank UST or when the nozzle fails to shut off at the dispenser; (3-24-22)(    )

~~c.~~ Physical or mechanical damage of all types except corrosion. Examples include a puncture of the petroleum underground storage tank UST or piping, loose fittings, broken components, and components that have changed dimension like elongation or swelling; (3-24-22)(    )

~~d.~~ Corrosion of a metal tank, piping, flex connector, or other component; and ( )

~~e.~~ Installation problem that occurs specifically because the underground storage tank UST system was not installed properly. (3-24-22)(    )

~~04. Requirements.~~ ~~The reporting required in Section 200 shall be reported to the Department within ninety (90) days of a confirmed release. The reporting requirement in Section 200 shall not relieve owners or operators from the obligation to comply with 40 CFR Part 280 Subpart E “Release Reporting, Investigation, and Confirmation,” IDAPA 58.01.02, “Water Quality Standards,” Section 851, “Petroleum Release Reporting, Investigation, and Confirmation,” and IDAPA 58.01.02, “Water Quality Standards,” Section 852, “Petroleum Release Response and Corrective Action.”~~ (3-24-22)

**201. -- 299. (RESERVED)**



300. TRAINING ~~REQUIREMENTS.~~

~~01. Requirements.~~ The Department shall adopt a training program to help owners and operators comply with the requirements of these rules. The training program requirements shall: (3-24-22)

~~a. Be consistent with 42 U.S.C. 6991i(a), as amended by the Underground Storage Tank Compliance Act, (Pub.L. 109-58, title XV, sec. 1524(a), Aug. 8, 2005); (3-24-22)~~

~~b. Be developed in cooperation with petroleum underground storage tank owners and tank operators; (3-24-22)~~

~~c. Take into consideration training programs implemented by petroleum underground storage tank owners and operators as of August 8, 2005; (3-24-22)~~

~~d. Provide for training to be conducted on site or at another mutually convenient location; and (3-24-22)~~

~~e. Be appropriately communicated to petroleum underground storage tank owners and operators. (3-24-22)~~

~~021. Operator Designation.~~ For each petroleum underground storage tank UST system regulated under these rules, the owner or operator shall must: (3-24-22)( )

~~a. Designate: ( )~~

~~i. The class A operator, who is the individual(s) having primary responsibility for on-site operation and maintenance of the petroleum underground storage tank UST system. This does not require It is not necessary that the class A operator be on site; (3-24-22)( )~~

~~ii. The class B operator, who is the individual(s) having daily on-site responsibility for the operation and maintenance of the petroleum underground storage tank UST system. This does not require It is not necessary that the class B operator be on site at all times; and (3-24-22)( )~~

~~iii. The class C operator, who is the daily, on-site individual(s) having primary responsibility for addressing emergencies presented by a spill or release from the petroleum underground storage tank UST system. The class C operator can may be designated by the class A or B operator. (3-24-22)( )~~

~~b. Maintain a record at the facility where the petroleum underground storage tank UST is located listing each person designated in Subsections 300.021.a.i., 300.02.a.ii., and 300.02.a. through iii. (3-24-22)( )~~

~~c. Notify the Department in writing of the individual(s) designated in Subsections 300.021.a.i. and 300.02.a.ii. within thirty (30) days of the designation. (3-24-22)( )~~

~~032. Individual Training.~~ The owner or operator of each petroleum underground storage tank UST system regulated under these rules shall must ensure that the individual(s) identified in: ( )

~~a. Subsections 300.021.a.i. and 300.02.a.ii. participate in the training conducted by the Department or a state of Idaho approved third party; (3-24-22)( )~~

~~ab. The individual(s) identified in Subsections 300.021.a.i. or 300.02.a.ii. shall provide training to the persons identified in Subsection 300.021.a.iii; (3-24-22)( )~~

~~bc. The individual(s) identified in Subsection 300.021.a.iii. must be trained before assuming responsibility for responding to emergencies; (3-24-22)( )~~

~~ed. The individual(s) identified in Subsections 300.021.a.i. and 300.02.a.ii. shall repeat the training within thirty (30) days if the petroleum underground storage tank UST system for which they have responsibility is~~



determined to be out of compliance with these rules: ~~and~~ (3-24-22)( )

~~de.~~ The individual(s) identified in Subsections 300.02~~1~~.a.i. and 300.02~~1~~.a.ii. shall be trained within thirty (30) days of assuming operation and maintenance duties. (3-24-22)( )

**043. Unattended Sites.** In the case of unattended sites, a sign must be posted in a location visible from the dispensers indicating emergency shut-off procedures and emergency contact phone numbers. ( )

**301. -- 399. (RESERVED)**

**400. INSPECTIONS.**

~~01. Department Authority.~~ In order to fulfill the statutory requirements of Chapter 88, Title 39, Idaho Code, officers, employees or representatives of the Department, or third party inspectors as described in Subsection 400.02, are authorized to inspect petroleum underground storage tanks, contents of the tanks, and associated equipment and records relating to such tanks, contents, and associated equipment. (3-24-22)

~~02. Third Party Inspections.~~ (3-24-22)

~~a.~~ Third party inspectors must be certified, licensed, or registered by an approved state program to perform on-site inspections. At a minimum, third party inspectors must meet the requirements listed in Subsections 400.02.a.i. through 400.02.a.v.: (3-24-22)

~~i.~~ Be trained in the state-specific inspection protocols and procedures, and perform inspections pursuant to such protocols and procedures; (3-24-22)

~~ii.~~ Successfully complete the state's required training program. The training program for third party inspectors must be comparable to the training program for Department inspectors; (3-24-22)

~~iii.~~ Not be the owner or operator of the petroleum underground storage tank, an employee of the owner or operator of the petroleum underground storage tank, or a person having daily on-site responsibility for the operation and maintenance of the petroleum underground storage tank; (3-24-22)

~~iv.~~ Use an inspection report form developed by the Department. Review of applicable records and other activities that can be accomplished off-site may be combined with activities conducted at the site to fulfill the on-site inspection requirement; and (3-24-22)

~~v.~~ Complete and submit the inspection report to the Department in the manner and time frame established by the Department. All third party inspection reports must be submitted electronically to the Department for review and for the Department to make a compliance determination for each site. If requested by the Department, third party inspectors shall provide all supporting documentation for its inspection reports. (3-24-22)

~~b.~~ Third party inspection procedures must contain an audit program, developed by the Department, to monitor third party inspectors on a routine basis. The audit program must include a sufficient number of on-site inspections to effectively assess inspector performance. (3-24-22)

~~e.~~ If a third party inspector fails to demonstrate to the approved state program adequate competence and proficiency to perform petroleum underground storage tank inspections, or the approved state program otherwise determines it is not appropriate for the third party inspector to conduct on-site inspections as part of a third party inspection program, the approved state program must take appropriate action against the third party inspector as provided by law. (3-24-22)

~~03. Inspections.~~ All inspections shall be done in accordance with the provisions of Section 39-108, Idaho Code. At a minimum, an on-site inspection must assess compliance with the provisions of these rules and 40 CFR Part 280. (3-24-22)

**401.—499. (RESERVED)**

500. DELIVERY PROHIBITION.

~~01. Prohibition. Effective August 8, 2007, it shall be unlawful for any person to deliver to, deposit into, or accept a regulated petroleum substance into a petroleum underground storage tank at a facility which has been identified by the Department to be ineligible for such delivery, deposit, or acceptance. (3-24-22)~~

~~021. Classification as Ineligible. The Department shall will classify a petroleum underground storage tank UST as ineligible for delivery, deposit, or acceptance of a regulated petroleum substance as soon as practicable after the Department determines one (1) or more of the following conditions exists is not installed: (3-24-22)( )~~

- ~~a. Required sSpill prevention equipment is not installed; (3-24-22)( )~~
- ~~b. Required eOverfill protection equipment is not installed; (3-24-22)( )~~
- ~~c. Required lLeak detection equipment is not installed; or (3-24-22)( )~~
- ~~d. Required eCorrosion protection equipment is not installed. (3-24-22)( )~~

~~032. Warning of Violations. The Department may classify a petroleum underground storage tank UST as ineligible for delivery, deposit, or acceptance of a regulated petroleum substance if the owner or operator of the tank has been issued a written warning for failure to comply with any of the following violations items, and the owner or operator fails to initiate corrective action within thirty (30) days of the issuance of the written warning, unless the deadline is extended by the Department: (3-24-22)( )~~

- ~~a. Failure to pProperly operate or maintain leak detection equipment; (3-24-22)( )~~
- ~~b. Failure to pProperly operate or maintain spill, overfill, or corrosion protection equipment; or (3-24-22)( )~~
- ~~c. Failure to mMaintain financial responsibility. (3-24-22)( )~~

~~043. Service of Notice. If the Department classifies a petroleum underground storage tank UST as ineligible for delivery, deposit, or acceptance of a regulated petroleum substance pursuant to Subsections 500.021 or 500.032, the Department shall will provide a written notice of the determination to the owner or operator prior to prohibiting the delivery, deposit, or acceptance of a regulated petroleum substance. Notice is considered properly served by the Department in any of the following ways: (3-24-22)( )~~

- ~~a. The notice is pPersonally delivered to the owner or operator; or (3-24-22)( )~~
- ~~b. The notice is eClearly posted at a public entrance to the facility where the petroleum underground storage tank UST is located and a copy of the notice is also sent by certified mail to the last known address of the owner or operator. (3-24-22)( )~~

~~054. Red-Tagging. Once service of the written notice of the ineligible determination is complete, the Department shall then will: ( )~~

- ~~a. aAttach a red tag to each fill pipe of the ineligible petroleum underground storage tank UST clearly identifying the tank as ineligible; ( )~~
- ~~b. The Department shall also mMaintain a list of all petroleum underground storage tanks USTs that are classified as ineligible for delivery, deposit, or acceptance of a regulated petroleum substance; ( )~~
- ~~c. The Department shall mMake the list available to the public by posting the list on the Department's website at www.deq.idaho.gov. (3-24-22)( )~~

~~065. Written Notice. The written notice required by Subsection 500.043 must include: (3-24-22)( )~~

- a. The specific reasons or violations that led to the ineligible classification; ( )
- b. A statement notifying the owner and operator that the ~~petroleum underground storage tank UST~~ is ineligible for delivery and it is unlawful for any person to deliver to, deposit into, or accept a regulated ~~petroleum~~ substance into the ~~petroleum underground storage tank UST~~; (3-24-22)( )
- c. The effective date the ~~petroleum underground storage tank UST~~ is deemed ineligible for delivery; (3-24-22)( )
- d. The name and address of the department representative to whom a written request for re-inspection can be made, if a re-inspection is necessary; ( )
- e. A statement regarding the right to appeal the Department's action regarding ineligible classification pursuant to IDAPA 58.01.23, "Contested Case Rules and Rules for Protection and Disclosure of Records"; and ( )
- f. The option to request a compliance conference pursuant to Subsection 500.076. (3-24-22)( )

**076. Compliance Conference.** The owner or operator may request a compliance conference with the Department within fifteen (15) days of receipt of the notice. A compliance conference ~~shall~~ will be scheduled within twenty (20) days and conducted in an informal manner by the Department. At the compliance conference, the owner or operator may explain why he believes the ~~petroleum underground storage tank UST~~ should not be classified as ineligible. During the compliance conference, the owner or operator and the Department will identify and establish appropriate acts and a time schedule for compliance as necessary. (3-24-22)( )

**087. Duration of Ineligible Classification.** The classification of a ~~petroleum underground storage tank UST~~ as ineligible ~~shall~~ remains in effect until the conditions cited in the notice no longer exist. If the Department determines that an ineligible storage tank has returned to compliance and is now eligible for delivery, deposit, or acceptance of a regulated ~~petroleum~~ substance, the Department or an authorized designee ~~shall~~ will: ( )

- UST: **a.** ~~a~~As soon as practicable, remove the red tag from the ~~petroleum underground storage tank and also~~ ( )
- b.** ~~R~~Remove the ~~petroleum underground storage tank UST~~ from the ineligible list posted on its website: ~~and~~ ( )
- c.** ~~The Department will also s~~Send a written notice to the owner and operator that an ineligible storage tank has returned to compliance and is now eligible for delivery, deposit, or acceptance of a regulated ~~petroleum~~ substance. (3-24-22)( )

**098. Declining Classification.** The Director may decline to classify a ~~petroleum underground storage tank UST~~ as ineligible if the Director decides that ~~classifying the petroleum underground storage tank as ineligible for delivery, deposit, or acceptance~~ it is not in the best interest of the public. (3-24-22)( )

- a. The Director may only defer application of delivery prohibition for up to one hundred eighty (180) days after determining a ~~petroleum underground storage tank UST~~ is ineligible ~~for delivery, deposit, or acceptance of a regulated petroleum substance~~. (3-24-22)( )
- b. The Director may authorize the delivery, deposit, or acceptance of product into an ineligible ~~petroleum underground storage tank UST~~ if such activity is necessary to test or calibrate the ~~underground storage tank UST~~ or dispenser system. (3-24-22)( )

**409. Department Authority.** Nothing in Section 500 ~~shall~~ will affect or preempt the authority of the Department to prohibit the delivery, deposit, or acceptance of a regulated ~~petroleum~~ substance to a ~~petroleum underground storage tank UST~~ under other existing authorities. (3-24-22)( )

~~110.~~ **Proper Notice.** A person ~~shall will~~ not be in violation of ~~Subsection 500.01 39-8809(1), Idaho Code,~~ if the Department fails to provide the notice ~~required by described in~~ Subsections 500.04~~3~~ and 500.05~~4~~.  
(3-24-22)( )

~~121.~~ **Unlawful to Tamper with Red Tag.** It ~~shall be is~~ unlawful for any person to tamper with ~~and/or~~ remove the red tag without the Department's approval.  
(3-24-22)( )

501. -- ~~599~~600. (RESERVED)

~~600. PETROLEUM UNDERGROUND STORAGE TANK DATABASE.~~

~~01. Maintenance.~~ The Department shall maintain a database which provides details on the status of all petroleum underground storage tanks in the state of Idaho which are subject to regulation. The database shall be updated no less than the end of each calendar quarter.  
(3-24-22)

~~02. Identification.~~ The database shall identify any tanks subject to delivery prohibition.  
(3-24-22)

~~03. Petition.~~ Petroleum underground storage tank owners or operators may petition the Department to correct any inaccurate information for their tanks and the Department shall correct any such inaccurate information within thirty (30) days after verification.  
(3-24-22)

~~04. Availability.~~ The database shall be available to the public on the Department's website at [www.deq.idaho.gov](http://www.deq.idaho.gov).  
(3-24-22)

~~601. FEE SCHEDULE FOR UNDERGROUND STORAGE TANKS USTS.~~

~~Owners or operators of A~~all regulated underground storage tanks shall USTs must pay an annual, underground storage tank nonrefundable fee provided in Section 39-119, Idaho Code. The fee shall be assessed to regulated underground storage tanks as provided in Section 601.  
(3-24-22)( )

01. **Fee Criteria.** ( )

a. Compartment, emergency generator day and belly tanks, and siphon-manifolded ~~underground storage tanks shall~~ USTs will be treated as separate underground storage tanks.  
(3-24-22)( )

b. Temporarily out of use tanks are included ~~in Section 601.~~  
(3-24-22)( )

02. **Fee Amount and Schedule.** ( )

a. Annual fees ~~shall must~~ be paid for each fee year beginning January 2, 2018, and continuing for each succeeding year.  
(3-24-22)( )

b. The annual fee per ~~underground storage tank UST~~ is one hundred dollars (\$100). The annual fee ~~shall will~~ not exceed one hundred dollars (\$100) and will be re-calculated each year if the fee balance exceeds thirty-five thousand dollars (\$35,000). Any fee balance above thirty-five thousand dollars (\$35,000) will be used to reduce the following year's fee.  
(3-24-22)( )

c. New ~~underground storage tanks~~ USTs installed after January 2 will not pay a fee until the following January.  
(3-24-22)( )

03. **Billing.** ( )

a. An annual fee invoice will be generated and mailed in November for each owner listed in the Department's Underground Storage Tank Database.  
( )

b. Owners will have one (1) month to notify the Department in writing if the number of ~~underground storage tanks~~ USTs is incorrect.  
(3-24-22)( )

**04. Payment.** Payment of the annual fee ~~shall be~~ **is** due on January 2, unless it is a Saturday, a Sunday, or a legal holiday, in which event the payment ~~shall will~~ be due on the successive business day. ~~Fees paid by Make~~ checks or money orders ~~shall be made~~ payable to the ~~Idaho~~ Department of Environmental Quality and ~~sent send~~ to 1410 North Hilton Street, Boise, ID 83706-1255. (3-24-22)( )

**05. Delinquent Unpaid Fees.** An owner will be delinquent in payment if the annual fee has not been received by the Department by March 1. ( )

~~**06. Enforcement.** Failure to comply with Section 601 shall be subject to enforcement and penalties pursuant to the enforcement provisions of Section 39-108, Idaho Code, (Idaho Environmental Protection and Health Act), and Section 39-8811(2), Idaho Code, (Idaho Underground Storage Tank Act). (3-24-22)~~

~~**07. Nonrefundable.** The annual fee required by these rules shall be nonrefundable. (3-24-22)~~

**086. Fee Report.** Prior to February 1 of each year, the Director ~~shall will~~ report to the Governor and the Idaho Legislature on the use of fees collected the previous year. At a minimum, the report ~~shall must~~ include: (3-24-22)( )

- a. A list of all tanks subject to inspection; ( )
- b. The type of inspection and regulatory authority or guidance used; and ( )
- c. A detailed accounting of how fee funds were spent. ( )

**602. -- 999. (RESERVED)**

## IDAPA 58 – DEPARTMENT OF ENVIRONMENTAL QUALITY

### 58.01.08 – IDAHO RULES FOR PUBLIC DRINKING WATER SYSTEMS

#### DOCKET NO. 58-0108-2301 (ZBR CHAPTER REWRITE, FEE RULE)

#### NOTICE OF RULEMAKING – ADOPTION OF PENDING RULE

[LINK: LSO Rules Analysis Memo, Incorporation By Reference Synopsis \(IBRS\), & Cost/Benefit Analysis \(CBA\)](#)

**EFFECTIVE DATE:** This rule has been adopted by the Idaho Board of Environmental Quality (Board) and is now pending review by the 2024 Idaho State Legislature for final approval. Pursuant to Section 67-5224(2)(d), Idaho Code, this pending fee rule shall not become final and effective unless affirmatively approved by concurrent resolution of the Legislature. Pursuant to Section 67-5291(2), Idaho Code, all temporary, pending, and final rules of any nature may be approved or rejected by a concurrent resolution of the Legislature. The concurrent resolution shall state the effective date of the approval or rejection.

**AUTHORITY:** In compliance with Section 67-5224, Idaho Code, notice is hereby given that the Board has adopted a pending rule. This action is authorized by Chapter 1, Title 39, Idaho Code.

**DESCRIPTIVE SUMMARY:** A detailed summary of the reason for adopting the rule is set forth in the initial proposal published in the Idaho Administrative Bulletin, September 6, 2023, [Vol. 23-9, pages 635 through 783](#).

After consideration of public comments, Sections 003, 150, 300, 500, 501, 504, 510, 513, 542, 543, and 552 have been revised. DEQ identified revisions that had been inadvertently left out of the proposed rule publication. These revisions were negotiated or are non-substantive in nature: Sections 003 (definition of Vulnerability Assessment), 302, 450, 503, 511, 512, 515, 521, 529 – 532, 540, and 541. The remainder of the rule has been adopted as initially proposed. The board meeting documents are available at <https://www.deq.idaho.gov/drinking-water-docket-no-58-0108-2301/>.

**FEE SUMMARY:** This rulemaking does not impose or increase a fee beyond what was previously submitted to and reviewed by the Idaho Legislature in prior rules. Fees included in this rule chapter are authorized by Section 39-119, Idaho Code.

**FISCAL IMPACT STATEMENT:** The following is a specific description, if applicable, of any negative fiscal impact on the state General Fund greater than ten thousand dollars (\$10,000) during the fiscal year: Not applicable.

**ASSISTANCE ON TECHNICAL QUESTIONS:** For assistance on questions concerning the rulemaking, contact the undersigned.

Dated this 6th day of December, 2023.

Kristin Ryan  
Deputy Director  
Department of Environmental Quality  
1410 N. Hilton Street  
Boise, Idaho 83706  
208-373-0194  
[Kristin.Ryan@deq.idaho.gov](mailto:Kristin.Ryan@deq.idaho.gov)

**THE FOLLOWING NOTICE PUBLISHED WITH THE PROPOSED RULE**

**AUTHORITY:** In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking. This action is authorized by Chapter 1, Title 39, Idaho Code.

**PUBLIC HEARING SCHEDULE:** No hearings have been scheduled. Pursuant to Section 67-5222(2), Idaho Code, a public hearing will be held if requested in writing by twenty-five (25) persons, a political subdivision, or an agency. Written requests for a hearing must be received by the undersigned on or before September 22, 2023. If no such written request is received, a public hearing will not be held. Two public meetings were held during the negotiated rulemaking process.

**DESCRIPTIVE SUMMARY:** DEQ initiated this rulemaking in compliance with [Executive Order No. 2020-01, Zero-Based Regulation \(EO 2020-01\)](#), issued by Governor Little on January 16, 2020. Pursuant to EO 2020-01, each rule chapter effective on June 30, 2020, shall be reviewed by the agency that promulgated the rule. The review will be conducted according to a schedule established by the Division of Financial Management, Office of the Governor (DFM), posted at [https://adminrules.idaho.gov/forms\\_menu.html](https://adminrules.idaho.gov/forms_menu.html). This is one of the DEQ rule chapters up for review in 2023. The goal of the rulemaking is to perform a critical and comprehensive review of the entire chapter in an attempt to reduce overall regulatory burden, streamline various provisions, increase clarity and ease of use, and maintain state program approval.

This rulemaking also updates federal regulations incorporated by reference with the July 1, 2023 Code of Federal Regulations (CFR) effective date. The July 1, 2023 CFR is a codification of federal regulations published in the Federal Register as of July 1, 2023. Adoption of federal regulations is necessary to maintain program primacy. Incorporation by reference allows DEQ to keep its rules up to date with federal regulations and simplifies compliance for the regulated community.

Citizens of the state of Idaho, environmental groups, DEQ's Drinking Water Advisory Committee, the Idaho Water Utility Council, the Association of Civil Engineers, the Idaho Chapters of the American Water Works Association, and owners and operators of drinking water treatment facilities may be interested in commenting on this proposed rule. The rule is expected to be final and effective upon the conclusion of the 2024 legislative session if adopted by the Board and approved by the Idaho Legislature.

**FEE SUMMARY:** This rulemaking does not impose or increase a fee beyond what was previously submitted to and reviewed by the Idaho Legislature in prior rules. Fees included in this rule chapter are authorized by Section 39-119, Idaho Code.

**FISCAL IMPACT:** The following is a specific description, if applicable, of any negative fiscal impact on the state General Fund greater than ten thousand dollars (\$10,000) during the fiscal year resulting from this rulemaking: Not applicable.

**NEGOTIATED RULEMAKING:** On March 1, 2023, the notice of negotiated rulemaking was published in the Idaho Administrative Bulletin and on March 30, 2023, a preliminary draft rule was posted on DEQ's website. Meetings were held on April 11 and May 9, 2023. Stakeholders and members of the public participated by receiving email notifications, attending the meetings, reviewing DEQ's presentations, and submitting comments. Key information was posted on DEQ's website and distributed to persons who participated in the negotiated rulemaking.

All comments received during the negotiated rulemaking process were considered by DEQ when making decisions regarding the development of the rule. At the conclusion of the negotiated rulemaking process, DEQ submitted the draft rule to the Division of Financial Management for review. DEQ formatted the draft for publication as a proposed rule and is now seeking public comment. The negotiated rulemaking record, which includes the negotiated rule drafts, documents distributed during the negotiated rulemaking process, and the negotiated rulemaking summary, is available at <https://www.deq.idaho.gov/drinking-water-docket-no-58-0108-2301/>.



**INCORPORATION BY REFERENCE:** Pursuant to Section 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the materials cited are being incorporated by reference into this rule:

Adoption of federal regulations is necessary to maintain program primacy, allows DEQ to keep its rules up to date with federal regulation changes, and simplifies compliance for the regulated community. Information for obtaining a copy of the federal regulations is included in the rule.

In compliance with Idaho Code 67-5223(4), DEQ prepared a brief synopsis detailing the substantive differences between the previously incorporated material and the latest revised edition or version of the incorporated material being proposed for incorporation by reference. The Overview of Incorporations by Reference is available at <https://www.deq.idaho.gov/drinking-water-docket-no-58-0108-2301/>.

**IDAHO CODE SECTION 39-107D STATEMENT:** Section 39-107D, Idaho Code applies to a rule which “proposes to regulate an activity not regulated by the federal government.” The engineering standards for design, construction, and operation of public drinking water systems regulate activities that are not regulated by the federal government. These standards were originally promulgated to fulfill the requirements of Section 39-118, Idaho Code, and pre-date the Safe Drinking Water Act. These proposed rules address the review and approval of plans and specifications for public drinking water systems and the standard by which the agency does the review and approval. This is not an activity regulated by the federal government. This is an activity, however, that DEQ has regulated for years pursuant to Section 39-118, Idaho Code, and 58.01.08, Idaho Rules for Public Drinking Water Systems. To the extent DEQ is not proposing any new regulation of activities, Section 39-107D, Idaho Code, is most likely not applicable.

Assuming Section 39-107D, Idaho Code, is applicable, 39-107D(3) provides that any rule subject to 39-107D that proposes a standard necessary to protect human health and the environment must also include in the rulemaking record and in the notice of rulemaking additional information. This additional information includes any estimates of risk accomplished, identification of populations or receptors addressed by any estimates, and other information related to an estimation of risk. The proposed rules include facility standards which are intended to protect human health and the environment. The standards, however, are for the design and construction of public drinking water facilities. For example, the rules require that water mains be constructed using materials that meet national standards for potable water. The rules are not based upon any express estimate or analysis of risk to public health or the environment. The facility standards are based upon guidelines set forth in documents, such as the “Recommended Standards for Water Works” and the “American Water Works Association Standards,” that are generally accepted and used throughout the United States by engineers and state regulators, and which are all referenced in the rules.

**ASSISTANCE ON TECHNICAL QUESTIONS:** For assistance on questions concerning this proposed rulemaking, contact Tyler Fortunati at [tyler.fortunati@deq.idaho.gov](mailto:tyler.fortunati@deq.idaho.gov) or (208) 373-0410.

**SUBMISSION OF WRITTEN COMMENTS:** Anyone may submit written comments regarding this proposed rule. The Department will consider all written comments received on or before October 6, 2023. Submit written comments to:

Tyler Fortunati  
Department of Environmental Quality  
1410 N. Hilton, Boise, ID 83706  
[Tyler.fortunati@deq.idaho.gov](mailto:Tyler.fortunati@deq.idaho.gov)

Dated this 6th day of September, 2023.

**THE FOLLOWING IS THE TEXT OF ZBR DOCKET NO. 58-0108-2301**



**58.01.08 – IDAHO RULES FOR PUBLIC DRINKING WATER SYSTEMS**

**000. LEGAL AUTHORITY.**

Chapter 1, Title 39, Idaho Code.

( )

**001. SCOPE.**

40 CFR 141.3 is incorporated by reference. The purpose of these rules is to control and regulate the design, construction, operation, maintenance, and quality control of public drinking water systems to provide a degree of assurance that such systems are protected from contamination and maintained free from contaminants which may injure the health of the consumer.

( )

**002. INCORPORATION BY REFERENCE AND AVAILABILITY OF REFERENCED MATERIALS.**

**01. Incorporation by Reference.**

( )

**a.** 40 CFR Part 141, revised as of July 1, 2023 (excluding annual monitoring provisions in 40 CFR 141.854(a)(4),(d),(e),(f) and (h), and the Aircraft Drinking Water Rule in Subpart X); and 40 CFR Part 143, revised as of July 1, 2023.

( )

**b.** American Water Works Association (AWWA) Standards, effective December 2022, available for a fee from AWWA, <https://www.awwa.org/Publications/Standards/Standards-List> or available to be viewed through the Department's state office.

( )

**02. Availability of Specific Referenced Material.** Copies of specific documents referenced within these rules are available at the following locations:

( )

**a.** Recommended Standards for Water Works – Policies for the Review and Approval of Plans and Specifications for Public Water Supplies: a report of the Water Supply Committee of the Great Lakes -- Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, most current edition, <https://www.health.state.mn.us/communities/environment/water/tenstates/standards.html>.

( )

**b.** Manual of Individual and Non-Public Water Supply Systems (EPA 570/9-91-004), published by the U.S. Environmental Protection Agency, <https://nepis.epa.gov>.

( )

**c.** NSF/ANSI Standard 53-2020, Drinking Water Treatment Units -- Health Effects, available from the National Sanitation Foundation, <https://www.techstreet.com/nsf/> (or) [https://www.techstreet.com/nsf/standards/nsf-ansi-53-2020?product\\_id=2212861](https://www.techstreet.com/nsf/standards/nsf-ansi-53-2020?product_id=2212861).

( )

**d.** NSF/ANSI Standard 55-2020, Ultraviolet Microbiological Water Treatment Systems, available from the National Sanitation Foundation, <https://www.techstreet.com/nsf/> (or) [https://www.techstreet.com/nsf/standards/nsf-ansi-55-2020?product\\_id=2229644](https://www.techstreet.com/nsf/standards/nsf-ansi-55-2020?product_id=2229644).

( )

**e.** NSF/ANSI Standard 58-2020, Reverse Osmosis Drinking Water Treatment Systems, available from the National Sanitation Foundation, <https://www.techstreet.com/nsf/> (or) [https://www.techstreet.com/nsf/standards/nsf-ansi-58-2020?product\\_id=2206515](https://www.techstreet.com/nsf/standards/nsf-ansi-58-2020?product_id=2206515).

( )

**f.** NSF/ANSI/CAN Standard 60-2021, Drinking Water Treatment Chemicals -- Health Effects, available from the National Sanitation Foundation, <https://www.techstreet.com/nsf/> (or) [https://www.techstreet.com/nsf/standards/nsf-ansi-can-60-2021?product\\_id=2239369](https://www.techstreet.com/nsf/standards/nsf-ansi-can-60-2021?product_id=2239369).

( )

**g.** ANSI/NSF Standard 61-2021, Drinking Water System Components -- Health Effects, available from the National Sanitation Foundation, <https://www.techstreet.com/nsf/> (or) [https://www.techstreet.com/nsf/standards/nsf-ansi-can-61-2021?product\\_id=2240016](https://www.techstreet.com/nsf/standards/nsf-ansi-can-61-2021?product_id=2240016).

( )

- h.** Manual of Cross-Connection Control, Current Edition, Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California, [www.usc.edu/dept/fccchr/](http://www.usc.edu/dept/fccchr/). ( )
- i.** Manual of design for Slow Sand Filtration (1991), published by AWWA Research Foundation <https://www.directtextbook.com/isbn/0898675510>. ( )
- j.** Slow Sand Filtration (1991), published by the American Society of Civil Engineers American Society of Civil Engineers, <https://www.amazon.com/Slow-Sand-Filtration-Gary-Logsdon/dp/0872628477>. ( )
- k.** Slow Sand Filtration and Diatomaceous Earth Filtration for Small Water Systems, DOH Pub #331-204 (4/03), Washington State Department of Health, Division of Environmental Health, Office of Drinking Water, <https://www.scribd.com/document/163696548/331-204-pdf>. ( )
- l.** Recommended Operations and Optimization Goals, Slow Sand Filtration, DOH Pub #331-601 (6/21), Washington State Department of Health, Division of Environmental Health, Office of Drinking Water, <https://www.doh.wa.gov/Portals/1/Documents/Pubs/331-601.pdf>. ( )
- m.** Water System Design Manual, DOH Pub #331-123 (Rev. 6-20), Washington State Department of Health, Division of Environmental Health, Office of Drinking Water, <https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemDesignandPlanning/SystemDesign>. ( )
- n.** Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources (March 1991 Edition), U.S. Environmental Protection Agency, <http://water.epa.gov/lawsregs/rulesregs/sdwa/swtr/upload/guidsws.pdf>. ( )
- o.** Standard Methods for the Examination of Water and Wastewater, a joint publication of the American Public Health Association, the Water Environment Federation, and the American Water Works Association, [www.standardmethods.org](http://www.standardmethods.org). ( )
- p.** “Idaho Standards for Public Works Construction,” Local Highway Technical Assistance Council, <https://lhtac.org/resources/ispwc>. ( )
- q.** Memorandum of Understanding between the Idaho Department of Environmental Quality and the Idaho Division of Building Safety Plumbing Bureau, Idaho Department of Environmental Quality, 1410 North Hilton, Boise, Idaho 83706, [www.deq.idaho.gov](http://www.deq.idaho.gov). ( )
- r.** Implementation Guidance for the Long Term 2 Enhanced Surface Water Treatment Rule, Idaho Department of Environmental Quality, <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/6040>. ( )
- s.** Implementation Guidance for the Stage 2 Disinfectants and Disinfection Byproducts Rule, Idaho Department of Environmental Quality, <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/4790>. ( )
- t.** Implementation Guidance for the Drinking Water Program-Ground Water Rule, Idaho Department of Environmental Quality, <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/4778>. ( )
- u.** AWWA Recommended Practice for Backflow Prevention and Cross-Connection Control (M14), current edition available from the AWWA, <https://engage.awwa.org/PersonifyEbusiness/Store/Product-Details/productId/46494412>. ( )
- v.** Membrane Filtration Guidance Manual (EPA 815-R-06-009) published by the U.S. Environmental Protection Agency, [https://sswm.info/sites/default/files/reference\\_attachments/EPA%202005%20Membrane%20Filtration%20Guidance%20Manual.pdf](https://sswm.info/sites/default/files/reference_attachments/EPA%202005%20Membrane%20Filtration%20Guidance%20Manual.pdf). ( )
- w.** Ultraviolet Disinfection Guidance Manual for the Final Long Term 2 Enhanced Surface water

Treatment Rule (EPA 815-R-06-007) published by the U.S. Environmental Protection Agency, <https://www.epa.gov/dwreginfo/long-term-2-enhanced-surface-water-treatment-rule-documents>. ( )

x. Improving Clearwell Design for CT Compliance, Report #90756, available from the Water Research Foundation, <https://www.waterrf.org/research/projects/improving-clearwell-design-ct-compliance>. ( )

y. Surface Water Treatment Rule Compliance Guidance, dated January 10, 1996, Idaho Department of Environmental Quality, <https://www.deq.idaho.gov/public-information/laws-guidance-and-orders/guidance/>. ( )

z. Uniform Plumbing Code, available through the Idaho Division of Building Safety, 1090 E. Watertower St., Meridian, Idaho 83642; and at the Division of Building Safety, <http://dbs.idaho.gov>. ( )

aa. Optimizing Water Treatment Plant Performance Using the Composite Correction Program (EPA/625/6-91/027) published by the U.S. Environmental Protection Agency, [https://cfpub.epa.gov/si/si\\_public\\_record\\_report.cfm?Lab=NRMRL&direntryid=23902](https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NRMRL&direntryid=23902). ( )

**03. Precedence.** In the event of conflict or inconsistency between the language in these rules and that found in any document incorporated by reference, these rules prevail. ( )

**003. DEFINITIONS.**

The definitions set forth in [40 CFR 141.2](#) are incorporated by reference. The terms “board,” “director,” “department,” and “person” have the meaning provided in Section 39-103, Idaho Code. The term “watersheds” has the meaning provided in Section 39-3602, Idaho Code. The terms “distribution system,” “license,” “responsible charge,” and “responsible charge operator” have the meaning provided in Section 54-2403, Idaho Code. The term “public utility” has the meaning provided in Section 61-129, Idaho Code. The term “pesticide” has the meaning provided in Section 22-3401, Idaho Code. ( )

**01. Aquifer.** A geological formation of permeable saturated material, such as rock, sand, gravel, etc., capable of yielding an economic quantity of water to wells and springs. ( )

**02. Backflow.** The reverse from normal flow direction in a plumbing system or water system caused by back pressure or back siphonage. ( )

**03. Capacity.** The capabilities required of a public drinking water system (PWS) in order to achieve and maintain compliance with these rules and the requirements of the federal Safe Drinking Water Act (SDWA). It is divided into three (3) main elements: ( )

a. Technical capacity means the PWS has the physical infrastructure to consistently meet drinking water quality standards and treatment requirements and is able to meet the requirements of routine and emergency operations. It further means the ability of PWS personnel to adequately operate and maintain the PWS and to otherwise implement technical knowledge. Training of operator(s) is required, as appropriate, for the system size and complexity. ( )

b. Financial capacity means the financial resources of the PWS, including an appropriate budget; rate structure; cash reserves sufficient for current operation and maintenance, future needs and emergency situations; and adequate fiscal controls. ( )

c. Managerial capacity means that the management structure of the PWS embodies the aspects of system operations, including, but not limited to; ( )

i. Short and long range planning; ( )

ii. Personnel management; ( )

iii. Fiduciary responsibility; ( )

iv. Emergency response; ( )

- v. Customer responsiveness; ( )
- vi. Source water protection; ( )
- vii. Administrative functions such as billing and consumer awareness; and ( )
- viii. Ability to meet the intent of the federal SDWA. ( )

**04. Components of Finished Water Storage.** Storage is available to serve the system if the storage structure or facility is elevated sufficiently or is equipped with sufficient booster pumping capability to pressurize the system. Components of finished water storage are further defined as: ( )

**a.** Dead Storage is storage that is either not available for use in the system or can provide only substandard flows and pressures. ( )

**b.** Effective storage is all storage other than dead storage and is made up of the additive components described in Paragraphs c. through f. of this Subsection. ( )

**c.** Operational storage supplies water when, under normal conditions, the sources are off. This component is the larger of; ( )

i. The volume required to prevent excess pump cycling and ensure that the following volume components are full and ready for use when needed; or ( )

ii. The volume needed to compensate for the sensitivity of the water level sensors. ( )

**d.** Equalization Storage is storage of finished water in sufficient quantity to compensate for the difference between a water system's maximum pumping capacity and peak hour demand. ( )

**e.** Fire Suppression Storage is the water needed to support fire flow in those systems that provide it. ( )

**f.** Standby storage provides a measure of reliability or safety factor if sources fail or when unusual conditions impose higher than anticipated demands. Normally used for emergency operation, if standby power is not provided, to provide water for eight (8) hours of operation at average day demand. ( )

**05. Composite Correction Program (CCP).** A systematic approach to identifying opportunities for improving the performance of water treatment and implementing changes that will capitalize on these opportunities. The CCP consists of two (2) elements: ( )

**a.** Comprehensive Performance Evaluation (CPE). As defined in 40 CFR 141.2. ( )

**b.** Comprehensive Technical Assistance (CTA) is the implementation phase that is carried out if the CPE results indicate improved performance potential. During the CTA phase, the PWS must identify and systematically address plant-specific factors. The CTA consists of follow-up to the CPE results, implementation of process control priority setting techniques, and maintaining long term involvement to systematically train staff and administrators. ( )

**06. Confining Layer.** A nearly impermeable subsurface stratum which is located adjacent to one (1) or more aquifers and does not yield a significant quantity of water to a well. ( )

**07. Consumer.** Any person served by a PWS. ( )

**08. Consumer Confidence Report (CCR).** An annual report that community water systems must deliver to their customers. The reports must contain information on the quality of the water delivered by the PWS and characterize the risks (if any) from exposure to contaminants detected in the drinking water in an accurate and

understandable manner. ( )

**09. Cross Connection.** An actual or potential connection or piping arrangement between a drinking water system and another source that could introduce contamination into the potable water system through backflow, backsiphoning, or backpressure. ( )

**10. Dead End Main.** A distribution main of any diameter and length that does not loop back into the distribution system. ( )

**11. Direct Integrity Test (DIT).** A physical test applied to a microfiltration or ultrafiltration membrane unit in order to identify integrity breaches. ( )

**12. Drinking Water System.** All mains, pipes, and structures through which water is obtained and distributed, including wells and well structures, intakes and cribs, pumping stations, treatment plants, reservoirs, storage tanks and appurtenances, collectively or severally, actually used or intended for use for the purpose of furnishing water for drinking or general domestic use. ( )

**13. Effective Contact Time.** For the purpose of these rules, effective contact time means the time in minutes that it takes for water to move from the point of completely mixed chemical application to the point where residual concentration is measured. It is the “T” in contact time (CT) calculations and is either “demonstrated” or “calculated.” It is the contact time sufficient to achieve the inactivation of target pathogens under the expected range of raw water pH and temperature variation and must be demonstrated through tracer studies or other evaluations or calculations acceptable to the Department. “Improving Clearwell Design for CT Compliance,” referenced in Subsection 002.02, contains information that may be used as guidance for these calculations. ( )

**14. Equivalent Dwelling Unit (EDU).** A unit of measure that standardizes all land use types (housing, retail, office, etc.) to the level of demand created by a single-family detached housing unit within a water system. The demand for one (1) equivalent dwelling unit is equivalent to the amount of water provided to the average single-family detached housing unit within a water system. For example, a business designed to use three (3) times as much water as an average single-family detached housing unit will have a demand of three (3) equivalent dwelling units. ( )

**15. Exemption.** A temporary deferment of compliance with a maximum contaminant level or treatment technique requirement which may be granted only if the PWS demonstrates to the satisfaction of the Department that the PWS cannot comply due to compelling factors and the deferment does not cause an unreasonable risk to public health. ( )

**16. Facility Plan.** The facility plan for a PWS describes the overall system, including sources of water, treatment processes and facilities, pumping stations and distribution piping, finished water storage, and waste disposal. It is a comprehensive planning document for infrastructure and includes a plan for the future of the system/facility, including upgrades and additions. It is usually updated on a regular basis due to anticipated or unanticipated growth patterns, regulatory requirements, or other infrastructure needs. A facility plan is sometimes referred to as a master plan or facilities planning study. In general, a facility plan is an overall system-wide plan as opposed to a project specific plan. ( )

**17. Filtrate.** As the term relates to microfiltration and ultrafiltration, the product water or the portion of the feed stream that has passed through the membrane. ( )

**18. Finished Water Storage Structures or Facilities.** Finished water storage structures or facilities are defined as: ( )

**a.** Above-ground storage structure or facility is a finished water storage structure or facility with a bottom elevation above normal ground surface. ( )

**b.** Ground-level storage structure or facility is a finished water storage structure or facility with a bottom elevation at normal ground surface. ( )

c. Partially buried storage structure or facility is a finished water storage structure or facility with a bottom elevation below normal ground surface and any portion of the structure or facility above normal ground surface. ( )

d. Below-ground storage structure or facility is a finished water storage structure or facility with a bottom elevation and top elevation below normal ground surface. ( )

**19. Fire Flow Capacity.** The water system capacity, in addition to maximum day demand, that is available for fire fighting purposes within the water system or distribution system pressure zone. Adequacy of the water system fire flow capacity is determined by the local fire authority or through a hydraulic analysis performed by a licensed professional engineer to establish required fire flows in accordance with the International Fire Code as adopted by the State Fire Marshal. ( )

**20. Fire Suppression Storage.** The water needed to support fire flow in those systems that provide it. See also the definition of Components of Finished Water Storage in these rules. ( )

**21. Fixture Protection.** The practice of installing backflow prevention assemblies or devices to isolate one (1) or more cross connections within a customer's facility. ( )

**22. Flux.** The throughput of a pressure-driven membrane filtration process expressed as flow per unit of membrane area, usually in gallons per square foot per day or liters per hour per square meter. ( )

**23. Health Hazard.** Any condition, operation, or practice in a PWS which creates, or has the potential to create, an acute or immediate danger to the consumer's health. ( )

**24. Indirect Integrity Monitoring.** Monitoring some aspect of filtrate water quality that is indicative of the removal of particulate matter. ( )

**25. Inorganic.** Generally refers to compounds that do not contain carbon and hydrogen. ( )

**26. Internal or In-Plant Isolation.** The practice of installing backflow prevention assemblies to protect an area within a water customer's structure, facility, or premises from contaminating another part of the structure, facility, or premises. ( )

**27. Like-Kind Replacement.** Repair or replacement of a system component that is identical in capacity, exhibits equivalent design, operational, and material parameters, and does not result in an increase in system capacity or alter existing methods or processes. ( )

**28. Log.** Logarithm to the base ten (10). In the context of these rules, it is used in the determination of removal or inactivation efficiencies. It is expressed as the logarithm to the base ten (10) or "log" of the concentration of the feed or raw water minus the log of the concentration in the filtrate or product water. For example, if the incoming feed or raw water concentration is one hundred (100), and the outgoing filtrate or product water concentration is ten (10), a 10-fold reduction was attained; or 1-log removal. 1-log removal also equates to ninety percent (90%) removal, as ninety (90) of the original feed concentration counts had been removed, leaving ten (10) in the filtrate. Similarly, 2-log equates to ninety-nine percent (99%) removal. ( )

**29. Log Removal Value (LRV).** LRV is a measure of filtration removal efficiency for a target organism, particulate, or surrogate expressed as Logarithm to the base ten (10). ( )

**30. Material Deviation.** A change from the design plans that significantly alters the type or location of system components. ( )

**31. Material Modification.** Modifications of an existing PWS that increase system capacity or alter the methods or processes employed. Increasing system capacity occurs by adding a new water source to a PWS, increasing the pumping and hydraulic capacity of the PWS, increasing potable water demand, or increasing the number of service connections. Altering methods or processes employed occurs by adding new, or altering existing, system components to satisfy increasing potable water demand, or changing engineering design intent of potable

water delivery or treatment. Maintenance as outlined in the approved operation and maintenance manual, or maintenance that does not meet the criteria of a material modification described in this definition, is not a material modification. Like-kind replacement is not considered a material modification. ( )

**32. Maximum Pumping Capacity.** The pumping capacity with the largest source or pump out of service. ( )

**33. Membrane Unit.** A group of treatment systems or membrane modules that usually share common control and valving so that the group can be isolated for testing or cleaning. ( )

**34. Microfiltration (MF).** A low-pressure membrane filtration process with pore diameter normally in the range of 0.1 to 0.5  $\mu\text{m}$ . ( )

**35. Module.** As the term relates to membrane filtration, it is the smallest component of a membrane unit in which a specific membrane surface area is housed. The component is typically equipped with a feedwater inlet, a filtrate outlet, and concentrate or backwash outlet structure. ( )

**36. Nanofiltration (NF).** A membrane filtration process that removes dissolved constituents from water. Nanofiltration is similar to reverse osmosis but allows a higher percentage of certain ions to pass through the membrane. These systems typically operate under higher pressure than microfiltration and ultrafiltration. ( )

**37. New System.** Any water system that meets, for the first time, the definition of a PWS, which includes systems that are entirely new construction or previously unregulated systems that increased either the population served or connections. ( )

**38. Non-Potable Fluids or Gases.** Any fluids or gases that do not meet the definition of potable water ( )

**39. Non-Potable Mains.** Pipelines that collect, deliver, or otherwise convey non-potable fluids. ( )

**40. Non-Potable Services or Lines.** Pipelines that collect, deliver, or otherwise convey non-potable fluids to or from a non-potable main. These pipelines connect individual facilities to the non-potable main. This term also refers to pipelines that convey non-potable fluids from a pressurized irrigation system, reclaimed wastewater system, and other non-potable systems to individual consumers. ( )

**41. Operating Shift.** Any period of time during which a licensed operator must be present, or available, for proper operation or oversight of the PWS. ( )

**42. Operational Storage.** Operational storage supplies water when, under normal conditions, the sources are off. This component is the larger of the volume required to prevent excess pump cycling and ensure that the following volume components are full and ready for use when needed or the volume needed to compensate for the sensitivity of the water level sensors. See also the definition of Components of Finished Water Storage in these rules. ( )

**43. Operation and Maintenance Manual.** A comprehensive document that provides procedures for the operations and maintenance of the PWS. The manual typically covers three main subjects: a water system specific operations plan (see definition of Operations Plan); maintenance information and checklists; and manufacturer's product information (including trouble shooting information, a parts list and parts order form, special tools, spare parts list, etc.). An operation and maintenance manual may cover every aspect of the water system or any part of the water system, including but not limited to the following: treatment, pump stations, storage reservoirs, distribution system, pressure reducing valve stations, etc. ( )

**44. Operations Plan.** The operations plan is part of an operation and maintenance manual. Depending on which facilities of the PWS are being addressed, the operations plan may cover many types of information including but not limited to the following: daily, weekly, monthly, and yearly operating instructions; information specific to a particular type of treatment; location of valves and other key distribution system features; pertinent

telephone and address contact information including the responsible charge PWS operator and PWS owner; operator safety procedures; alarm system; emergency procedures; trouble-shooting advice; water quality testing; depressurization events; customer service; and response to customer complaints. ( )

**45. Owner/Purveyor of Water/Supplier of Water.** The person, company, corporation, association, or other organizational entity which holds legal title to the PWS, who provides, or intends to provide, drinking water to the customers, and who is ultimately responsible for the PWS operation. ( )

**46. Plant Design Capacity.** The maximum design flow through treatment units. The minimum plant design capacity may be equal to peak hour demand but may also be equal to the maximum day demand if equalization storage is provided. ( )

**47. Plant.** A physical facility where drinking water is treated or processed. ( )

**48. Point of Use (POU) Treatment System.** A collection of POU treatment devices. ( )

**49. Potable Mains.** Pipelines that deliver potable water to multiple service connections. ( )

**50. Potable Services.** Pipelines that convey potable water from a service connection to the potable water main to individual consumers. ( )

**51. Potable Water.** Water for human consumption. Also referred to as Water for Human Consumption or Drinking Water. ( )

**52. Preliminary Engineering Report (PER).** A report that addresses specific portions of the PWS or facility for which material modifications are being designed. Material modifications may include, but are not limited to, significant changes to existing processes or facilities, PWS expansion, addition of treatment, or installation of other processes and facilities. This report addresses specific purpose and scope, design requirements, alternative solutions, costs, operation and maintenance requirements, and other requirements as described in Section 503. Preliminary engineering reports are generally project specific as opposed to an overall system-wide plan, such as a facility plan. ( )

**53. Premises Isolation or Containment.** The practice of separating the customer's structure, facility, or premises from the purveyor's PWS by means of a backflow prevention assembly installed on the service line before any distribution takes place. ( )

**54. Protected Water Source.** For the purposes of the Revised Total Coliform Rule (40 CFR Part 141, Subpart Y), a protected water source is a groundwater well that is not susceptible to contamination on the basis of well construction, hydrologic data, or contamination history. ( )

**55. Public Notice.** The notification to PWS consumers of information pertaining to that PWS including information regarding water quality or compliance status of the PWS. ( )

**56. Public Drinking Water System (PWS).** A system for the provision to the public of water for human consumption through pipes or, after August 5, 1998, other constructed conveyances, if such system has at least fifteen (15) service connections, regardless of the number of water sources or configuration of the distribution system, or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year. Such term includes: any collection, treatment, storage, and distribution facilities under the control of the operator of such system and used primarily in connection with such system; and any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Such term does not include any "special irrigation district." A public water system is either a "community water system" or a "non-community water system" as further defined as: ( )

**a.** Community water system. A PWS which serves at least fifteen (15) service connections used by year-round residents or regularly serves at least twenty-five (25) year-round residents. ( )

**b.** Non-community water system. A PWS that is not a community water system. A non-community



water system is either a transient non-community water system or a non-transient non-community water system. ( )

**c.** Non-transient non-community water system. A PWS that is not a community water system and that regularly serves at least twenty-five (25) of the same persons over six (6) months per year. ( )

**d.** Transient non-community water system. A non-community water system which does not regularly serve at least twenty-five (25) of the same persons over six (6) months per year. ( )

**57. Public Water System (PWS)/Water System/System.** Means “public drinking water system.” ( )

**58. Pump House.** A structure containing important water system components, such as a well, hydro-pneumatic tank, booster pump, pump controls, flow meter, well discharge line, or a treatment unit. Pump houses are often called well houses in common usage, even though in modern construction these structures may not contain either a well or a pump. These terms are used interchangeably in national standards and trade publications. ( )

**59. Qualified Licensed Professional Engineer (QLPE).** A professional engineer licensed by the state of Idaho; qualified by education or experience in the specific technical fields involved in these rules; and retained or employed by a city, county, quasi-municipal corporation, or regulated public utility for the purposes of plan and specification review. ( )

**60. Quasi-Municipal Corporation.** A public entity, other than community government, created or authorized by the legislature to aid the state in, or to take charge of, some public or state work for the general welfare. For the purpose of these rules, this term refers to drinking water districts. ( )

**61. Raw Water.** Raw water is any groundwater, spring water, or surface water utilized as source water prior to treatment for the purpose of producing potable water. ( )

**62. Redundancy.** The installation of duplicate components or backup systems that are designed to maintain minimum pressure and capacity of the PWS if any component fails or is otherwise out of service for maintenance or repair. ( )

**63. Reverse Osmosis (RO).** A membrane filtration process that removes dissolved constituents from water. Reverse osmosis is similar to nanofiltration but allows a lower percentage of certain ions to pass through the membrane. These systems typically operate under higher pressure than microfiltration and ultrafiltration. ( )

**64. Resolution.** As the term relates to membrane treatment, it is the size of the smallest integrity breach that contributes to a response from a direct integrity test when testing low pressure membranes. ( )

**65. Reviewing Authority.** For those projects requiring preconstruction approval by the Department, the Department is the reviewing authority. For those projects allowing for preconstruction approval by others, pursuant to Subsection 504.03.b., the qualified Idaho licensed professional engineer (QLPE) is also the reviewing authority. ( )

**66. Sampling Point.** The location in a PWS from which a sample is drawn. ( )

**67. Sensitivity.** As the term relates to membrane treatment, it is the maximum log removal value (LRV) for a specific resolution that can be reliably verified by the direct integrity test associated with a given low pressure membrane filtration system. ( )

**68. Service Connection.** Each structure, facility, or premises which is connected to a PWS water source, and which is or may be used for domestic purposes. ( )

**69. Sewage.** Water-carried human wastes from residences, buildings, and industrial establishments and other places, together with groundwater infiltration and surface water as may be present. ( )

**70. Significant Deficiency.** Any defect in a PWS's design, operation, maintenance, or administration, as well as any failure or malfunction of any system component, that the Department or its agent determines to cause, or have potential to cause, the introduction of contamination into the water delivered to consumers. ( )

**71. Simple Water Main Extension.** New or replacement water main(s) that require plan and specification review by a qualified licensed professional engineer (QLPE) or by the Department per these rules and that is connected to existing water main facilities and does not require the addition of system components designed to control quantity or pressure, including, but not limited to, booster stations, new sources, pressure reducing valve stations, or reservoirs; and continues to provide the pressure and quantity requirements of Subsection 552.01. ( )

**72. Spring.** A source of water which flows from a laterally percolating water table's intersection with the surface or from a geological fault that allows the flow of water from an artesian aquifer. ( )

**73. Standby Storage.** Standby storage provides a measure of reliability or safety factor if sources fail or when unusual conditions impose higher than anticipated demands. See also the definition of Components of Finished Water Storage in these rules. ( )

**74. Substantially Modified.** The Department considers a PWS to be substantially modified when, as the result of one (1) or more material modifications to the PWS, there is a combined increase of twenty-five percent (25%) in any one or combination of the following: the population served or number of service connections, the total length of transmission and distribution water mains, the total source capacity, or the peak or average water demand for the PWS. Material modifications completed after May 8, 2009, are the only modifications counted towards the twenty-five (25%) increase. Like-kind replacement of components will not be counted toward a combined increase of twenty-five percent (25%) calculation. Removal of existing system components will not be used to reduce the combined increase of twenty-five percent (25%) calculation. ( )

**75. Substitute Responsible Charge Operator.** An operator of a PWS who holds a valid license at a class equal to or greater than the drinking water system classification, designated by the PWS owner to replace and to perform the duties of the responsible charge operator when the responsible charge operator is not available or accessible. ( )

**76. Surface Water System.** A PWS which is supplied by one (1) or more surface water sources or groundwater sources under the direct influence of surface water. Also called subpart H systems in applicable sections of 40 CFR Part 141. ( )

**77. Treatment Facility.** Any place(s) where a PWS alters the physical or chemical characteristics of the drinking water. Chlorination may be considered as a function of a distribution system. ( )

**78. Turbidity.** Measure of the interference of light passage through water, or visual depth restriction from the presence of suspended matter such as clay, silt, nonliving organic particulates, plankton, and other microscopic organisms. Operationally, turbidity measurements are expressions of certain light-scattering and absorbing properties of a water sample. Turbidity is measured by the nephelometric method. ( )

**79. Ultrafiltration (UF).** A low pressure membrane filtration process with pore diameter normally in the range of five thousandths to one tenth micrometer (0.005 to 0.1  $\mu\text{m}$ ). ( )

**80. UV Transmittance (UVT).** A measure of the fraction of incident light transmitted through a material (e.g., water sample or quartz). The UVT is usually reported for a wavelength of two hundred fifty-four (254) nm and a path length of one (1) cm. It is often represented as a percentage. ( )

**81. Unregulated Contaminant.** Any substance that may affect the quality of water but for which a maximum contaminant level or treatment technique has not been established. ( )

**82. Use Assessment.** For the purpose of obtaining a waiver from certain monitoring requirements, a use assessment is an evaluation as to whether synthetic organic contaminants are being or have been used, manufactured, transported, stored, or disposed of in the watershed for surface water or the zone of influence for groundwater. ( )

**83. Variance.** A temporary deferment of compliance with a maximum contaminant level or treatment technique requirement which may be granted only when the PWS demonstrates to the satisfaction of the Department that the raw water characteristics prevent compliance with the MCL or requirement after installation of the best available technology or treatment technique and the deferment does not cause an unreasonable risk to public health. ( )

**84. Volatile Organic Chemicals (VOCs).** VOCs are lightweight organic compounds that vaporize or evaporate easily. ( )

**85. Vulnerability Assessment.** Related to monitoring waiver decisions, a determination of the risk of future contamination of a public drinking water supply. ( )

**86. Waiver.** ( )

**a.** Except for Sections 500 through 552, “waiver” means the Department approval of a temporary reduction in sampling requirements for a particular contaminant. ( )

**b.** For purposes of Sections 500 through 552, “waiver” means the dismissal or modification of any requirement of compliance. ( )

**c.** For the purposes of Section 010, “waiver” means the deferral of a fee assessment for a PWS. ( )

**87. Wastewater.** Combination of liquid or water and pollutants from activities and processes occurring in dwellings, commercial buildings, industrial plants, institutions and other establishments, together with any groundwater, surface water, and storm water that may be present; liquid or water that is chemically, biologically, physically or rationally identifiable as containing blackwater, gray water or commercial or industrial pollutants; and sewage. ( )

**88. Water Demand.** The volume of water requested by PWS users to satisfy their needs. Water demand can be further categorized as: ( )

**a.** Average day demand is the volume of water used by a PWS on an average day based on a one (1) year period. ( )

**b.** Maximum day demand is the average rate of consumption for the twenty-four (24) hour period in which total consumption is the largest for the design year. ( )

**c.** Peak hour demand is the highest hourly flow, excluding fire flow, that a PWS or distribution system pressure zone is likely to experience in the design year. ( )

**89. Water Main.** A pipe within a PWS which is under the control of the PWS operator and conveys water to two (2) or more service connections or conveys water to a fire hydrant. The collection of water mains within a given water supply is called the distribution system. ( )

**004. WAIVERS, VARIANCES, AND EXEMPTIONS.** 40 CFR 141.4 is incorporated by reference. ( )

**01. Monitoring Waivers.** 40 CFR 141.23(b) 141.23(c), 141.24(f), 141.24(h) are incorporated by reference. ( )

**a.** Waivers from sampling requirements in Subsections 100.03, 100.04, 200.01, and 503.03.e.v. may be available to all PWSs for all contaminants except nitrate, nitrite, and disinfection byproducts and are based upon a vulnerability assessment, use assessment, the analytical results of previous sampling, or some combination of vulnerability assessment, use assessment, and analytical results. ( )

**b.** If a PWS elects to request a waiver from monitoring, it must do so in writing at least sixty (60) days prior to the required monitoring deadline date. ( )

**c.** Waiver determinations are to be made by the Department on a contaminant specific basis and must be in writing. ( )

**d.** PWSs which do not receive waivers must sample at the required, monitoring frequencies ( )

**02. Facility, Design Standard, and Operating Criteria Waivers.** The Department may waive any requirement of Sections 500 through 552 that is not explicitly imposed by Idaho Statute, if it can be shown to the Department's satisfaction that the requirement is not necessary for the protection of public health, protection from contamination, and satisfactory operation and maintenance of a PWS. ( )

**03. Variances.** ( )

**a.** A general variance may be granted by the Department if a PWS owner submits a written request and demonstrates to the satisfaction of the Department that the minimum requirements of 42 USC Section 1415(a) (SDWA) are met. ( )

**b.** A small system variance for a maximum contaminant level or treatment technique may be granted by the Department if a PWS owner submits a written request and demonstrates to the satisfaction of the Department that the minimum requirements of 42 USC Section 1415(e) (SDWA) are met. ( )

**04. Exemptions.** An exemption may be granted by the Department if a PWS owner submits a written request and demonstrates to the satisfaction of the Department that the minimum requirements of 42 USC Section 1416(a) (SDWA) are met. ( )

**05. Conditions.** A waiver, exemption, or variance may be granted upon any conditions that the Department, determines are appropriate and in accordance with these rules. Failure by the PWS owner to comply with any condition voids the waiver, variance, or exemption. ( )

**06 Public Hearing.** The Department will provide public notice and an opportunity for public hearing in the area served by the PWS before any exemption or variance under Section 005 is granted by the Department. At the conclusion of the hearing, the Department will record the findings and issue a decision approving, denying, modifying, or conditioning the request. ( )

**005. DISAPPROVAL DESIGNATION.**  
The Department may assign a disapproved designation to a PWS when: ( )

**01. Defects.** There are design or construction defects, significant deficiencies, or health hazards; or ( )

**02. Operating Procedures.** Operating procedures constitute a health hazard; ( )

**03. Quality.** Violations of chemical, microbiological, or radiological maximum contaminant levels or action levels of these rules; ( )

**04. Monitoring.** Violations of monitoring requirements as specified in these rules; ( )

**05. Unapproved Source.** An unapproved source of drinking water is used or the PWS is interconnected with a disapproved water system; or ( )

**06. Non-Payment of Annual Fee Assessment.** The annual drinking water system fee assessment is not paid as set forth in Section 010. ( )

**006. HEALTH HAZARDS.**

- 01. Prohibited.** No PWS will: ( )
  - a. Constitute a health hazard. ( )
  - b. Create a condition which prevents, or may prevent, the detection of a health hazard. ( )

**02. Schedule.** Health hazard and condition which prevent, or may prevent, the detection of a health hazard must be mitigated as required, and terminated within a time schedule established, by the Department. ( )

**007. FEE SCHEDULE FOR PUBLIC DRINKING WATER SYSTEMS.**

All owners of PWSs must pay an annual drinking water system fee. The fee will be assessed as provided in this section. The Department may waive the requirements of this section at its discretion. ( )

**01. Effective Date.** Annual fees will be paid for each fee year. Fee years begin on October 1 of each calendar year. ( )

**02. Fee Schedule.** ( )

a. Owners of community and non-transient non-community PWSs must shall pay an annual fee according to the following fee schedule:

Number of Connections	Fee
1 to 20	\$100
21 to 184	\$5 per connection, not to exceed a total of \$735 per PWS
185 to 3,663	\$4 per connection, not to exceed a total of \$10,988 per PWS
3,664 or more	\$3 per connection

b. The annual fee for transient PWSs is twenty-five dollars (\$25). ( )

c. New PWSs formed after October 1 will not pay a fee until the following October. ( )

**03. Fee Assessment.** ( )

a. An annual fee assessment will be generated for each community and non-transient non-community PWS using the number of connections the Department has on record. ( )

b. Community and non-transient non-community PWSs will be notified each year of the official number of connections listed in SDWIS. PWSs will have at least one (1) month to notify the Department if the number of connections provided are not in agreement with the PWS's records. ( )

**04. Billing.** An annual fee statement will be mailed or delivered electronically to all PWS owners on record with the Department by September 1 of each year and will include acceptable payment methods. ( )

**05. Payment.** ( )

a. Annual fee payment will be due on October 1, unless it is a Saturday, a Sunday, or a legal holiday, in which event the payment will be due on the successive business day. ( )

b. If a PWS consists of two hundred fifty (250) connections or more, the PWS may request to divide its annual fee payment into equal monthly or quarterly installments by submitting a request to the Department. ( )

i. The Department will notify PWSs of approval or denial of a requested monthly or quarterly installment plan within ten (10) business days of receiving the request. ( )

ii. If a PWS has been approved to pay monthly installments then each installment will be due by the first day of each month, unless it is a Saturday, a Sunday, or a legal holiday, in which event the installment will be due on the successive business day. ( )

iii. If a PWS has been approved to pay quarterly installments then each installment will be due by the first day of the month of each quarter (October 1, January 1, April 1, and July 1), unless it is a Saturday, a Sunday, or a legal holiday, in which event the installment will be due on the successive business day. ( )

**06. Delinquent Unpaid Fees.** A PWS owner will be delinquent in payment if its annual fee assessment has not been received by November 1; or if having opted to pay monthly or quarterly installments, its monthly or quarterly installment has not been received by the last day of the month in which the monthly or quarterly payment is due. ( )

**07. Suspension of Services and Disapproval Designation.** ( )

**a.** For any PWS owner delinquent in payment of fee assessed under Subsections 010.02, in excess of ninety (90) days, technical assistance provided by the Department may be suspended except for review and processing of: ( )

i. Monitoring waivers; ( )

ii. Engineering reports; and ( )

iii. Plans and specifications for design and construction as set forth in Sections 500 through 552. ( )

**b.** For any PWS owner delinquent in payment of fee assessed under Subsections 010.02, in excess of one hundred and eighty (180) days, the Department may disapprove the PWS pursuant to Subsection 007.06 and may suspend all technical assistance provided including review and processing of: ( )

i. Engineering reports; ( )

ii. Plans and specifications for design and construction as set forth in Sections 500 through 552; or ( )

iii. Monitoring waivers ( )

**08. Reinstatement of Suspended Services and Approval Status.** For any PWS owner for which suspension of technical assistance, disapproval, or both has occurred, reinstatement of technical assistance, approval, or both, will occur upon payment of delinquent annual fee assessments. ( )

**09. Responsibility to Comply.** Subsection 010.07 in no way relieves any PWS from its obligation to comply with these rules. ( )

**008. CONTINUITY OF SERVICE.**

**01. Transfer of Ownership.** No owner may transfer PWS ownership without providing written notice to the Department and all customers. Notification must include a schedule for transferring responsibilities and identification of the new owner. ( )

**02. Maintenance of Standards.** The current PWS owner transferring ownership must ensure that all these rules are met during transfer and will ensure that water rights, operation and maintenance manuals, and all other pertinent rights and documentation are transferred to the new owner. ( )

**009. ADMINISTRATIVE PROVISIONS.**

Persons may be entitled to appeal agency actions authorized under these rules pursuant to IDAPA 58.01.23, “Contested Case Rules and Rules for Protection and Disclosure of Records.” ( )

**010. CONFIDENTIALITY OF RECORDS.**

Information obtained by the Department under these rules is subject to public disclosure pursuant to the provisions of Chapter 1, Title 74, Idaho Code. Information submitted under a trade secret claim may be entitled to confidential treatment by the Department as provided in Section 74-107 and IDAPA 58.01.23, “Contested Case Rules and Rules for Protection and Disclosure of Records.” ( )

**011. -- 049. (RESERVED)**

**050. MAXIMUM CONTAMINANT LEVELS AND MAXIMUM RESIDUAL DISINFECTANT LEVELS.**

**01. Maximum Contaminant Levels for Inorganic Contaminants.** 40 CFR 141.11 and 141.62 are incorporated by reference. ( )

**02. Maximum Contaminant Levels for Organic Contaminants.** 40 CFR 141.61 is incorporated by reference. ( )

**03. Maximum Contaminant Levels for Turbidity.** 40 CFR 141.13 is incorporated by reference. ( )

**04. Maximum Contaminant Levels for Radionuclides.** 40 CFR 141.66 is incorporated by reference. ( )

**05. Maximum Contaminant Levels for Microbiological Contaminants.** 40 CFR 141.63 is incorporated by reference. ( )

**06. Maximum Contaminant Levels for Disinfection Byproducts.** 40 CFR 141.64 is incorporated by reference. ( )

**07. Maximum Residual Disinfectant Levels.** 40 CFR 141.65 is incorporated by reference. ( )

**051. -- 099. (RESERVED)**

**100. MONITORING AND ANALYTICAL REQUIREMENTS.**

40 CFR Part 141, Subpart C, is incorporated by reference. ( )

**01. Total Coliform Sampling and Analytical Requirements.** The Total Coliform Rule, 40 CFR 141.21, is incorporated by reference. The Revised Total Coliform Rule, 40 CFR Part 141, Subpart Y, is incorporated by reference, excluding the annual monitoring provisions in 40 CFR 141.854 (a)(4), (d), (e), (f) and (h). ( )

**02. Turbidity Sampling and Analytical Requirements.** 40 CFR 141.22 is incorporated by reference. ( )

**03. Inorganic Chemical Sampling and Analytical Requirements.** 40 CFR 141.23 is incorporated by reference. ( )

**04. Organic Chemicals, Sampling and Analytical Requirements.** 40 CFR 141.24 is incorporated by reference. ( )

**05. Analytical Methods for Radioactivity.** 40 CFR 141.25 is incorporated by reference. ( )

**06. Monitoring Frequency and Compliance Requirements for Radioactivity in Community Water Systems.** 40 CFR 141.26 is incorporated by reference. ( )

- 07. Alternate Analytical Techniques.** 40 CFR 141.27 is incorporated by reference. ( )
- 08. Approved Laboratories.** 40 CFR 141.28 and 141.852(b) are incorporated by reference. All analyses conducted pursuant to these rules, except those listed below, must be performed in laboratories certified or granted reciprocity by the Idaho Department of Health and Welfare, Bureau of Laboratories, as provided in IDAPA 16.02.13, "Rules Governing Certification of Idaho Water Quality Laboratories." The following analyses may be performed by any person acceptable to the Department: ( )
- a.** pH; ( )
  - b.** Turbidity (Nephelometric method only); ( )
  - c.** Daily analysis for fluoride; ( )
  - d.** Temperature; ( )
  - e.** Disinfectant residuals, except ozone, will be analyzed using the Indigo Method or an acceptable automated method pursuant to Subsection 300.05.d.; ( )
  - f.** Alkalinity; ( )
  - g.** Calcium; ( )
  - h.** Conductivity; ( )
  - i.** Silica; and ( )
  - j.** Orthophosphate. ( )
- 09. Monitoring of Consecutive Water Systems.** 40 CFR 141.29 is incorporated by reference. ( )
- 10. Disinfection Residuals, Disinfection Byproducts, and Disinfection Byproduct Precursors.** 40 CFR Part 141, Subpart L, is incorporated by reference. ( )
- 11. Monitoring.** The department may alter the monitoring requirements specified in these rules if the department determines that such alteration is necessary to adequately assess the level of contamination. ( )
- 12. Special Monitoring for Sodium.** 40 CFR 141.41 is incorporated by reference. ( )
- 13. Special Monitoring for Corrosivity Characteristics.** 40 CFR 141.42 is incorporated by reference. ( )
- 101. -- 149. (RESERVED)**
- 150. REPORTING, PUBLIC NOTIFICATION, RECORDKEEPING.**
- 01. Reporting Requirements.** 40 CFR 141.31 is incorporated by reference. ( )
  - 02. Public Notification of Drinking Water Violations.** 40 CFR Part 141, Subpart Q is incorporated by reference. ( )
  - 03. Record Maintenance.** 40 CFR 141.33 is incorporated by reference. ( )
  - 04. Reporting for Unregulated Contaminant Monitoring Results.** 40 CFR 141.35 is incorporated by reference. ( )
  - 05. Reporting and Record Keeping Requirements for the Interim Enhanced Surface Water**



**Treatment Rule.** 40 CFR 141.175 is incorporated by reference. ( )

**06. Reporting and Record Keeping Requirements for the Disinfectants and Disinfectant Byproducts Rule.** 40 CFR 141.134 is incorporated by reference. ( )

**07. Reporting and Record Keeping Requirements for the Revised Total Coliform Rule.** 40 CFR 141.861 is incorporated by reference. ( )

**08. Public Notification.** The Department may require the owner of a PWS that has been disapproved to notify the public. The manner, content, and timing of this notification will be determined by the Department. This is in addition to any provisions set forth in Section 150 that may also apply. ( )

**09. Public Notification for Low System Pressure.** ( )

**a.** During unplanned or emergency situations, when water pressure within the system is known to have fallen below twenty (20) psi, the water supplier must notify the Department, provide public notice to the affected customers within twenty-four (24) hours, and disinfect or flush the system as appropriate. When sampling and corrective procedures have been conducted and after determination by the Department that the water is safe, the water supplier may re-notify the affected customers that the water is safe for consumption. The water supplier must notify the affected customers if the water is not safe for consumption. ( )

**b.** During planned maintenance or repair situations, when water pressure within the system is expected to fall below twenty (20) psi, the water supplier must provide public notice to the affected customers prior to the planned maintenance or repair activity and notify customers that the water is safe for consumption. ( )

**151. CONSUMER CONFIDENCE REPORTS.** 40 CFR Part 141, Subpart O is incorporated by reference. ( )

**152. -- 249. (RESERVED)**

**250. MAXIMUM CONTAMINANT LEVEL GOALS AND MAXIMUM RESIDUAL DISINFECTION LEVEL GOALS.**

**01. Maximum Contaminant Level Goals for Organic Contaminants.** 40 CFR 141.50 is incorporated by reference. ( )

**02. Maximum Contaminant Level Goals for Inorganic Contaminants.** 40 CFR 141.51 is incorporated by reference. ( )

**03. Maximum Contaminant Level Goals for Microbiological Contaminants.** 40 CFR 141.52 is incorporated by reference. ( )

**04. Maximum Contaminant Level Goals for Disinfection Byproducts.** 40 CFR 141.53 is incorporated by reference. ( )

**05. Maximum Residual Disinfectant Level Goals for Disinfectants.** 40 CFR 141.54 is incorporated by reference. ( )

**06. Maximum Contaminant Level Goals for Radionuclides.** 40 CFR 141.55 is incorporated by reference. ( )

**251. -- 299. (RESERVED)**

**300. FILTRATION AND DISINFECTION.**

**01. General Requirements.** 40 CFR 141.70 is incorporated by reference. ( )

**02. Filtration.** 40 CFR 141.73 is incorporated by reference. ( )

**a.** The Department will establish filtration removal credit on a system-by-system basis. Unless otherwise allowed the Department, the maximum log removal credit allowed for filtration is as follows:

Maximum Log Removal			
Filtration Type	Giardia lamblia	Viruses	Cryptosporidium
Conventional	2.5	2.0	2.5
Direct	2.0	1.0	2.0
Slow sand	2.0	2.0	2.0
Diatomaceous earth	2.0	1.0	2.0
Microfiltration	3.0	0.5	3.0
Ultrafiltration	3.5	2.0	3.5
Nanofiltration	4.0	3.0	4.0
Reverse Osmosis	4.0	3.0	4.0
Alternate technology	2.0	0	2.0

**b.** Filtration removal credit will be granted for filtration treatment provided the PWS is: ( )

**i.** Operated in accordance with the Operations Plan specified in Subsection 552.03.a.; and ( )

**ii.** The PWS is in compliance with the turbidity performance criteria specified under 40 CFR 141.73; and ( )

**iii.** Coagulant chemicals must be added and coagulation and flocculation unit process must be used at all times during which conventional and direct filtration treatment plants are in operation; and ( )

**iv.** Slow sand filters are operated at rates not to exceed one-tenth (0.1) gallons per minute per square foot or as approved by the Department; and ( )

**v.** Diatomaceous earth filters are operated at a rate not to exceed one point five (1.5) gallons per minute per square foot. ( )

**03. Criteria for Avoiding Filtration.** 40 CFR 141.71 is incorporated by reference. ( )

**04. Disinfection.** 40 CFR 141.72 is incorporated by reference. ( )

**a.** Surface water sources or groundwater sources directly influenced by surface water must maintain a minimum of at least two-tenths (0.2) mg/l disinfectant residual in the treated water at peak hour demand before delivery to the first customer. ( )

**b.** The Department may allow a PWS to utilize automatic shut-off of water to the distribution system whenever total disinfectant residual is less than two-tenths (0.2) mg/l rather than provide redundant disinfection components and auxiliary power as required in 40 CFR 141.72(a)(2). An automatic water shut-off may be used if the PWS demonstrates to the satisfaction of the Department that, at all times, a minimum of twenty (20) psi pressure and adequate fire flow can be maintained in the distribution system when water delivery is shut-off to the distribution system and, at all times, minimum Giardia lamblia and virus inactivation removal rates can be achieved prior to the first customer. ( )

c. Each PWS which is required to provide filtration must provide disinfection treatment such that filtration plus disinfection provide at least 3-Log or ninety-nine and nine tenths percent (99.9%) inactivation/removal of *Giardia lamblia* cysts and at least 4-Log or ninety-nine and ninety-nine hundredths percent (99.99%) inactivation/removal of viruses as specified in 40 CFR 141.72 and Section 300, and at least 2-Log or ninety-nine percent (99%) removal of *Cryptosporidium* as required by 40 CFR Part 141, Subpart P or Subpart T. However, in all cases the disinfection portion of the treatment train must be designed to provide not less than five tenths (0.5) log *Giardia lamblia* inactivation, irrespective of the *Giardia lamblia* removal credit awarded to the filtration portion of the treatment train. ( )

**05. Analytical and Monitoring Requirements.** 40 CFR 141.74 is incorporated by reference. ( )

a. Total inactivation ratio calculations: 40 CFR 141.74(b)(4)(i) and (ii) are incorporated by reference. ( )

b. Log removal credit for disinfection must be determined by multiplying the total inactivation ratio by three (3). ( )

c. Unfiltered Subpart H systems. 40 CFR 141.857(c) is incorporated by reference. ( )

d. Unfiltered PWSs must monitor as required in 40 CFR 141.74(b) upon notification by the Department that filtration treatment must be installed. ( )

e. During the period prior to filtration treatment installation, the Department may, at its discretion, reduce the turbidity monitoring frequency for any non-community system which demonstrates to the satisfaction of the Department: ( )

i. A free chlorine residual of two-tenths (0.2) part per million is maintained throughout the distribution system; ( )

ii. The water source is well protected; ( )

iii. *E. coli* MCL is not exceeded or a Level 1 or Level 2 Assessment has not been triggered in accordance with 40 CFR 141.859; and ( )

iv. No significant health risk is present. ( )

**06. Reporting and Recordkeeping Requirements.** 40 CFR 141.75 is incorporated by reference. ( )

a. As provided in 40 CFR 141.75(a) and Section 300, the Department may establish interim reporting requirements for PWSs notified by the Department or U.S. Environmental Protection Agency that filtration treatment must be installed as specified in 40 CFR 141.75(a) and as referred to in Subsection 300.06. Until filtration treatment is installed, PWSs required to install filtration treatment must report as follows: ( )

i. The purveyor will immediately report to the Department via telephone or other equally rapid means, but no later than the end of the next business day, the following information: ( )

(1) The occurrence of a waterborne disease outbreak potentially attributable to that PWS; ( )

(2) Any turbidity measurement which exceeds five (5) NTU; and ( )

(3) Any result indicating that the disinfectant residual concentration entering the distribution system is below two-tenths (0.2) mg/l free chlorine. ( )

ii. The purveyor will report to the Department within ten (10) days after the end of each month the PWS serves water to the public the following monitoring information using a Department-approved form: ( )

- (1) Turbidity monitoring information; and ( )
- (2) Disinfectant residual concentrations entering the distribution system. ( )
- iii. Personnel qualified under Subsection 300.01 will complete and sign the monthly report forms submitted to the Department as required in Subsection 300.06. ( )

**b.** In addition to the reporting requirements in 40 CFR 141.75(b) pertaining to PWSs with filtration treatment, each PWS which provides filtration treatment must report the level of *Giardia lamblia* and virus inactivation/removal achieved each day by filtration and disinfection. ( )

**07. Recycle Provisions.** 40 CFR 141.76 is incorporated by reference. ( )

**a.** The Department will evaluate recycling records kept by PWSs pursuant to 40 CFR 141.76 during sanitary surveys, comprehensive performance evaluations, or other inspections. ( )

**b.** The Department may require a PWS to modify recycling practices if it can be shown that these practices adversely affect the ability of the PWS to meet surface water treatment requirements. ( )

**301. ENHANCED FILTRATION AND DISINFECTION - SYSTEMS SERVING TEN THOUSAND OR MORE PEOPLE.**

This Section incorporates, 40 CFR Part 141, Subpart P, known as the Interim Enhanced Surface Water Treatment Rule. ( )

**01. General Requirements.** 40 CFR 141.170 is incorporated by reference. ( )

**02. Criteria for Avoiding Filtration.** 40 CFR 141.171 is incorporated by reference. ( )

**03. Disinfection Profiling and Benchmarking.** 40 CFR 141.172 is incorporated by reference. ( )

**04. Filtration.** 40 CFR 141.173 is incorporated by reference. ( )

**05. Filtration Sampling Requirements.** 40 CFR 141.174 is incorporated by reference. ( )

**302. SANITARY SURVEYS.**

The Department conduct a sanitary survey of all PWSs. Sanitary surveys will include, but are not limited to, the following elements: source; treatment; distribution system; finished water storage; pump, pump facilities, and controls; monitoring and reporting and data verification; PWS management and operation; and operator compliance with state requirements. For those PWSs using groundwater, 40 CFR Part 141, Subpart S, is incorporated by reference. ( )

**01. Frequency.** For non-community PWSs, a sanitary survey must be conducted every five (5) years. For community PWSs, a sanitary survey will be conducted every three (3) years, except as provided below. ( )

**a.** Community systems using surface water or groundwater under the direct influence of surface water that have been determined to have outstanding performance, according to criteria established by the Department, may have a sanitary survey conducted every five (5) years. ( )

**b.** Community systems using groundwater may have a sanitary survey conducted every five (5) years if the PWS provides at least a four (4)-log treatment of viruses (using inactivation, removal, or a Department-approved combination of 4-log inactivation and removal) before or at the first customer for all of its groundwater sources. ( )

**c.** Community systems using groundwater may have a sanitary survey conducted every five (5) years if they have an outstanding performance record, as determined by the Department and documented in previous sanitary surveys, and have no history of Revised Total Coliform Rule MCL or monitoring violations under

Subsection 100.01 since the last sanitary survey. ( )

**02. Report.** The Department will provided a report describing the results of the sanitary survey to the PWS. As part of the sanitary survey report or as an independent action, the Department will provide written notice to the PWS describing any significant deficiency within thirty (30) days after the Department identifies the significant deficiency. The notice may specify corrective actions and deadlines for completion of corrective actions. ( )

**03. Significant Deficiencies.** For each of the eight (8) elements of a sanitary survey of a groundwater system, the Department will consider the following deficiencies significant in all cases for the purposes of the notice required in Subsection 303.02. Decisions about the significance of other deficiencies identified during the sanitary survey will be at the Department's discretion, as indicated in the Department's sanitary survey protocol. ( )

**a.** Source: Lack of or improper sanitary well cap as specified in Subsection 511.06.b. ( )

**b.** Treatment: ( )

**i.** Chemical addition lacks emergency shut-off as specified in Subsection 531.02.b.ii. ( )

**ii.** Chemical addition is not flow proportioned where the rate of flow or chemical demand is not reasonably constant, as specified in Subsection 531.02.b.ii. ( )

**c.** Distribution system: A minimum system pressure of twenty (20) psi is not maintained throughout the distribution system as specified in Subsection 552.01.b. ( )

**d.** Finished water storage: Roof leaking, as specified in Subsections 544.09 and 544.09.c. ( )

**e.** Pumps, pump facilities, and controls: A pump house must be protected from contamination and unauthorized entry, as specified in Subsection 541.01. ( )

**f.** Monitoring, reporting, and data verification: Repeated failure to collect the required number and type of Revised Total Coliform Rule samples during the most recent two (2) year period, as specified in Subsection 100.01. ( )

**g.** PWS management and operation: History of frequent depressurization in the distribution system in violation of Subsection 552.01. ( )

**h.** Operator compliance with state licensing requirements: The PWS does not have a properly licensed responsible charge operator as required in Subsection 554.02. ( )

**04. Response Required.** After notification from the Department of significant deficiencies, the owner of a PWS must respond in writing, describing how and on what schedule the PWS will address all significant deficiencies, not later than forty-five (45) days for PWSs using surface water or groundwater under the direct influence of surface water or thirty (30) days for PWSs only using groundwater. ( )

**05. Consultation with the Department.** PWS owners must consult with the Department prior to taking specific corrective actions in response to significant deficiencies identified during a sanitary survey, unless such corrective actions are specified in detail by the Department in its written notification under Subsection 302.02. ( )

**06. Violation.** Failure to address significant deficiencies identified in a sanitary survey is a violation of these rules. ( )

**303. (RESERVED)**

**304. COMPOSITE CORRECTION PROGRAM (CCP).**

40 CFR 141.563 is incorporated by reference. In accordance with 40 CFR 142.16(g)(1), the Department has authority to require the owner of a PWC to conduct a composite correction program, as defined in Section 003, for the purpose

of identifying and correcting deficiencies in water treatment and distribution. Composite Correction Programs consist of a Comprehensive Performance Evaluation (CPE) and Comprehensive Technical Assistance (CTA). ( )

**01. Comprehensive Performance Evaluation (CPE).** The CPE is conducted to identify factors that may be adversely impacting a plant's capability to achieve compliance. It must emphasize approaches that can be implemented without significant capital improvements. The CPE assesses plant performance-based capabilities and associated administrative and operation and management practices. ( )

**02. Comprehensive Technical Assistance (CTA).** The CTA consists of follow-up to the CPE results, implementation of process control priority setting techniques, and long-term involvement to systematically train staff and administrators. ( )

**305. COLIFORM TREATMENT TECHNIQUE TRIGGERS AND ASSESSMENT REQUIREMENTS FOR PROTECTION AGAINST POTENTIAL FECAL CONTAMINATION.**

40 CFR 141.859, excluding 40 CFR 141.859(a)(2)(iii), is incorporated by reference. ( )

**01. Requirements For Assessments.** 40 CFR 141.859(b) is incorporated by reference. ( )

**a.** Level 1 and 2 assessments must be conducted consistent with any Department directives that tailor specific assessment elements with respect to the size and type of the PWS and the size, type, and characteristics of the distribution system. ( )

**b.** Level 1 Assessment. 40 CFR 141.859(b)(3) is incorporated by reference. ( )

**c.** Level 2 Assessment. 40 CFR 141.859(b)(4) is incorporated by reference. ( )

**i.** The Department will schedule and conduct Level 2 assessments for an E.coli treatment technique trigger in unless the Department approves another party to conduct the assessment as outlined in Subsection 305.02. ( )

**ii.** A second or any additional triggered Level 2 Assessment within a rolling twelve-month period must be conducted by a Department approved third party even if the PWS owner has staff or management approved under Subsection 305.02. ( )

**02. Approved Parties for Level 2 Assessments.** The PWS may conduct a Level 2 assessment if the PWS has staff or management with the certification or qualifications outlined in this Subsection or if the PWS hires parties that meet the qualifications in this Subsection. The following parties are approved by the Department to conduct Level 2 assessments: ( )

**a.** The Department or persons contracted with the Department who are trained to conduct sanitary surveys; ( )

**b.** Currently licensed operators in good standing that are licensed through the Idaho Division of Occupational and Professional Licenses with a drinking water classification of Distribution I through IV or Treatment I through IV and that are licensed at least to the classification level of the PWS requiring the Level 2 assessment; or ( )

**c.** Licensed professional engineers licensed by the state of Idaho and qualified by education and experience in the specific technical fields involved in these rules. ( )

**306. -- 309. (RESERVED)**

**310. ENHANCED FILTRATION AND DISINFECTION - SYSTEMS SERVING FEWER THAN TEN THOUSAND PEOPLE.**

40 CFR 141, Subpart T, is incorporated by reference. ( )

**311. ENHANCED TREATMENT FOR CRYPTOSPORIDIUM -- LONG TERM 2 ENHANCED SURFACE WATER TREATMENT RULE.**

40 CFR Part 141, Subpart W, is incorporated by reference. ( )

**01. Cryptosporidium Treatment Credit for Approved Watershed Control Program.** The Department will award 0.5 (zero point five) logs cryptosporidium removal credit to systems that have a Department approved Watershed Control Program. Requirements for a watershed control program are set forth in 40 CFR 141, Subpart W. Guidance on how to develop a watershed control program and obtain Department approval is provided in "Implementation Guidance for the Long Term 2 Enhanced Surface Water Treatment Rule," as referenced in Section 002. ( )

**02. Assessment of Significant Changes in the Watershed.** As part of the sanitary survey process set forth in Section 302, the Department, or an agent approved by the Department, will assess significant changes in the watershed of a surface water system that occurred since the PWS conducted source water monitoring. If changes in the watershed have the potential to significantly increase contamination of the source water with cryptosporidium, the Department will consult with the PWS owner on follow-up actions that may be required under 40 CFR 141, Subpart W, including, but not limited to, source water monitoring or additional treatment requirements. "Implementation Guidance for the Long Term 2 Enhanced Surface Water Treatment Rule," as referenced in Section 002, provides a description of factors that will be considered by the Department when making an assessment of changes in the watershed. These factors include, but are not limited to the following: ( )

- a.** New IPDES permits or changes in existing IPDES permits that involve increased loading of contaminants. ( )
- b.** Changes in land use patterns. ( )
- c.** Changes in agricultural cropping, chemical application, or irrigation practices. ( )
- d.** Changes in other non-point discharge source activities (such as grazing, manure application, commercial or residential development). ( )
- e.** Stream or riverbed modifications. ( )
- f.** IPDES permit violations at wastewater treatment plants or confined animal feedlot operations. ( )
- g.** Dramatic natural events such as floods, forest fires, earthquakes, and landslides that may transport or expose contaminants. ( )
- h.** Prolonged drought conditions that may warrant special preparatory measures to minimize impacts from waste accumulations that are washed into source waters when precipitation returns. ( )
- i.** Accidental or illegal waste discharges and spills. ( )

**312. -- 319. (RESERVED)**

**320. DISINFECTANT RESIDUALS, DISINFECTION BYPRODUCTS, AND DISINFECTION BYPRODUCT PRECURSORS.**

This Section incorporates 40 CFR Part 141, Subpart L, of the National Primary Drinking Water Regulations, known as the Disinfectants and Disinfection Byproducts Rule. ( )

**01. General Requirements.** 40 CFR 141.130 is incorporated by reference. ( )

**02. Analytical Requirements.** 40 CFR 141.131 is incorporated by reference. DPD colorimetric test kits may be used to measure residual disinfectant concentrations for chlorine, chloramines, and chlorine dioxide. ( )

- 03. Monitoring Requirements.** 40 CFR 141.132 is incorporated by reference. ( )
- 04. Compliance Requirements.** 40 CFR 141.133 is incorporated by reference. ( )
- 05. Treatment Techniques for Control of Disinfection Byproduct (DBP) Precursors.** 40 CFR 141.135 is incorporated by reference. ( )

**321. INITIAL DISTRIBUTION SYSTEM EVALUATIONS.**

40 CFR Part 141, Subpart U, is incorporated by reference. "Implementation Guidance for the Stage 2 Disinfectants and Disinfection Byproducts Rule," as referenced in Section 002, provides assistance to PWS owners and operators in understanding and achieving compliance with the requirements of 40 CFR 141, Subpart U. ( )

**322. STAGE 2 DISINFECTION BYPRODUCTS REQUIREMENTS.**

40 CFR Part 141, Subpart V, is incorporated by reference. "Implementation Guidance for the Stage 2 Disinfectants and Disinfection Byproducts Rule," as referenced in Section 002, provides assistance to public water system owners and operators in understanding and achieving compliance with the requirements of 40 CFR Part 141, Subpart V. ( )

**323. GROUND WATER RULE.**

40 CFR 141, Subpart S is incorporated by reference. "Implementation Guidance for the Drinking Water Program – Ground Water Rule," as referenced in Section 002, provides assistance to PWS owners and operators in understanding and achieving compliance with the requirements of 40 CFR 141, Subpart S. ( )

**01. Discontinuation of Treatment.** PWSs that wish to discontinue four (4)-log virus treatment at a groundwater source must meet the following criteria. Groundwater sources on which treatment has been discontinued will be subject to the triggered source water monitoring requirements of 40 CFR 141, Subpart S. ( )

- a.** Demonstration that any known source of contamination has been removed. ( )
- b.** Demonstration that structural deficiencies of the well have been rehabilitated and no longer exist. ( )
- c.** Provide evidence that the well is drawing from a protected or confined aquifer. ( )
- d.** Submit results of one (1) year of monthly monitoring for a fecal indicator organism during which no positive results occurred. ( )

**02. Chlorine Purging Prior to Triggered Source Sampling.** 40 CFR 141.402(e) requires that groundwater source samples be collected at a location prior to any treatment. Pursuant to this requirement PWSs that add chlorine to a source, either in the well bore or near enough to the wellhead that chlorinated water may backflow into the well, must ensure that all chlorine residual has been purged prior to taking a triggered source water sample. This must be accomplished by measuring chlorine residual in the source water until a reading of zero is obtained and be recorded in the space provided for chlorine residual on the sample submittal form. ( )

**324. -- 349. (RESERVED)**

**350. CONTROL OF LEAD AND COPPER.**

40 CFR 141 Subpart I is incorporated by reference. ( )

**351. -- 399. (RESERVED)**

**400. SECONDARY MCLS.**

40 CFR 143, Subpart A, is incorporated by reference. ( )

**401. -- 449. (RESERVED)**

**450. USE OF NON-CENTRALIZED TREATMENT DEVICES.**



**01. Criteria and Procedures for Public Water Systems Using Point of Entry Devices.** 40 CFR 141.100 is incorporated by reference. ( )

**02. Point of Use (POU) Treatment Devices.** ( )

**a.** A PWS owner may use point of use (POU) treatment to comply with certain maximum contaminant levels (MCL) or treatment techniques when the following conditions are met: ( )

**i.** A program for long-term operation, maintenance, and monitoring of the POU treatment system is approved by the Department, pursuant to Subsection 450.02.c. ( )

**ii.** The PWS owner or a vendor of POU treatment devices under contract with the PWS must own, control, and maintain the POU treatment system to ensure proper operation and maintenance and compliance with the MCL or treatment technique. ( )

**iii.** Each POU treatment device is equipped with a mechanical warning mechanism to ensure customers are automatically notified of operational problems. ( )

**iv.** Each POU treatment device must be certified by an accredited American National Standards Institute (ANSI) certification body to meet applicable ANSI/National Sanitation Foundation (NSF) Standards. ( )

**v.** POU treatment devices will not be used to comply with an MCL or treatment technique requirement for a microbial contaminant or an indicator of a microbial contaminant. Community PWSs may not use POU treatment devices to comply with a nitrate or nitrite MCL. ( )

**b.** The Department will waive the plan and specification requirements of Section 504 relating to material modifications for the following systems only to the extent that the material modification is limited to the installation or use of a POU treatment device(s): ( )

**i.** Community PWSs serving two hundred (200) or fewer service connections. ( )

**ii.** Non-transient non-community PWSs; ( )

**iii.** Transient non-community PWSs; or ( )

**iv.** Community PWSs serving more than two hundred (200) service connections if approved by the Department through the waiver process outlined in Subsection 005.02. ( )

**c.** Prior to installation, the PWS owner must submit the following documentation for approval to the Department. ( )

**i.** Water system information: ( )

(1) PWS name and identification number; ( )

(2) Total number of service connections; ( )

(3) Demonstration that all POU treatment devices are owned, controlled, and maintained by the PWS owner or by a vendor of POU treatment devices under contract with the PWS owner; ( )

(4) Documentation that a customer at each service connection has agreed to installation and use of a POU treatment device and has granted access for installation, maintenance, and sampling; ( )

(5) A statement of recognition that failure to maintain compliance with the MCL, or the failure to operate and maintain compliance with a POU treatment system as approved by the Department, may necessitate

- installation of centralized treatment; and ( )
554. (6) Documentation that the PWS is current with certified operator requirements pursuant to Section ( )
- ii. POU device information: ( )
- (1) Type of POU treatment device; ( )
- (2) Manufacturer, model number, and manufacturer’s specifications; ( )
- (3) Contaminant to be treated and documentation that the POU is certified and is of sufficient design and capacity for removal of the contaminant; ( )
- (4) Documentation that the PWS’s water chemistry is compatible with the POU; ( )
- (5) Type and function of the mechanical warning (performance indicator); ( )
- (6) Certification verification for ANSI/NSF; ( )
- (7) Documentation describing how other drinking water dispensing units, such as hot water dispensers and refrigerators, soda machines, water fountains, and other similar units will be provided with treated water and how the water will be transported to that unit with non-reactive piping or tubing. Non-transient non-community and transient non-community PWSs must demonstrate that the POU treatment devices are located in areas adequate to protect public health and in sufficient quantity to serve the system’s users; ( )
- (8) Installer qualifications; and ( )
- (9) Proposed date for completing installation(s). ( )
- iii. POU operation, maintenance, and sampling plan that includes documentation on how the PWS owner will: ( )
- (1) Address any non-compliance with Subsection 450.02.c.i.(4); ( )
- (2) Ensure real estate disclosures for the POU treatment systems; ( )
- (3) Deliver ongoing education and outreach to customers, including renters, regarding POU treatment and health effects of the contaminant(s) of concern; ( )
- (4) Address and perform on-going maintenance activities, including frequency of treatment media replacements and treatment device replacements, periodic verification that the mechanical warning device is functional, schedule of planned maintenance activities, a plan to address unscheduled maintenance problems, and a plan and method of waste disposal; and ( )
- (5) Collect samples from the location of all service connections and demonstrating that all POU treatment devices will be sampled for compliance with the treated contaminant(s) during every compliance period or other frequency designated by the Department. ( )
- d. Within thirty (30) days of installing the approved POU treatment system, the PWS owner must: ( )
- i. Notify the Department in writing that the POU treatment system was installed as approved by the Department. ( )
- ii. Submit samples from each POU treatment device to a certified laboratory for the contaminant(s) being treated to demonstrate initial compliance with the MCL. ( )

e. The PWS owner or operator must maintain records for a POU treatment system. Records must be submitted to the Department at a frequency and in a format specified by the Department. Records to maintain include: ( )

i. Requirements of Subsection 450.02.c.; ( )

ii. All sampling performed on the POU treatment devices; ( )

iii. Maintenance logs and schedules; ( )

iv. Log of installed units; and ( )

v. Contracts, lease agreements, or other legal documents with vendors and consumers. ( )

**03. Use of Bottled Water.** 40 CFR 141.101 is incorporated by reference. ( )

**451. TREATMENT TECHNIQUES.**  
40 CFR 141, Subpart K, is incorporated by reference. ( )

**452. -- 499. (RESERVED)**

**500. DEMONSTRATION OF TECHNICAL, FINANCIAL, AND MANAGERIAL CAPACITY OF PUBLIC DRINKING WATER SYSTEMS.**

No person may proceed, or cause to proceed, with construction of a new community or non-transient, non-community PWS until they have demonstrated to the Department that the PWS will have adequate technical, financial, and managerial capacity, as defined in Section 003. Existing community or non-transient, non-community PWSs incapable of demonstrating technical, financial, or managerial capacity as identified through operational problems, may be required to submit technical, financial, and managerial documentation to the Department for review and approval. With the exception of water sources, demonstration of capacity must be submitted to the Department prior to or concurrent with the submittal of plans and specifications, as required in Section 39-118, Idaho Code, and Subsection 504.03. Plans and specifications for water sources may be submitted to the Department prior to demonstration of capacity for the PWS. The Department will issue its approval of the new PWS capacity demonstration in writing. ( )

**01. Technical Capacity.** Demonstration of technical capacity must include the following: ( )

a. The PWS meets the relevant design, construction, and operating requirements of these rules; ( )

b. The PWS has an adequate and consistent source of water; ( )

c. A plan is in place to protect the water source and deal with emergencies; ( )

d. A plan exists for replacement or improvement of infrastructure as necessary; and ( )

e. The PWS has trained personnel with an understanding of the technical and operational characteristics of the PWS. ( )

**02. Financial Capacity.** Demonstration of financial capacity must include the following: ( )

a. Documentation that organizational and financial arrangements are adequate to construct and operate the PWS in accordance with these rules. This information can be provided by submitting estimated construction, operation, and maintenance costs, letters of credit, or other access to financial capital through public or private sources and, if available, a certified financial statement; ( )

b. Demonstration of revenue sufficiency, that includes but is not limited to billing and collection

procedures; a proposed rate structure which demonstrates the availability of operating funds, revenues for depreciation and reserves, and the ability to accrue a capital replacement fund. A preliminary operating budget must be provided; and ( )

c. Adequate fiscal controls must be demonstrated. ( )

**03. Managerial Capacity.** Demonstration of managerial capacity, the must include the following: ( )

a. Clear documentation of legal ownership and any plans that may exist for transfer of that ownership upon completion of construction or after a period of operation; ( )

b. The name, address, and telephone number of the person who will be accountable for ensuring that the PWS is in compliance with these rules; ( )

c. The name, address, and telephone number of the responsible charge operator; ( )

d. A description of the manner in which the PWS will be managed. Information such as by-laws, restrictive covenants, articles of incorporation, or procedures and policy manuals which describe the management organizational structure must be provided; ( )

e. A recommendation of staff qualifications, including training, experience, certification or licensing, and continuing education; ( )

f. An explanation of how the PWS will establish and maintain effective communications and relationships between the PWS management, its customers, professional service providers, and any applicable regulatory agencies; and ( )

g. Evidence of planning for future growth, equipment repair and maintenance, and long term replacement of system components. ( )

**04. Submittal.** The PWS owner may request guidance on how to prepare a capacity document submittal from the Department, the guidance is available on the Department website at <http://www.deq.idaho.gov>. ( )

**05. Expanding Systems.** A PWS which comes into existence as a result of growth in population or number of service connections within a previously unregulated system will be considered a new PWS under these rules and is subject to all design, construction, and operating requirements herein. ( )

**06. Consolidation.** In demonstrating new PWS capacity, the owner of the proposed new PWS must investigate the feasibility of obtaining water service from an established PWS. If such service is available, but the owner elects to proceed with an independent PWS, the owner must explain why this choice is in the public interest in terms of environmental protection, affordability to water users, and protection of public health. ( )

**07. Exclusion.** New PWSs which are public utilities as defined in Sections 61-104 (Corporation), 61-124 (Water System), 61-125 (Water Corporation), and 61-129 (Public Utility), Idaho Code, must meet the regulatory requirements of the Idaho Public Utilities Commission (IPUC) in Chapter 1, Title 61, Idaho Code, Public Utilities Law, and IDAPA 31.01.01, "Rules of Procedure of the Idaho Public Utilities Commission." Such water systems will not be required to meet any requirements of this Section which are in conflict with the provisions and requirements of the IPUC. ( )

**501. GENERAL DESIGN REQUIREMENTS FOR PUBLIC DRINKING WATER SYSTEMS.**

Unless otherwise specified by the Department, the design of new PWSs, or modifications to existing PWSs must conform to the facility and design standards set forth in 40 CFR 141.5, and Sections 500 through 552. The following general design requirements apply as applicable for the type of PWS and the treatment or other processes employed. ( )

**01. Materials Used in Construction.** Products that are used to construct PWSs and have water contact surfaces must conform to applicable AWWA standards and be certified by an accredited ANSI certification body to meet applicable ANSI/NSF standards, where products meeting such AWWA and ANSI/NSF standards exist, and must conform to 40 CFR 143 Subpart B. In the absence of such products, products meeting applicable product standards and acceptable to the Department may be selected. Corrosion control must be taken into account during all aspects of PWS design. ( )

**02. Additives Used in Operation.** No chemical or other substance will be added to drinking water, nor will any process be utilized to treat drinking water, unless approved by the Department. All chemicals must conform to applicable AWWA standards and be certified by an accredited ANSI certification body to meet ANSI/NSF Standard 60, referenced in Subsection 002.02. ( )

**03. Design Basis.** The PWS, including the water source and treatment facilities, must be designed to provide either peak hour demand of the PWS or maximum day demand plus equalization storage at the design year. ( )

**04. Design of Treatment Facilities.** Design of treatment facilities must address: ( )

- a. Functional aspects of facility layout and provisions for future facility expansion; ( )
- b. Provision for expansion of waste treatment and disposal facilities (see Section 540); ( )
- c. Roads constructed to provide year-round access by vehicles and equipment needed for repair and maintenance; ( )
- d. Site grading and drainage; and ( )
- e. Chemical feed or injection systems must be designed to ensure complete mixing through rapid mix devices or other measures unless otherwise approved by the Department. ( )

f. Unless otherwise approved by the Department or as specified in other sections of these rules, to ensure that minimum quality, quantity, and pressure requirements are continuously met during maintenance, breakdowns, structural failures, emergencies, or other periods when components must be out of service, water system treatment, filtration, and disinfection components for all new or substantially modified community or non-transient, non-community PWSs must be designed with redundancy or other acceptable methods, such that plant design capacity can be maintained with any component out of service. Raw water intake structures are excluded from the general redundancy requirement but must be designed to ensure that plant design capacity will be maintained. ( )

**05. Design of Buildings.** The design of buildings that are a part PWSs must provide for: ( )

- a. Adequate ventilation, lighting, heating, and air conditioning; ( )
- b. Adequate drainage; ( )
- c. Dehumidification equipment, if necessary; ( )
- d. Accessibility of equipment for operation, servicing, and removal; ( )
- e. Flexibility and convenience of operation and safety of operators; and ( )
- f. Separate room(s) for chemical storage and feed equipment that may be required based on type of chemicals and associated hazards. ( )

**06. Electrical.** Main switch gear electrical controls must be located above grade, in areas not subject to flooding. All electrical work must conform to the requirements of the National Electrical Code or to relevant state/local codes. The National Electrical Code is available from the National Fire Protection Association, 1 Batterymarch

Park, Quincy, Massachusetts 02169-7471, (617)770-3000, <http://www.nfpa.org>. ( )

**07. Reliability and Emergency Operation.** New community PWSs are required to have sufficient dedicated on-site standby power, with automatic switch-over capability, or standby storage so that water may be treated and supplied to pressurize the entire distribution system during power outages. During a power outage, the PWS must be able to meet the operating pressure requirements of Subsection 552.01.b. for a minimum of eight (8) hours at average day demand plus fire flow where provided. A minimum of eight (8) hours of fuel storage must be located on site unless an equivalent plan is authorized by the Department. Standby power provided in a PWS may be coordinated with the standby power that is provided in the wastewater collection and treatment system. ( )

**a.** The Department may require the installation of standby power or storage facilities in existing PWSs if the frequency and duration of power outages a PWS experiences constitute a health hazard. ( )

**b.** Existing community PWSs that are substantially modified must meet the requirements of Subsection 501.07. in those portions of the PWS affected by the modifications. ( )

**c.** New sources and booster pumps intended to increase PWS capacity must be provided with standby power or equivalent unless, during a power outage, the PWS or distribution system pressure zone can already meet the minimum operating capacity and pressure requirements in Subsection 501.07 for a minimum of eight (8) hours at average day demand plus fire flow where provided for each pressure zone. ( )

**d.** For both new and existing PWSs, the Department may reduce the requirements of Subsection 501.07 if the PWS can demonstrate the capacity to adequately protect public health during a power outage. Any decision by the Department will be based on, but not limited to, the following considerations: ( )

**i.** An adequate emergency response and operation plan and the capacity to implement that plan. ( )

**ii.** The adequacy of the PWS's cross connection control program and the capacity to protect public health in the event of a system wide depressurization. ( )

**iii.** Demonstration of historical and projected reliability of the electrical power supplied to the PWS. ( )

**iv.** A strategy for providing information to the public during power outages, including instructions to stop irrigation, boil water, etc., until notified otherwise. ( )

**v.** The level of reliability acceptable to consumers. This can be accomplished with either a vote of the majority of consumers for privately owned and operated PWSs or a decision by the governing body for publicly governed PWSs. ( )

**vi.** Other considerations that may be pertinent, including connections to other PWSs, agreements to provide water in emergency situations, and the availability of dedicated portable auxiliary power. ( )

**08. On-Site Analysis and Testing Capabilities.** Each PWS must have equipment and facilities for routine testing necessary to ensure proper operation. Equipment selection must be based on the characteristics of the raw water source and the complexity of the treatment process involved. ( )

**09. Sample Taps.** Sample taps must be provided so that water samples can be obtained from each water source and from appropriate locations in each unit operation of treatment, and from the finished water. Taps must be consistent with sampling needs and shall not be of the petcock type. Taps owned by the PWS and used for obtaining samples for bacteriological analysis must be of the smooth-nosed type without interior or exterior threads, will not be of the mixing type, and will not have a screen, aerator, or other such appurtenance. ( )

**10. Facility Potable Water Supply.** The facility water supply service line and the plant finished water sample tap must be supplied from a source of finished water at a point where all chemicals have been thoroughly mixed, and the required disinfectant contact time, if applicable, has been achieved. There may be no cross

connections between the facility water supply service line and any piping, troughs, tanks, or other treatment units containing wastewater, treatment chemicals, raw or partially treated water. ( )

**11. Meters.** All water supplies must have an acceptable means of measuring the flow from each source, the wash water, the recycled water, any blended water of different quality, and the finished water. ( )

**12. Operation and Maintenance Manual.** A new or updated operation and maintenance manual that addresses all PWS facilities must be submitted to the Department for review and approval prior to start-up of the new or materially modified PWS unless the same system components are already covered in an existing operation and maintenance manual. For existing PWSs with continual operational problems as determined by the Department, the Department may require that an operation and maintenance manual be submitted to the Department for review and approval. The operator will ensure that the PWS is operated in accordance with the approved operation and maintenance manual. ( )

**13. Start-Up Training.** Provisions must be made for operator instruction at the start-up of a new plant or pumping station. ( )

**14. Safety.** Consideration must be given to the protection of maintenance personnel and visitors from typical and foreseeable hazards in accordance with the engineering standards of care. The design must comply with all applicable safety codes and regulations that may include the Uniform Building Code, International Fire Code, National Fire Protection Association Standards, and state and federal OSHA standards. Items to be considered include, but are not limited to, noise arresters, noise protection, confined space entry, protective equipment and clothing, gas masks, safety showers and eye washes, handrails and guards, warning signs, smoke detectors, toxic gas detectors and fire extinguishers. ( )

**15. Security.** Appropriate design measures to help ensure the security of PWS facilities must be incorporated. Such measures, at a minimum, will include means to lock all exterior doorways, windows, gates and other entrances to source, treatment, pumping stations, and water storage facilities. ( )

**16. Other Regulations.** Consideration must be given to the design requirements of other federal, state, and local regulatory agencies for items such as safety requirements, special designs for the handicapped, plumbing and electrical codes, and construction in the flood plain. ( )

**17. Groundwater Source Redundancy.** New community PWSs served by groundwater must have a minimum of two (2) sources if they are intended to serve more than twenty-five (25) connections or equivalent dwelling units (EDUs). Under normal operating conditions, with any source out of service, the remaining source(s) must be capable of providing either the peak hour demand of the PWS or a minimum of the maximum day demand plus equalization storage. See Subsection 501.18 for general design and redundancy requirements concerning fire flow capacity. ( )

**18. Redundant Fire Flow Capacity.** ( )

**a.** PWSs that provide fire flow must be designed to provide maximum day demand plus fire flow. Fire flow requirements and system adequacy will be determined by the local fire authority or by a hydraulic analysis by a licensed professional engineer to establish required fire flows in accordance with the International Fire Code as adopted by the State Fire Marshal. Pumping systems supporting fire flow capacity must be designed so that maximum day demand plus fire flow may be provided with any pump out of service. ( )

**b.** The requirement for redundant pumping capacity specified in Subsection 501.18.a. may be reduced to the extent that fire suppression storage is provided in sufficient quantity to meet some or all of fire flow demands. Where fire suppression storage is not provided, the requirement for fire flow pumping redundancy may be reduced or eliminated if the following conditions are met: ( )

**i.** The local fire authority justifies that the fire flow capacity of the PWS is acceptable and is compatible with the water demand of existing and planned fire-fighting equipment and fire-fighting practices in the area served by the PWS. ( )

ii. In a manner appropriate to the PWS type and situation, notification is provided to customers that describes the design of the PWS's fire-fighting capability and explains how it differs from the requirements of Subsection 501.18.a. ( )

**19. Pilot Studies.** Unless otherwise approved by the Department, pilot studies are required for treatment processes other than chlorine disinfection or point of use installations. Pilot studies may be performed in the field using the proposed source water or in conjunction with bench scale testing in the lab using the proposed source water. The PWS must obtain the Department's approval of a pilot study plan before the pilot study is implemented. A pilot study will be conducted for a period that is determined by the design engineer and approved by the Department. A final pilot study report with results must be submitted to the Department for review and approval. Upon completion of the pilot study, final approval of equipment and treatment processes is subject to the applicable requirements of Sections 500 through 552. ( )

a. A pilot study plan must include the following and any other items required by the Department: ( )

i. General information about the project including the existing system, the reason for conducting the pilot study, and anticipated results of a successful pilot study. ( )

ii. A brief description of alternative processes that may be used if the proposed process is shown to be ineffective from the study. ( )

iii. Discussion of how the pilot study will be conducted, the time frame of the study, source water quality, how source water may be altered to mimic various source water quality conditions, and the water quality parameters that are monitored and evaluated to determine if the treatment process was effective. ( )

b. The pilot study report must include the following and any other items required by the Department: ( )

i. Introduction and Background. ( )

ii. A discussion of the overall pilot study progress, including any issues or problems and a general discussion of results of the study and what the results indicate. This discussion will determine parameters necessary for full scale implementation. ( )

iii. Conclusions and recommendation to proceed with the treatment process if the results of the study proved successful. ( )

c. Additional specific pilot study requirements in Sections 500 through 552 must be included in pilot study plans and reports. ( )

d. Pilot study plans and pilot study reports submitted to the Department must bear the imprint of an Idaho licensed professional engineer's seal that is both signed and dated by the engineer. ( )

**502. FACILITY PLANS.** See the definition of Facility Plan in Section 003. ( )

**01. Facility Plans Required.** The owner of all new PWSs, and existing PWSs undergoing material modification, are required to have a current facility plan that addresses all applicable issues specifically required in Sections 500 through 552. Facility plans must address the entire potential service area of the project. Facility plans may not be required for simple water main extension projects as detailed in Subsections 502.01.a. and 502.01.b. ( )

a. A facility plan is not required if the Department is provided documentation supporting the ability of the purveyor to provide service for the simple water main extension without adding system components designed to control quantity or pressure to the PWS and while continuing to provide the pressure and quantity requirements of Subsection 552.01. Documentation may be in the form of: ( )



- i. Hydraulic modeling; ( )
- ii. Usage data and flow calculations; ( )
- iii. Declining balance reports that demonstrate the PWS has the capacity to supply the service area of the system served by the extension; or ( )
- iv. Other documentation acceptable to the Department. ( )

**b.** A Department-approved facility plan is not required to be in place prior to the Qualified Licensed Professional Engineer (QLPE) approving a simple water main extension pursuant to Subsection 504.03.b., provided that the service area of the system served by the extension is in compliance with the facility and design standards in Sections 500 through 552. If the Department has not approved a facility plan for the PWS which includes the proposed simple water main extension, then the PWS purveyor or the QLPE must provide with the transmittal letter documentation supporting the ability of the purveyor to provide service for the simple water main extension without adding system components designed to control quantity or pressure to the PWS and while continuing to provide the pressure and quantity requirements of Subsection 552.01. The purveyor must provide this documentation to the QLPE as necessary. Documentation may be in the form of: ( )

- i. Hydraulic modeling; ( )
- ii. Usage data and flow calculations; ( )
- iii. Declining balance reports that demonstrate the PWS has the capacity to supply the service area of the system served by the extension; or ( )
- iv. Other documentation acceptable to the Department. ( )

**02. Submittal to the Department.** When required, facility plans must be submitted to the Department for review and approval prior to the submission of plans and specifications for a project related to the facility plan unless otherwise approved by the Department. ( )

**03. Engineer's Seal Required.** Facility plans submitted to the Department must bear the imprint of an Idaho licensed professional engineer's seal that is both signed and dated by the engineer. ( )

**04. Facility Plan Contents.** The facility plan must include basic information, criteria and assumptions, hydraulic capacity, treatment capacity, standby power, redundancy, fire flows, project financing, operation and maintenance considerations, alternative solutions with preliminary layouts, and cost estimates as applicable. The facility plan is intended to address system wide growth, to identify system deficiencies, and to lay out a plan for system upgrades and expansion. If specific items listed in Subsections 502.04.a.i. through 502.04.a.viii. or Subsections 502.04.b.i. through 502.04.b.vii. are not applicable to a particular facility plan, then the submitting engineer must state this in the facility plan and state the reason why the requirement is not applicable. ( )

**a.** The minimum requirements for a facility plan for a new PWS are listed in Subsections 502.04.a.i. through 502.04.a.viii but it must include: ( )

- i. A general description and location of the PWS. ( )
- ii. The estimated design population of the PWS including the number of connections and the number of EDUs proposed. ( )
- iii. Adequacy, quality, and availability of sources of water for potable use and a description of the non-potable irrigation system. ( )
- iv. Identify and describe any anticipated treatment. ( )

- v. Design data covering water quantity for domestic, irrigation, fire fighting, commercial, or industrial water uses, including peak hour, maximum day, and average day demands. ( )
- vi. Include the size and location of any anticipated storage structures. ( )
- vii. Pressure ranges for all flow conditions prescribed by these rules. ( )
- viii. Describe the wastewater collection system and wastewater treatment works, with reference to their relationship to existing or proposed water works structures which may affect the operation of the water supply system, or which may affect the quality of the supply. ( )
- b.** The minimum requirements for a facility plan for an existing PWS must include Subsections 502.04.b.i. through 502.04.b.vii. as well as Subsections 502.04.a.i. through 502.04.a.viii. ( )
  - i. A computerized hydraulic model of the distribution system based on flow demand and pressure requirements is required unless otherwise approved by the Department; any hydraulic model of an existing distribution system must be properly calibrated. The type or sophistication of hydraulic model will be dependent on the type of PWS. ( )
  - ii. Identify and evaluate problems related to the PWS. ( )
  - iii. Describe financing methods. ( )
  - iv. Set forth anticipated charges for users. ( )
  - v. Review organizational and staffing requirements. ( )
  - vi. Offer a project(s) recommendation for client consideration. ( )
  - vii. Outline official actions and procedures to implement the project. ( )
- c. Public Water System Facility Plan funded by the State Revolving Fund.** If the project is funded by the state revolving fund or a state grant, the facility plan must meet the requirements of Subsections 502.04.a. and 502.04.b., and other requirements that may also apply. See IDAPA 58.01.12, "Rules for Administration of Wastewater and Drinking Water Loan Funds," and IDAPA 58.01.22, "Rules for Administration of Planning Grants for Drinking Water and Wastewater Facilities." ( )
- d.** A checklist, which can be used as guidance, can be found on the Department website at <http://www.deq.idaho.gov>. The guidance document is for Department grant and loan projects, but may be used in part or in whole as a guide to assist in the development of any facility plan. ( )

**503. PRELIMINARY ENGINEERING REPORTS.**

See the definition of Preliminary Engineering Report (PER) in Section 003. PERs are required for all new PWSs or material modifications to existing PWSs that require plan and specification review and approval pursuant to Subsection 504.03. The PER must be in conformance with the approved facility plan or must describe any modifications to the facility plan. PERs must be completed for all major PWS projects including, but not limited to, source, pump station, pressure control, storage, and treatment projects. PERs are not required for simple water main extensions that are approved in accordance with Subsections 502.01.a. or 502.01.b. ( )

**01. Submittal to Reviewing Authority.** PERs must be submitted to the Department for review and approval prior to the submission of plans and specifications. The Department may allow well construction plans and specifications to be submitted concurrently with a PER for these projects. ( )

**02. Seal Required.** PERs submitted to the Department must bear the imprint of an Idaho licensed professional engineer's seal that is both signed and dated by the engineer. The Department will accept the seal and signature of an Idaho licensed professional geologist for well source, spring source, or infiltration gallery site reports, and for well construction. ( )

**03. PER Contents.** The PER must include sufficient detail to demonstrate that the proposed project meets applicable criteria. The items included in Subsections 503.03.a. through 503.03.e., and all applicable issues and items specifically required in Sections 500 through 552, must be addressed in detail or justification must be provided for any proposed deviations where specifically allowed. As required, a PER must also identify and evaluate drinking water related problems, assemble basic information, present criteria and assumptions, examine alternative solutions with preliminary layouts and cost estimates, offer a conclusion with a proposed project, and outline official actions and procedures to implement the project. If specific items in Subsections 503.03.a. through 503.03.e. are not applicable to a particular design, then the designer must state this in the PER and state the reason why it is not applicable. Items adequately addressed in the facility plan under which the project is being designed may be addressed by reference for purposes of the PER. ( )

**a.** All PERs must include items in Subsection 503.03.a. and the applicable items from Subsections 503.03.b. through 503.03.e. ( )

**i.** The general information must include, but is not limited to: ( )

(1) A detailed description of the proposed project; ( )

(2) A general description of the location of the project and justification of the site selection; ( )

(3) A general discussion of adequacy of local roadways and availability of power or other utilities; ( )

and (4) A general discussion of surrounding land use, including any potential sources of contamination; ( )

(5) A general discussion of planned security features such as fencing, lighting, alarm systems, etc. ( )

**ii.** The PER must discuss or reference items provided in the Department-approved facility plan. These items include, but are not limited to: ( )

(1) A general description of the existing PWS and how the project fits into the overall system and facility plan; ( )

(2) The estimated PWS size based on number of persons, number of connections, or number of EDUs served or impacted by the project; ( )

(3) Design data for domestic, irrigation, fire fighting, commercial and industrial water uses, including peak hour, maximum day, and average day demands; ( )

(4) How the project will affect various storage requirements. See definition of Components of Finished Water Storage in Section 003; ( )

(5) Pressure ranges for all flow conditions prescribed by these rules; ( )

(6) A computer model of the hydraulics of the distribution system based on flow demands and pressure requirements is required unless otherwise approved by the Department; any hydraulic model of an existing distribution system must be properly calibrated. The type and sophistication of hydraulic model will be dependent on the type of PWS; ( )

(7) A general discussion of the adequacy, quality and availability of source of water. A PWS that is to be served by a separate non-potable irrigation system must provide documentation to demonstrate the actual availability of water in sufficient quantity to ensure that the irrigation system will not compete with or in any way diminish the source of water for the potable water system; ( )

(8) Describe the wastewater collection system and wastewater treatment works, with special reference to their relationship to existing or proposed water works structures which may affect the operation of the water supply system, or which may affect the quality of the supply; ( )

(9) Assesses and characterize all anticipated treatment waste discharges generated by the project and any activities that may impact the water supply. The location of each waste handling area or discharge point must be shown on a scale map; ( )

(10) Provide brief discussion of financing options investigated or planned; and ( )

(11) Discuss mechanisms for protection of the PWS from flooding. ( )

iii. Include a summary of applicable codes and standards that apply to the proposed project. ( )

iv. Provide, as applicable, estimated construction costs for public works projects or projects funded through public monies. ( )

v. Include the proposed construction schedule. ( )

vi. Identify sources of contamination and describe how the drinking water sources will be protected. ( )

vii. Generally discuss soil, groundwater conditions, and potential building foundation problems, including a description of: ( )

(1) The character of the soil through which water mains are to be laid; ( )

(2) Characteristics of the soil, water table, and geological substrate that may affect the design and construction of the foundations of proposed structures; and ( )

(3) The approximate elevation of groundwater in relation to subsurface structures. ( )

**b.** In addition to items listed in Subsection 503.03.a., a PER for source water construction projects using wells or springs must include all items listed in Subsection 503.03.b., applicable items in Sections 510 through 514, and Sections 500 to 552 are to be evaluated for their relevance to the project. ( )

i. Include geological data and existing well logs. ( )

ii. Describe the anticipated drilling method and well construction. ( )

iii. Anticipated potability and water quality including monitoring results required for new sources by these rules. ( )

iv. Provide the appropriate documentation for the water rights for the drinking water source. ( )

v. Dimensions of the well lot and location of source. Include geographical coordinates of the source location. ( )

vi. For all new groundwater sources, including but not limited to wells, springs, and infiltration galleries, PWSs must supply information as required by the Department for the Department to determine if these sources are under the direct influence of surface water. The determination of direct influence may be based on site-specific measurements of water quality, documentation of well construction characteristics and geology with field evaluation, a combination of water quality and documentation, or other information required by the Department. ( )

vii. Provide a site evaluation report as required by Section 510 for wells and 514 for springs. ( )

**c.** In addition to items listed in Subsection 503.03.a., PERs for well and pump house construction projects must include all items listed in Subsection 503.03.c., applicable items in Sections 511, 541, 547, and Sections 500 to 552 are to be evaluated for their relevance to the project. ( )

i. Include information on the anticipated construction and well house equipment such as heating, ventilation, interior lighting, and drain(s). ( )

ii. Provide a brief description of the means for measuring the water level in the well. ( )

iii. Include information on the proposed or planned pump, including the pump curve. ( )

iv. Describe the equipment and controls for the well and pump house. This includes but is not limited to system control and data acquisition, variable frequency drive, and other manual or automated controls within the well house. ( )

v. Piping and appurtenances including but not limited to sample taps, discharge piping, flow meters, check valves, and pressure gauges. Describe the receiving system for the pump to waste volume of water including an evaluation of the capacity of the receiving system and, if applicable, provide documentation that the system owner will accept the estimated volume of water and any limitations the owner places upon that acceptance. ( )

vi. Describe the well vent if applicable. ( )

vii. Describe the anticipated casing and well cap type and materials. ( )

viii. Describe the anticipated pitless adapter for the well. ( )

ix. Describe the soil and groundwater conditions that may affect the design and construction of proposed structure(s). ( )

**d.** In addition to items listed in Subsection 503.03.a., PERs for reservoir and storage construction projects must include all items listed in Subsection 503.03.d., applicable items in Sections 544, and Sections 500 to 552 are to be evaluated for their relevance to the project. ( )

i. Describe the required storage capacity and the related components of finished water storage. ( )

ii. Describe the anticipated overflow system for the water storage project and where the overflow will discharge. ( )

iii. Describe the venting system used for the water storage project if applicable. ( )

iv. Describe the construction materials used for the storage project. ( )

v. Describe the protection of storage facility features from freezing especially riser pipes, overflows, and vents. ( )

vi. Describe any site work or grading that may be necessary. ( )

vii. Provide a discussion on methods to prevent corrosion such as coatings, cathodic protection, corrosion resistant materials, and encasement. ( )

viii. Describe the methods to be used to disinfect the storage facility and the testing to check for proper disinfection. ( )

**e.** Surface water and groundwater under the direct influence of surface water (GWUDI) treatment construction projects. In addition to items listed in Subsection 503.03.a., PERs for surface water treatment and GWUDI construction projects must include all items listed in Sections 503.03.e., applicable items in Sections 515

- through 540, and Sections 500 to 552 are to be evaluated for their relevance to the project. ( )
- i. Describe the intake structures that will be used. ( )
  - ii. If applicable, describe the proposed off-stream raw water storage. ( )
  - iii. Describe the treatment methods and potential alternatives including the removal of pathogens, disinfection, enhanced disinfection, water quality monitoring, and redundancy provisions. ( )
  - iv. Characterize the various wastes from the water treatment processes and, if applicable, their volumes, constituents, and proposed treatment and disposal. If discharging to a sanitary sewage system, verify that the system is capable of handling the flow to the treatment works and that the treatment works is capable and willing to accept the additional loading. ( )
  - v. Provide applicable raw water monitoring results as required by these rules including anticipated turbidity ranges, microbiological, physical, chemical, radiological, and other parameters as determined by the Department. ( )
  - vi. An assessment of the degree of hazard to the supply by agricultural, industrial, recreational, and residential activities in the watershed, and by accidental spillage of materials that may be toxic, harmful or detrimental to treatment processes. ( )
  - vii. Assess all waste discharges and activities that may impact the water supply. The location of each waste discharge must be shown on a scale map. ( )
  - viii. Provide any available records and data regarding hydrological and historical stream flow. ( )
  - ix. A copy of the appropriate permit(s) or application(s) from the Idaho Department of Water Resources regarding authorization to appropriate public waters of the state of Idaho in sufficient quantity to meet the design requirements of the PWS. ( )
  - x. Anticipated turbidity range. ( )
  - xi. Assessment of the degree of control the PWS will be able to exercise over the watershed. ( )
  - xii. Projected future uses of impoundments or reservoirs within the watershed. ( )
  - xiii. Submit source water sample data over a sufficient period of time to assess the microbiological, physical, chemical and radiological characteristics of the water. ( )
  - xiv. Provide consideration of currents, wind and ice conditions, and the effect of confluent streams. ( )

**504. REVIEW OF PLANS AND SPECIFICATIONS.**

The Department will apply the facility and design standards set forth in these rules, Subsections 500 through 548, in the review of plans and specifications for PWS facilities. If design issues are not addressed by the facility and design standards set out in these rules, then guidance documents, some of which are listed in Subsection 002.02, must be used as guidance in the design and review of plans and specifications for public drinking water facilities. See also Section 013. ( )

**01. Ownership.** The PWS owner must provide documentation of the ownership and responsibility for operating the proposed PWS to the Department prior to or concurrent with the submittal of plans and specifications as required in Subsection 504.03. The documentation must show organization and financial arrangements adequate to assure construction, operation and maintenance of the PWS according to these rules. Documentation also includes the name of the PWS, the name, address, and phone number of the supplier of water, the PWS size, and the name, address, and phone number of the PWS operator. This information may be presented in a will serve letter as required in Subsection 504.02. ( )

**02. Will Serve Letter.** If the proposed project is to be connected to an existing PWS, a letter from the purveyor must be submitted to the Department stating that the purveyor will be able to provide services to the proposed project and that purveyor has reviewed and accepted the proposed construction plans and specifications that are subject to Department review and approval. The Department may require documentation supporting the ability of the purveyor to provide service to the new system without diminishing quality of service to existing customers, as described in Subsection 502.01.a and 502.01.b. This letter must be submitted prior to or concurrent with the submittal of plans and specifications as required in Subsection 504.03. ( )

**03. Plans and Specifications Required. ( )**

**a.** Prior to construction of new PWSs or material modifications of existing PWSs, the owner must submit plans and specifications to the Department for review and approval. Construction must commence as soon as practical after approval, and if construction is not completed within twelve (12) months of the Department's final approval, an extension or re-approval must be obtained from the Department. The Department may require re-submittal of all or part of the plans and specifications prior to issuing an extension or re-approving the plans and specifications. ( )

**b.** Plans and specifications for simple water main extensions do not require pre-construction approval by the Department when such extensions will be owned and operated by a city, county, quasi-municipal corporation or regulated public utility, provided that such plans and specifications are reviewed and approved by a QLPE who was not involved in the preparation of the plans and specifications being reviewed to verify compliance with the requirements of these rules prior to initiation of construction. Any plans and specifications approved pursuant to Subsection 504.03.b. must be transmitted to the Department at the time construction is authorized and will be marked or stamped as "Approved for Construction." Along with the plans and specifications, the transmittal must include the items listed in Subsections 504.03.b.i. through 504.03.b.vii. The plans and specifications must bear the imprint of an Idaho licensed professional engineer's seal that is both signed and dated by the engineer, and the approval or transmittal letter must be sealed, signed, and dated by the QLPE that is approving the plans and specifications. ( )

**i.** A statement that the author of the transmittal letter is the QLPE representing the city, county, quasi-municipal corporation or regulated public entity. ( )

**ii.** A statement that the extension project complies with the current facility plan or PER, or a statement that the PWS has adequate capacity. Please see Subsection 502.01.b. for further information. ( )

**iii.** A statement from the city, county, quasi-municipal corporation or regulated public entity or its authorized agent that the PWS purveyor will serve the project. ( )

**iv.** A statement from the city, county, quasi-municipal corporation or regulated public entity or its authorized agent that the PWS purveyor will own and operate the project after construction is complete. ( )

**v.** A statement by the QLPE that the plans and specifications are approved for construction. ( )

**vi.** A statement by the QLPE that the plans and specifications comply with the facility standards within these rules. ( )

**vii.** A statement recommending whether sanitary restrictions can be released or will remain in force. ( )

**c.** Subsections 504.03.c.i. through 504.03.c.vi. outline the projects which QLPEs may approve and which QLPEs may not approve. ( )

**i.** A QLPE may approve plans and specifications for simple water main extensions that are able to connect to an existing PWS owned by a city, county, quasi-municipal corporation, or regulated public utility at the time the extension is approved for construction by the QLPE. ( )

ii. A QLPE may approve plans for simple water main extensions which will connect to an existing PWS, but are unable to connect to the PWS at the time the extension is approved for construction by the QLPE, provided sanitary restrictions remain in force for the proposed extension. ( )

iii. A QLPE may not approve plans and specifications which include mechanical systems such as booster stations. ( )

iv. A QLPE may not approve plans and specifications for projects which the QLPE was the design engineer or otherwise involved in the design. ( )

v. A QLPE employed by a city, county, quasi-municipal corporation, or regulated public utility may approve a design that was prepared by a subordinate engineer or an engineer from a separate design group within the city, county, quasi-municipal corporation, or regulated public utility. ( )

vi. A QLPE who is not employed by a city, county, quasi-municipal corporation, or regulated public utility, but is retained by a city, county, quasi-municipal corporation, or regulated public utility for the purpose of plan and specification review may not approve projects designed by the company with which the QLPE is employed. ( )

d. At the discretion of the city, county, quasi-municipal corporation or regulated public utility, the plans addressed by Subsection 504.03.b. may be referred to the Department for review and approval prior to initiation of construction. ( )

**04. Review Criteria.** The Department will review plans and specifications to determine compliance with these rules and engineering standards of care. If the plans and specifications comply with these rules and engineering standards of care, the Department will not substitute its judgment for that of the owner's design engineer concerning the manner of compliance with the rule. ( )

**05. Review Schedule.** The Department will review plans and specifications in accordance with timelines set forth in Section 39-118, Idaho Code. ( )

**06. Engineer's Seal Required.** Plans and specifications submitted to the Department must bear the imprint of an Idaho licensed professional engineer's seal; except that the Department will accept the seal of an Idaho licensed professional geologist on the following: ( )

a. Well source, spring source, or infiltration gallery site evaluation reports, as specified in Subsections 510 and 514. ( )

b. Plans and specifications for well construction and results of field inspection and testing, as specified in Section 510. ( )

**07. Contents of Plans and Specifications.** Plans and specifications must, where pertinent, provide the following: ( )

a. General layout, including: ( )

i. Suitable title. ( )

ii. Name of municipality or other entity or person responsible for the water supply. ( )

iii. Area or institution to be served. ( )

iv. Scale of drawings. ( )

v. North arrow. ( )

vi. Datum used. ( )



- vii. General boundaries of municipality or area to be served. ( )
- viii. Date, name, and address of the designing engineer. ( )
- ix. Legible prints suitable for reproduction. ( )
- x. Location and size of existing water mains, if applicable. ( )
- xi. For PWSs undergoing material modification, location and nature of existing water works structures and appurtenances affecting the proposed improvements. ( )
- b.** Detailed plans, including: ( )
  - i. Stream crossings, providing profiles with elevations of the stream bed and the estimated normal and extreme high and, where appropriate, low water levels. ( )
  - ii. Location and size of the property to be used for the development with respect to known references such as roads, streams, section lines, or streets. ( )
  - iii. Topography and arrangement of present or planned wells or structures. ( )
  - iv. Elevations of the one hundred (100) year flood level in relation to the floor of structures, upper termination of protective casings, and grade surrounding facilities. ( )
  - v. Details of well construction, including diameter and depth of drill holes, casing and liner diameters and depths, grouting depths, elevations, and designation of geological formations, water levels and other data as specified in Section 510. ( )
  - vi. Location of all known existing and potential sources of pollution within five hundred (500) feet of water sources or underground treated storage facilities. ( )
  - vii. Size, length, and materials of proposed water mains. ( )
  - viii. Location of existing or proposed streets; water sources, ponds, lakes, and drains; storm sanitary, combined and house sewers; septic tanks, disposal fields and cesspools. ( )
  - ix. Schematic flow diagrams and hydraulic profiles showing the flow through various plant units. ( )
  - x. Piping in sufficient detail to show flow through the plant including waste lines. ( )
  - xi. Locations of all chemical storage areas, chemical feeding equipment, and points of chemical application. ( )
  - xii. All appurtenances, specific structures, equipment, water treatment plant waste disposal units and points of discharge having any relationship to the plans for water mains or water works structures. ( )
  - xiii. Locations of sanitary or other facilities, such as lavatories, showers, toilets, and lockers, when applicable or required by the Department. ( )
  - xiv. Locations, dimensions, and elevations of all proposed plant facilities. ( )
  - xv. Locations of all sampling taps owned by the PWS. ( )
  - xvi. Adequate description of any significant features not otherwise covered by the specifications that may impact public safety or welfare. ( )

- c. Complete, detailed technical specifications must be supplied for the proposed project, including: ( )
  - i. A program for keeping existing water works facilities in operation during construction of additional facilities so as to minimize interruption of service. ( )
  - ii. Laboratory facilities and equipment. ( )
  - iii. Description of chemical feeding equipment. ( )
  - iv. Procedures for flushing, disinfection and testing, as needed, prior to placing the project in service. All wells, pipes, tanks, and equipment which can convey or store potable water must be disinfected in accordance with AWWA Standards, incorporated into these rules at Subsection 002.01. Plans or specifications must outline the procedure and include the disinfectant dosage, contact time, and method of testing the results of this procedure. ( )
  - v. Materials or proprietary equipment for sanitary or other facilities, including any necessary backflow or back-siphonage protection. ( )
- d. Complete design criteria, as set forth in these rules. ( )
- e. The Department may require additional information which is not part of the construction drawings, including, but not limited to, head loss calculations, proprietary technical data, and copies of contracts. ( )
- 08. Notification of Material Deviations.** As set forth in Subsection 504.03, during construction or modification, the Department must be notified of any material deviation from the approved plans. The reviewing authority's prior written approval is required before any material deviation is allowed. ( )
- 09. Record Plans and Specifications Required.** ( )
  - a. Must be submitted to the Department by the design engineer as specified in Section 39-118(3), Idaho Code. ( )
  - b. Record plans and specifications, or a statement submitted in lieu of record plans and specifications, must bear the imprint of an Idaho licensed professional engineer's seal that is both signed and dated by the engineer. ( )
  - c. The Department will accept the seal and signature of an Idaho licensed professional geologist on record plans and specifications, or a statement bearing the seal and signature of an Idaho licensed professional geologist in lieu of record plans and specifications, for record plans and specifications for well construction and results of field inspection and testing, as specified in Section 510. ( )
- 10. Exception.** The Department may waive the plan and specification approval required of any facility or category of facilities when doing so will have no significant impact on public health or the environment. ( )
- 11. Department Approval On-Site During Construction.** It is the responsibility of the owner to maintain one (1) copy of the approved plans and specifications and the approval letter from the reviewing authority on-site during construction at all times. ( )
- 12. Construction.** Except as provided in Subsection 504.03.b., no construction will commence until all of the necessary approvals have been received from the Department. The owner must provide for the inspection of the construction of a PWS facility by an Idaho licensed professional engineer to the extent required to confirm material compliance with the approved plans and to produce accurate record documents as required by Subsection 504.09. ( )

**505. -- 509. (RESERVED)**

**510. SITING AND CONSTRUCTION OF WELLS.**

Written approval by the Department is required before water from any new or reconstructed well may be served to the public. Any supplier of water for a PWS served by one (1) or more wells must ensure that the following requirements are met: ( )

**01. Site Approval.** Prior to drilling, the site of a PWS well must be approved in writing by the Department. A well site evaluation report must be submitted prior to or concurrent with the PER for the well. The well site evaluation must take into account the proposed size, depth, and location of the well. The evaluation may include, but is not limited to the following types of information: ( )

- a. An evaluation of the quality of anticipated groundwater. ( )
- b. Identification of the known aquifers and the extent of each aquifer, based on the stratigraphy, sedimentation, and geologic structure beneath the proposed well site. ( )
- c. An estimate of hydrologic and geologic properties of each aquifer and confining layers. ( )
- d. Prediction of the sources of water to be extracted by the well and the drawdown of existing wells, springs, and surface water bodies that may be caused by pumping the proposed well. This prediction may be based on analytical or numerical models as determined by the Idaho Department of Water Resources permitting process. ( )
- e. Demonstration of the extent of the capture zone of the well, based on the well’s design discharge and on aquifer geology, using estimates of hydraulic conductivity and storativity. ( )

f. Description of potential sources of contamination including, but not limited to, sewers and sewage treatment/disposal facilities, highways, railroads, landfills, outcroppings of consolidated water-bearing formations, chemical facilities, waste disposal wells, and agricultural uses within five hundred (500) feet of the well site. ( )

**02. Location.** In vulnerable settings, the Department may require engineering or hydrologic analysis to determine if the required setback distance is adequate to prevent contamination. Each well must be staked by the design engineer or licensed professional geologist prior to drilling and meet the following minimum distances:

<b>Minimum Distances from a Public Water System Well</b>	
Frost free hydrant	5 feet
Property line	50 feet
Gravity wastewater line	50 feet
Any potential source of contamination	50 feet
Pressure wastewater line	100 feet
Class A Municipal Reclaimed Wastewater Pressure distribution line	50 feet
Individual home septic tank	100 feet
Individual home disposal field	100 feet
Individual home seepage pit	100 feet
Privies	100 feet
Livestock	50 feet

Minimum Distances from a Public Water System Well	
Drainfield - standard subsurface disposal module	100 feet
Absorption module - large soil absorption system	150 - 300 feet, see IDAPA 58.01.03
Canals, streams, ditches, lakes, ponds and tanks used to store non-potable substances	50 feet
Storm water facilities disposing storm water originating off the well lot	50 feet
Municipal or industrial wastewater treatment plant	500 feet
Reclamation and reuse of municipal and industrial wastewater sites	See IDAPA 58.01.17
Biosolids application site	1,000 feet

( )

**03. Construction Standards.** In addition to meeting the requirements of these rules, all wells must be constructed in accordance with IDAPA 37.03.09, “Well Construction Standards Rules,” and related rules and laws administered by the Idaho Department of Water Resources. All wells must comply with the drilling permit requirements of Section 42-235, Idaho Code. ( )

- a. Casing for steel pipe must meet the following requirements:

STEEL PIPE					
SIZE	DIAMETER (inches)		THICKNESS (inches)	WEIGHT PER FOOT (pounds)	
	External	Internal		Plain Ends (calculated)	With Threads and Couplings (nominal)
6(id)	6.625	6.065	0.280	18.97	19.18
8	8.625	7.981	0.322	28.55	29.35
10	10.750	10.020	0.365	40.48	41.85
12	12.750	12.000	0.375	49.56	51.15
14 (od)	14.000	13.250	0.375	54.57	57.00
16	16.000	15.250	0.375	62.58	
18	18.000	17.250	0.375	70.59	
20	20.000	19.250	0.500	78.60	
22	22.000	21.000	0.500	114.81	
24	24.000	23.000	0.500	125.49	
26	26.000	25.000	0.500	136.17	

STEEL PIPE					
SIZE	DIAMETER (inches)		THICKNESS (inches)	WEIGHT PER FOOT (pounds)	
	External	Internal		Plain Ends (calculated)	With Threads and Couplings (nominal)
28	28.000	27.000	0.500	146.85	
30	30.000	29.000	0.500	157.53	
32	32.000	31.000	0.500	168.21	
34	34.000	33.000	0.500	178.89	
36	36.000	35.000	0.500	189.57	

\* id = inside diameter

\* od = outside diameter

( )

**b.** The use of plastic well casing for PWS wells may be considered on a case-by-case basis. Plastic casing must meet or exceed ASTM Standard F480, current edition, and ANSI/NSF Standard 61. Plastic casing must also meet the following requirements: ( )

i. Have a minimum wall thickness equivalent to standard dimension ratio 21. However, diameters of 8 inches or greater or deep wells may require greater thickness to meet collapse strength requirements; ( )

ii. Must not be used at sites where permeation by hydrocarbons or degradation may occur; ( )

iii. Must be assembled using coupling or solvent welded joints. All coupling and solvents must meet ANSI/NSF Standard 14, ASTM F480, or similar requirements; and ( )

iv. Must not be driven. ( )

**c.** PWS wells must have no less than fifty-eight (58) feet of annular seal of not less than one and one-half (1 ½) inches thickness as measured from land surface to the bottom of the seal unless: ( )

i. It can be demonstrated to the Department’s satisfaction that there is a confining layer at lesser depth that is capable of preventing unwanted water from reaching the intake zone of the well; or ( )

ii. The best and most practical aquifer at a particular site is less than fifty-eight (58) feet deep; or; ( )

iii. The Department specifies a different annular seal depth based on local hydrologic conditions. ( )

**d.** Specifications must include allowable tolerances for plumbness and alignment in accordance with AWWA Standards, incorporated by reference into these rules at Subsection 002.01, or as otherwise approved by the Department. If the well fails to meet these requirements, it may be accepted by the Department if it does not interfere with the installation or operation of the pump or uniform placement of grout. ( )

**e.** Geological data must be collected at each pronounced change in formation and shall be recorded in the driller’s log. Supplemental data includes, but is not limited to, accurate geographical location such as latitude and longitude or GIS coordinates, and other information on accurate records of drillhole diameters and depths, assembled order of size and length of casing, screens and liners, grouting depths, formations penetrated, and water levels. ( )

- f. The owner of each well must retain all records pertaining to each well until the well has been properly abandoned. ( )
- g. Wells with intake screens must: ( )
- i. Be constructed of materials resistant to damage by chemical action of groundwater or cleaning operations. ( )
- ii. Have openings based on sieve analysis of formation, of gravel pack materials, or both. ( )
- iii. Have sufficient length and diameter to provide adequate specific capacity and aperture entrance velocity not to exceed point one (0.1) feet per second, or as otherwise approved by the Department. ( )
- iv. Be installed so that the pumping water level remains above the screen under all operating conditions, or otherwise approved by the Department. Where a bottom plate or sump is utilized, it must be of the same material as the screen, or as otherwise approved by the Department. Where a washdown assembly, tailpipe or sump is used below the screen, it may be made of a different material than the screen. ( )
- h. Permanent well casing must be surrounded by a minimum of one and one-half (1 ½) inches of grout to the depth required by Subsection 510.03.b., or by the Rules of the Idaho Department of Water Resources, whichever is greater. All casing identified in plans and specifications as temporary casing must be removed prior to well completion. ( )
- i. Neat cement grout consisting of cement that conforms to AWWA Standard A-100, and water, with not more than six (6) gallons of water per ninety-four (94) pounds of cement, must be used for one and one-half (1 ½) inch annular space. Additives may be used to increase fluidity and are subject to approval by the Department and the Idaho Department of Water Resources on a case-by-case basis. ( )
- ii. Bentonite grout must have a solids content not less than twenty-five (25) percent by weight when mixed with water and be specifically manufactured for use in sealing of well casing. Bentonite grout shall not contain weighting agents to increase solids content. Bentonite grout must not be used above the water table. All bentonite grout must be installed by positive displacement from the bottom up through a tremmie or float shoe. ( )
- iii. Where a dry annular space is to be sealed, a minimum of two (2) inches on all sides of the casing will be required to place bentonite to depths not greater than one hundred (100) feet, using #8 mesh granular bentonite. All dry pour granular bentonite must be tagged at appropriate intervals to verify placement. If a bridge occurs, a tremmie pipe must be washed or jetted through the bridge to allow for pumping of grout. Bentonite chips must be of sufficient size to accommodate proper placement for the existing subsurface conditions. ( )
- iv. Dry granular bentonite used in wells where a dry annular space is to be sealed with depths greater than one hundred (100) feet will require an annulus of at least three (3) inches on all sides of the casing, or as approved by the Department and the Idaho Department of Water Resources. If a bridge occurs, a tremmie pipe must be washed or jetted through the bridge to allow for pumping of grout. Bentonite chips must be of sufficient size to accommodate proper placement for the existing subsurface conditions. ( )
- v. All chip bentonite seals installed through water must only be used in annular spaces of at least four (4) inches on all sides of the casing. If a bridge occurs, a tremmie pipe must be washed or jetted through the bridge to allow for pumping of grout. Bentonite chips must be of sufficient size to accommodate proper placement for the existing subsurface conditions. Chip bentonite seals installed through water must be: ( )
- (1) Installed in accordance with manufacturer's specifications; or ( )
- (2) Installed by pouring chips over a one-quarter (1/4) inch mesh screen for three-eighths (3/8) inch chips to remove fines to prevent bridging at the water table; or ( )
- (3) Installed using coated pellets to retard hydration if approved by the Department and the Idaho

Department of Water Resources. ( )

vi. Concrete may be approved on a case-by-case basis by the Department and the Idaho Department of Water Resources. Upon such approval, the approved method must use a six (6) sack minus one-half (1/2) inch Portland cement concrete and must be installed by positive displacement from the bottom up through a tremmie pipe. ( )

**04. Disinfection.** All tools, bits, pipe, and other materials to be inserted in the borehole must be cleaned and disinfected in accordance with the Well Construction Standards and permitting requirements of the Idaho Department of Water Resources. This applies to new well construction and repair of existing wells. ( )

**05. Well Completion Report.** Upon completion of a well, and prior to its use as a drinking water source, the following information and data must be submitted by the PWS to the Department. The well completion report must be submitted to the Department prior to or concurrent with the submittal of the preliminary engineering report for well house construction/modification. The well completion report must bear the imprint of an Idaho licensed professional engineer's or an Idaho licensed professional geologist's seal that is both signed and dated by the engineer or geologist: ( )

- a. A copy of all well logs; ( )
- b. Results of test pumping, as specified in Subsection 510.06; ( )
- c. As constructed plans showing at least the following: ( )
  - i. Annular seal, including depth and sealant material used and method of application; ( )
  - ii. Casing perforations, results of sieve analysis used in designing screens installed in sand or gravel aquifers, gravel packs; and ( )
  - iii. Recommended pump location. ( )
- d. Other information as may be specified by the Department. ( )
- e. Sampling results for iron, manganese, corrosivity, and other secondary contaminants specified by the Department. Other monitoring requirements are specified in Subsections 510.05.e.i. through 510.05.e.iii. ( )
  - i. Community systems must submit results of analysis for total coliform, inorganic chemical contaminants, organic chemicals, and radionuclide contaminants set forth in Subsections 050.01, 050.02, 050.05, 100.01, 100.03, 100.04, 100.05, and 100.06, unless analysis is waived pursuant to Subsection 100.07. ( )
  - ii. Non-transient Non-community systems must submit results of analysis for total coliform and inorganic and organic chemical contaminants listed in Subsections 050.01, 050.02, 100.01, 100.03, 100.04, unless analysis is waived pursuant to Subsection 100.07. ( )
  - iii. Transient Non-community systems must submit results of a total coliform, nitrite, and nitrate analysis listed in Subsections 050.01, 100.01 and 100.03. ( )

**06. Test Pumping.** Upon completion of a groundwater source, test pumping must be conducted in accordance with the following procedures to meet the specified requirements: ( )

a. The well must be test pumped at the desired yield (design capacity) of the well for at least twenty-four (24) consecutive hours after the drawdown trend has stabilized, as determined by the supervising engineer or geologist. Alternatively, the well may be pumped at a rate of one hundred fifty percent (150%) of the desired yield for at least six (6) continuous hours after the drawdown trend has stabilized, as determined by the supervising engineer or geologist. The field pumping equipment must be capable of maintaining a constant rate of discharge during the test. Discharge water must be piped an adequate distance to prevent recharge of the well during the test. If the well fails the test protocol, design of the PWS must be re-evaluated and submitted to the Department for approval. ( )

**b.** Upon completion of well development, the well must be tested for sand production. Fifteen (15) minutes after the start of the test pumping (at or above the design production rate), the sand content of a new well may not be more than five (5) parts per million. Sand production must be measured by a centrifugal sand sampler or other means acceptable to the Department. If sand production exceeds five (5) ppm, the well must be screened gravel packed, or re-developed. ( )

**c.** The following data must be provided: ( )

**i.** Static water level and stabilized drawdown; ( )

**ii.** Well yield in gpm and duration of the pump test, including a discussion of any discrepancy between the desired yield and the yield observed during the test; ( )

**iii.** Water level in the well recorded at regular intervals during pumping; ( )

**iv.** Profile of water level recovery from the pumping level projected to the original static water level. ( )

**v.** Depth at which the test pump was positioned in the well; ( )

**vi.** Test pump capacity and head characteristics; ( )

**vii.** Sand production data. ( )

**viii.** Results of analysis based on the drawdown and recovery test pertaining to aquifer properties, long term yield, and boundary conditions affecting drawdown. ( )

**d.** The Department may allow the use of other pump test protocols that are generally accepted by engineering firms with specialized experience in well construction, by the well drilling industry, or as described in national standards (such as ANSI/AWWA A100), as long as the minimum data specified in Subsection 510.06.c. are provided. The Department welcomes more extensive data about the well, such as step-drawdown evaluations used in determining well capacity for test pumping purposes, zone of influence calculations, and any other information that may be of use in source protection activities or in routine PWS operations. ( )

**e.** Where aquifer yield, sustainability, or water quality are questionable, the Department, at its discretion, may require additional site-specific investigations that include test well construction, long-term pumping tests, or other means to demonstrate that the aquifer yield is sufficient to meet the long-term water requirements of the project. ( )

**07. Conversion of Non-Public Water System Wells for Public Water System Use.** Any existing well constructed for use other than as a PWS source may be considered for use as a PWS source on a case-by-case basis. The owner of such a well must demonstrate to the Department's satisfaction that the well site conforms to the requirements of Subsections 510.01, 510.02, and Section 512, the well is constructed in a manner that is protective of public health, and that both the quantity and quality of water produced by the well meet PWS standards set forth in these rules. ( )

**08. Monitoring Wells.** If monitoring (observation) wells are used and are intended to remain in service after completion of the water supply well, the observation wells must be constructed in accordance with the requirements for permanent wells and be protected at the upper terminal to preclude entrance of foreign materials in accordance with the "Well Construction Standard Rules," IDAPA 37.03.09. ( )

**09. Well Abandonment.** Well decommissioning (abandonment) must be performed in accordance with Department of Water Resources requirements set forth in IDAPA 37.03.09, "Well Construction Standard Rules. ( )

**511. WELL PUMPS, DISCHARGE PIPING, AND APPURTENANCES.**



**01. Sample Tap Required.** A sample tap suitable for collecting bacteriological samples must be provided as required by Subsection 501.09 on the discharge piping from every well at a point where pressure is maintained but prior to any treatment. In addition, threaded hose bib taps may also be used for collecting samples, other than bacteriological samples, if equipped with an appropriate backflow prevention device as may be necessary to protect the PWS from contamination. ( )

**02. Discharge Piping.** The discharge line must be equipped with the necessary valves and appurtenances to allow a well to be pumped to waste at the scour velocity of the well column via an approved air gap of no less than two (2) pipe diameters, unless otherwise approved by the Department, through an approved non-corrodible screen or equivalent at a location prior to the first service connection, and must meet the following requirements: ( )

**a.** Be designed to minimize friction loss. ( )

**b.** Have control valves and appurtenances located above the pump house floor when an above-ground discharge is provided. ( )

**c.** Be protected against contamination. ( )

**d.** Vertical turbine pumps must be equipped with an air release-vacuum relief valve, or equivalent, located upstream from the check valve, with exhaust/relief piping terminating in a down-turned position at least eighteen (18) inches above the floor and covered with a twenty-four (24) mesh corrosion resistant screen. ( )

**e.** Have all exposed piping, valves and appurtenances protected against physical damage and freezing. ( )

**f.** Be properly anchored to prevent movement, and protected against surge or water hammer. ( )

**g.** The pump to waste discharge piping must be valved to ensure that other PWS components that may be negatively affected by the quality of the discharged water are not pressurized by the water that is being pumped to waste. ( )

**h.** Where two (2) or more wells are connected to a common well house, the discharge piping must be designed to ensure that each well can be pumped to waste independently without affecting the ability of the other well or wells to pressurize the PWS. ( )

**03. Pressure Gauge Required.** A pressure gauge must be provided on discharge piping. ( )

**04. Flow Meter and Check Valve.** Unless otherwise approved by the Department, an instantaneous and totalizing flow meter equipped with nonvolatile memory must be installed on the discharge line of each well in accordance with the manufacturer's specifications. Meters installed on PWSs with variable frequency drives must be capable of accurately reading the full range of flow rates. An accessible check valve, which is not located in the pump column, must be installed in the discharge line of each well between the pump and the shut-off valve. Additional check valves must be located in the pump column as necessary. ( )

**05. Well Vent.** All wells must be vented, unless it can be demonstrated that the drawdown under maximum pumping conditions will not exceed ten (10) feet. ( )

**a.** For wells not in a pump house, the open end of the vent must be screened with a twenty-four (24) mesh or similar non-corrodible screen and terminated downward at least eighteen (18) inches above the final ground surface. ( )

**b.** If the well is in a pump house, the open end of the vent must be screened with a twenty-four (24) mesh or similar non-corrodible screen and must terminate downward at least twelve (12) inches above the pump house floor. ( )

**c.** Artesian wells equipped with pumps may need venting or an air valve as determined by the Department. ( )

**06. Casings and Sanitary Well Caps.** The following requirements apply to well casings and sanitary caps: ( )

**a.** Casings must extend at least eighteen (18) inches above the final ground surface. If the well is located within a pump house, casings must extend least twelve (12) inches above the pump house floor. For a well located in an area subject to flooding, the Department may require an extension of the casing above the one hundred (100) year or highest known flood level, whichever is higher. ( )

**b.** Wells must be cased and provided with an approved cap in such a manner that contamination cannot enter the well. ( )

**c.** For community PWSs, a permanent means for measuring water level within the casing must be provided. For other PWSs, a temporary means to measure water levels may be made available. All equipment required for conducting water level measurements must be purchased and made available to the PWS operator at the time the well is put into service. Where pneumatic or electronic water level measuring equipment is used, it must be made using corrosion resistant materials attached firmly to the drop pipe or pump column and in such a manner as to prevent entrance of foreign materials. ( )

**07. Well Houses.** For regulatory purposes, a well house is considered a pump house as defined in Section 003. Well houses must meet the requirements for pump houses as set forth in Section 541. All above ground discharge piping must be contained in a well house or otherwise protected from freezing. ( )

**08. Pitless Adapters and Units.** ( )

**a.** Marked approved by the National Sanitation Foundation or Pitless Adapter Division of the Water Systems Council. ( )

**b.** Designed, constructed and installed to be watertight including the cap, cover, casing extension and other attachments. ( )

**c.** Field tested for leaks before being put into service. The procedure outlined in “Manual of Individual and Non-Public Water Supply Systems,” referenced in Subsection 002.02, or other procedure approved by the Department Must be followed. ( )

**d.** If the discharge line is two (2) inches or smaller, be provided with a swing joint outside the pitless adapter unit to reduce strain, deformation, and possible leakage of the pitless seal caused by settling soils in the trench. The orientation of swing joints must be such that any settling that occurs will tighten the threads. The hole in the casing must be cut with a saw rather than a torch with an opening large enough to allow seating of gaskets. ( )

**e.** Provided with a contamination-proof entrance connection for electrical cable. ( )

**f.** Pitless adapters: ( )

**i.** Threaded adapters must be installed by drilling a hole not more than one quarter (1/4) inch larger than the outer diameter of the pitless shank. No torch-cut holes will be accepted. The orientation of swing joints must be such that any settling that occurs will tighten the threads. ( )

**ii.** The only field welding permitted will be that needed to connect a pitless adapter to the casing. ( )

**g.** Pitless units must be: ( )

**i.** Shop-fabricated from the point of connection with the well casing to the unit cap or cover. ( )

- ii. Constructed of materials and weight at least equivalent to and compatible with the well casing. ( )
- iii. Threaded or welded to the well casing. Threaded units must be installed by drilling a hole not more than one quarter (¼) inch larger than the outer diameter of the pitless shank. No torch-cut holes will be accepted. If the connection to the casing is by field weld, the shop-assembled unit must be designed specifically for field welding to the casing. ( )
- iv. Terminate at least eighteen (18) inches above final ground elevation. For a well located in an area subject to flooding, the Department may require an extension of the casing above the one hundred (100) year or highest known flood level, whichever is higher. ( )
- v. Provided with access to disinfect the well. ( )
- vi. Field connected to the lateral discharge from the pitless unit of threaded, flanged, or mechanical joint connection. ( )
- h. After installation of a pitless adapter or unit, the disturbed well seal must be repaired or replaced to meet original seal specifications unless otherwise approved by the Department. The engineering proposal must ensure that the material surrounding the final seal is moisture controlled and compacted such that it equals or exceeds the characteristics of the native soil prior to being disturbed. ( )

**09. Wells Not Allowed in Pits.** Wells must not be located in pits. Exceptions to this requirement will be granted by the Department if the well was constructed prior to November 5, 1964, and the installation is constructed or reconstructed in accordance with the requirements of the Department to provide watertight construction of pit walls and floors, floor drains and acceptable pit covers. ( )

**10. Discharge Pumps.** Discharge pumps are subject to the following requirements: ( )

- a. Line shaft pumps must: ( )
  - i. Have the casing firmly connected to the pump structure or have the casing inserted into a recess extending at least one-half (1/2) inch into the pump base. ( )
  - ii. Have the pump foundation and base designed to prevent water from coming into contact with the joint. ( )
  - iii. Use lubricants that meet ANSI/NSF Standard 61. ( )
- b. Submersible pumps: ( )
  - i. The top of the casing must be effectively sealed against the entrance of water under all conditions of vibration or movement of conductors or cables. ( )
  - ii. The electrical cable must be firmly attached to the drop pipe at twenty-one (21) foot intervals or less, or at each coupling or joint. ( )

**512. WELL LOT.**

A well lot must be provided for wells constructed after November 1, 1977. The well lot must be owned in fee simple by the supplier of water or controlled by lease or easement with a term of not less than the useful life of the well and be large enough to provide a minimum distance of fifty (50) feet between the well and the nearest property line. ( )

**01. Use of Chemicals.** No pesticides, herbicides, or fertilizers may be applied to a well lot without prior approval from the Department. ( )

**02. Storage of Hazardous Materials.** No pesticides, herbicides, fertilizers, portable containers of petroleum products, or other materials known to be toxic or hazardous may be stored on a well lot, except that: ( )

**a.** An internal combustion engine to drive either a generator for emergency standby power or a pump to provide fire flows, and an associated fuel tank, may be placed on the well lot. ( )

**b.** A propane or natural gas powered generator is preferable to reduce risk of fuel spillage. ( )

**c.** If a diesel or gasoline-fueled engine is used, the fuel tank and connecting piping must be approved by the Underwriter's Laboratory, Inc., double-walled, meet the requirements of the local fire jurisdiction, and include both spill prevention and overfill protection features. The tank must be above ground and may be contained within the structural base of the generator unit. A spill containment structure must surround all fuel tanks and be sized to contain at least one hundred ten percent (110%) of the fuel tank volume. The Department may require additional containment capacity in settings where accumulation of snow, ice, or rain water may be expected to diminish the usable capacity of the structure. A licensed PWS operator must be present during filling of the tank following a period of usage, or during periodic extraction and replacement of outdated fuel. ( )

**d.** If the internal combustion engine is located within the pump house, the floor of the pump house must be constructed so as to contain all petroleum drips and spills so that they will not be able to reach the floor drain(s). Engine exhaust must be directly discharged outside the pump house. ( )

**03. Parking Lots and Vehicle Storage.** Public parking or vehicle storage is not allowed on the well lot, except that operation/maintenance vehicles may be temporarily parked on the well lot during the normal course of business. ( )

**513. NUMBER OF GROUNDWATER SOURCES REQUIRED – EXISTING SYSTEMS.**

Existing community PWSs served by groundwater and intending to serve more than twenty-five (25) connections or equivalent dwelling units are subject to the following requirements for the number of groundwater sources required. ( )

**01. Existing System with All Sources Constructed Prior to July 1, 1985.** A community PWS served by groundwater and with all existing sources constructed prior to July 1, 1985 will be required to comply with Subsection 501.17 upon substantially modifying the PWS after July 2002. ( )

**02. Existing System with Any Sources Constructed After July 1, 1985.** A community PWS served by groundwater with any sources constructed after July 1, 1985 is required to comply with Subsection 501.17 when a material modification is made to the PWS after May 8, 2009, which triggers the PWS to be classified as substantially modified. ( )

**514. SPRING SOURCES.**

Written approval by the Department is required before water from any new or reconstructed spring source may be served to the public. For new spring sources, the Department will require a site evaluation report containing applicable required information listed in Subsection 510.01. This information includes, but is not limited to, the following: an evaluation of the potability and quality of anticipated spring water; an estimate of hydrologic and geologic properties of the aquifer; and a description of potential sources of contamination within five hundred (500) feet of the spring. Any supplier of water for a PWS served by one (1) or more springs must ensure that the following requirements are met: ( )

**01. Protection of the Spring.** Springs must be housed in a permanent structure and protected from contamination including the entry of surface water, animals, and dust. ( )

**02. Spring Box or Combined Spring Box/Finished Water Storage Design.** To facilitate efficient design and review of spring box or combined spring box/finished water storage designs, these site-specific designs must be coordinated in advance with the Department. Specific issues to be addressed are: ( )

**a.** The inlet must be screened as determined by the Department and located above the floor of the ( )

collection chamber. ( )

**b.** Unless otherwise approved by the Department, the spring box or combined spring box/finished water storage tank must meet the applicable design requirements of Section 544 - Facility and Design Standards: General Design of Finished Water Storage. ( )

**03. Sample Tap.** A sample tap suitable for collecting bacteriological samples must be provided as required by Subsection 501.09. In addition, threaded hose bib taps may also be used for collecting samples, other than bacteriological samples, if equipped with an appropriate backflow prevention device as may be necessary to protect the PWS from contamination. ( )

**04. Flow Measurement.** A flow meter or other flow measuring device must be provided. ( )

**05. Protected Area.** The entire area within a one hundred (100) foot radius of the spring box and collection piping must be owned by the supplier of water or controlled by a long term lease, secured to prevent trespass or livestock and void of buildings, dwellings and any potential sources of contamination. Surface water must be diverted from this area. ( )

**515. SURFACE SOURCES AND GROUNDWATER SOURCES UNDER THE DIRECT INFLUENCE OF SURFACE WATER.**

Written approval by the Department is required before water from any new surface source or groundwater source that is under the direct influence of surface water may be served to the public. Infiltration collection lines or galleries are considered groundwater under the direct influence of surface water unless demonstrated otherwise. Infiltration galleries that are not directly influenced by surface water must meet the requirements of Section 514. The area around infiltration lines must be under the control of the water purveyor for a distance acceptable to the Department. ( )

**01. Intake Structures.** Design of intake structures must provide for: ( )

**a.** Withdrawal of water from more than one (1) level if quality varies with depth. ( )

**b.** Separate facilities for release of less desirable water held in storage. ( )

**c.** Where frazil ice may be a problem, holding the velocity of flow into the intake structure to a minimum, generally not to exceed point five (0.5) feet per second. Frazil ice is made up of randomly distributed ice crystals that are formed in flowing water that has cooled below thirty-two (32) degrees Fahrenheit and is prevented from forming into ice sheets by the movement of the water. ( )

**d.** Inspection manholes every one thousand (1000) feet for pipe sizes large enough to permit visual inspection. ( )

**e.** Cleaning the intake line as needed. ( )

**f.** Adequate protection against rupture by dragging anchors, ice, or other hazards. ( )

**g.** Ports located above the bottom of the stream, lake or impoundment, but at sufficient depth to be kept submerged at low water levels. ( )

**h.** Where shore wells are not provided, a diversion device capable of keeping large quantities of fish or debris from entering an intake structure. ( )

**i.** If necessary, provisions must be made in the intake structure to control the influx of nuisance aquatic organisms. Specific control methods must be approved by the Department. ( )

**j.** When buried surface water collectors are used, sufficient intake opening area must be provided to minimize inlet head loss. Particular attention must be given to the selection of backfill material in relation to the collector pipe slot size and gradation of the native material over the collector system. ( )

- 02. Raw Water Pumps.** Raw water pumping wells must: ( )
- a. Have motors and electrical controls located above grade (except for submersible pumps) and protected from flooding as required by the Department. ( )
  - b. Be accessible and designed to prevent flotation. ( )
  - c. Be equipped with removable or traveling screens before the pump suction well. ( )
  - d. Provide for introduction of chlorine or other chemicals in the raw water transmission main if necessary for quality control. ( )
  - e. Where practical, have intake valves and provisions for back flushing or cleaning by a mechanical device and testing for leaks. ( )
  - f. Have provisions for withstanding surges where necessary. ( )
- 03. Off-stream Raw Water Storage.** An off-stream raw water storage reservoir is a facility into which water is pumped during periods of good quality and high stream flow for future release to treatment facilities. These off-stream raw water storage reservoirs must be constructed to assure that: ( )
- a. Water quality is protected by controlling runoff into the reservoir. ( )
  - b. Dikes are structurally sound and protected against wave action and erosion. ( )
  - c. Intake structures and devices meet requirements of Subsection 515.01. ( )
  - d. Point of influent flow is separated from the point of withdrawal. ( )
  - e. Separate pipes are provided for influent to and effluent from the reservoir. ( )
- 04. Reservoirs.** Impoundments and reservoirs must provide, where applicable: ( )
- a. Removal of brush and trees to high water elevation. ( )
  - b. Protection from floods during construction. ( )
  - c. Wells which will be inundated by the reservoir must be abandoned in accordance with requirements of the Idaho Department of Water Resources. See Rules of the Idaho Department of Water Resources referenced in Subsection 002.02. ( )

**516. -- 517. (RESERVED)**

**518. ADDITIONAL DESIGN CRITERIA FOR SURFACE SOURCES.**

Performance criteria for surface water treatment facilities are set forth in Sections 300, 301, and 310. Surface water treatment systems must comply with applicable general design requirements in Section 503. In addition, the following design requirements apply specifically to surface water treatment facilities: ( )

**01. Engineering Design Requirements.** The PWS must ensure that filtration and disinfection facilities for surface water or groundwater under the direct influence of surface water are designed, constructed and operated in accordance with all applicable engineering practices designated by the Department. The design of the water treatment plant must consider the worst raw water quality conditions that are likely to occur during the life of the facility. ( )

**02. Removal of Pathogens.** Filtration facilities (excluding disinfection) must be designed, constructed and operated to achieve at least two (2) log removal of *Giardia lamblia* cysts, two (2) log removal of *Cryptosporidium* oocysts, and one (1) log removal of viruses, except as allowed under Subsection 518.09.b. ( )

**03. Disinfection.** Disinfection facilities must be designed, constructed and operated so as to achieve at least point five zero (0.50) log inactivation of *Giardia lamblia* cysts; and ( )

**a.** Two (2) log inactivation of viruses if using conventional and slow sand filtration technology; or ( )

**b.** Three (3) log inactivation of viruses if using direct and diatomaceous earth filtration technology; or ( )

**c.** Four (4) log inactivation of viruses if using alternate filtration technology. ( )

**d.** Four (4) log inactivation of viruses if filtration treatment is not used. ( )

**04. Enhanced Disinfection.** Higher levels of disinfection than specified under Subsection 518.03 may be required by the Department to provide adequate protection against *Giardia lamblia* and viruses. ( )

**05. Filter to Waste.** For plants constructed after December 31, 1992, each filter unit must be capable of filter to waste. For plants constructed prior to December 31, 1992, each filter unit must be capable of filter to waste unless the PWS demonstrates through continuous turbidity monitoring or other means acceptable to the Department that water quality is not adversely affected following filter backwashing, cleaning or media replacement. ( )

**06. Continuous Turbidity Monitoring.** For conventional, direct, membrane, and diatomaceous earth filtration technology, equipment must be provided to continuously measure the turbidity of each filter unit. ( )

**07. Continuous Monitoring of Disinfectant.** Equipment must be provided and operated for continuous measurement of disinfectant residual prior to entry to the distribution system, unless the PWS serves fewer than three thousand three hundred (3,300) people. ( )

**08. Continuous Operation Required.** Diatomaceous earth filtration facilities must include an alternate power source with automatic startup and alarm, or be designed in a manner to ensure continuous operation. ( )

**09. Acceptable Technology.** The purveyor must select a filtration technology acceptable to the Department. ( )

**a.** Conventional, direct, slow sand, diatomaceous earth, and membrane filtration technologies are generally acceptable to the Department on a case-by-case basis. ( )

**b.** Alternate filtration technologies may be acceptable if the purveyor demonstrates all of the following to the satisfaction of the Department: ( )

**i.** That the filtration technology: ( )

(1) Is certified and listed by the National Sanitation Foundation (NSF) under Standard 53, Drinking Water Treatment Units - Health Effects, as achieving the NSF criteria for cyst reduction; or ( )

(2) Removes at least ninety-nine percent (99%) (two (2) logs) of *Cryptosporidium* oocysts or surrogate particles and removes or inactivates at least ninety-nine percent (99%) (two (2) logs) of *Giardia lamblia* cysts or *Giardia lamblia* cyst surrogate particles in a challenge study acceptable to the Department. ( )

**ii.** Based on field studies or other means acceptable to the Department, it must be demonstrated that the filtration technology has the following capabilities: ( )

(1) In combination with disinfection treatment, consistently achieves at least ninety-nine percent (99%) (two (2) logs) removal of *Cryptosporidium* oocysts or surrogate particles and at least ninety-nine and nine tenths percent (99.9%) (three (3) logs) removal or inactivation of *Giardia lamblia* cysts and ninety-nine and ninety-nine

hundredths percent (99.99%) (four (4) logs) removal or inactivation of viruses; and ( )

(2) Meets the turbidity performance requirements of 40 CFR 141.73 (b). ( )

**10. Pilot Studies.** The PWS must conduct pilot studies in accordance with the following requirements and in accordance with Subsection 501.19 for all proposed filtration facilities and structural modifications to existing filtration facilities, unless the Department modifies the requirements in writing: ( )

**a.** The PWS must obtain the Department's approval of the pilot study plan before the pilot filter is constructed and before the pilot study is undertaken. ( )

**b.** The design and operation of the pilot study must be overseen by an Idaho licensed professional engineer. ( )

**c.** The PWS's pilot study plan must identify at a minimum: ( )

i. The objectives of the pilot study; ( )

ii. Pilot filter design; ( )

iii. Water quality and operational parameters to monitor; ( )

iv. Amount of data to collect; and ( )

v. Qualifications of the pilot plant operator. ( )

**d.** The PWS must ensure that the pilot study is: ( )

i. Conducted to simulate conditions of the proposed full-scale design; ( )

ii. Conducted for at least twelve (12) consecutive months or for a shorter period upon approval by the Department; ( )

iii. Conducted to evaluate the reliability of the treatment system to achieve applicable water quality treatment criteria specified for filtration systems in 40 CFR 141.72 and 40 CFR 141.73; and ( )

iv. Designed and operated in accordance with good engineering practices documented in references acceptable to the Department. ( )

**11. Redundant Disinfection.** Surface water systems constructed after July 1, 1985, are required to install redundant disinfection components or maintain a backup unit on site as required to maintain constant application of disinfectant whenever water is being delivered to the distribution system. ( )

**519. SURFACE WATER TREATMENT; MICROSCREENING.**

A microscreen may be used to reduce nuisance organisms and organic loadings. It may not be used in place of filtration or coagulation in the preparation of water for filtration. ( )

**01. Design Considerations.** The following must be taken into account during design: ( )

**a.** Nature of the suspended matter to be removed. ( )

**b.** Corrosiveness of the water. ( )

**c.** Effect of chlorination, when required as pre-treatment. ( )

**d.** Duplication of units for continuous operation during equipment maintenance. ( )



- e. Automated backflushing operation when used in conjunction with microfiltration treatment. ( )
- 02. **Design Requirements.** Design must provide the following: ( )
  - a. A durable, corrosion-resistant screen. ( )
  - b. A by-pass arrangement. ( )
  - c. Protection against back-siphonage when potable water is used for washing. ( )
  - d. Proper disposal of water used to wash the microscreen. ( )

**520. SURFACE WATER TREATMENT: CLARIFICATION PROCESSES.**

Treatment facilities designed to include clarification for processing surface water must meet the following requirements: ( )

**01. Two Units Required.** A minimum of two (2) units each must be provided for flocculation, sedimentation, and solids removal such that plant design capacity can be maintained with any component out of service for maintenance or repairs. Drains and pumps must be sized to allow dewatering in a reasonable period of time. ( )

**02. Parallel or Serial Operation.** The units must be capable of being operated either in series or parallel where softening is performed. ( )

**03. Manual Start-Up.** The units must be started manually following shutdown. ( )

**04. Pre-Treatment.** Waters exhibiting high turbidity may require pretreatment, usually sedimentation with or without the addition of coagulation chemicals. When presedimentation is provided, the following requirements must be met: ( )

a. Incoming water must be dispersed across the full width of the line of travel as quickly as possible. Short circuiting must be prevented. ( )

b. Provisions for bypassing pre-sedimentation basins must be included. ( )

c. The need for redundant pretreatment components must be evaluated according to the type and necessity of the pretreatment. ( )

**05. Rapid Mix.** Unless otherwise approved by the Department, a rapid mix device or chamber is required prior to flocculation, clarification, sedimentation, and settler units. The need for redundant rapid mix components must be evaluated. Rapid mix is the rapid dispersion of chemicals throughout the water to be treated, usually by violent agitation. The engineer must submit the design basis for the velocity gradient (G value) selected, considering the chemicals to be added and water temperature, color and other related water quality parameters. Basins or mixing chambers must be equipped with devices capable of providing adequate mixing for all treatment flow rates. ( )

**06. Flocculation.** Flocculation is the gathering together of fine particles in water by gentle mixing after the addition of coagulant chemicals to form larger particles and must include: ( )

a. Basin inlet and outlet design must minimize short-circuiting and destruction of floc. A drain, pumps, or a combination of both drain and pumps must be provided to accomplish dewatering and sludge removal. ( )

b. The flow-through velocity must not be less than one-half (0.5) nor greater than one and one-half (1.5) feet per minute with a detention time for floc formation of at least thirty (30) minutes unless otherwise approved by the Department. ( )

- c. Agitators must be driven by variable speed drives. ( )
- d. Flocculation and sedimentation basins must be as close together as possible. The velocity of flocculated water through pipes or conduits to settling basins must be not less than one-half (0.5) nor greater than one and one-half (1.5) feet per second. Allowances must be made to minimize turbulence at bends and changes in direction. ( )
- 07. Small Systems May Use Baffling.** Baffling may be used to provide for flocculation in small treatment plants upon approval by the Department. ( )
- 08. Sedimentation Units.** The following criteria apply to conventional sedimentation units: ( )
- a. A minimum of two (2) hours of settling time must be provided following flocculation unless adequate settling in less time can be demonstrated. ( )
- b. Inlets must be designed to distribute the water equally and at uniform velocities. ( )
- c. Outlet weirs or submerged orifices must maintain velocities suitable for settling in the basin and minimize short-circuiting. Outlet weirs must be designed so that the rate of flow over the outlet weirs or through the submerged orifices will not exceed twenty-thousand (20,000) gallons per day per foot of the outlet launder. The entrance velocity through the submerged orifices must not exceed one-half (0.5) feet per second. ( )
- d. The velocity through settling basins must not exceed one-half (0.5) feet per minute. The basins must be designed to minimize short-circuiting. Fixed or adjustable baffles must be provided as necessary to achieve the maximum potential for clarification. ( )
- e. When an overflow weir or pipe is provided the overflow must discharge by gravity with a free fall at a location where the discharge will be noted. ( )
- f. Adequate sludge collection equipment that ensures proper basin coverage must be provided and basins must be provided with a means for dewatering. ( )
- g. Flushing lines or hydrants must be provided and must be equipped with backflow prevention devices acceptable under Section 543. ( )
- h. Sludge removal design must provide that sludge pipes are not less than three (3) inches in diameter and arranged so as to facilitate cleaning. Entrance to sludge withdrawal piping must be designed to prevent clogging. Provision must be made for the operator to observe and sample sludge being withdrawn from the unit. ( )
- i. Sludge must be disposed of in accordance with applicable regulations, as set forth in Section 540. ( )
- 09. Solids Contact Clarifiers.** Solids contact clarifiers are generally acceptable for combined softening and clarification where water characteristics, especially temperature, do not fluctuate rapidly, flow rates are uniform and operation is continuous. A minimum of two (2) units are required for surface water treatment as required in Subsection 520.01. ( )
- a. Chemicals must be applied at such points and by such means as to ensure satisfactory mixing of the chemicals with the water. ( )
- b. Unless otherwise approved by the Department, a rapid mix device or chamber ahead of the solids contact clarifier is required to assure proper mixing of the chemicals applied. Mixing devices employed must be constructed so as to provide good mixing of the raw water with previously formed sludge particles and prevent deposition of solids in the mixing zone. ( )
- c. Flocculation equipment must be adjustable as to speed, pitch, or a combination of speed and pitch

and must provide for coagulation in a separate chamber or baffled zone within the unit. ( )

**d.** Sludge removal design must provide that sludge pipes are not less than three (3) inches in diameter and arranged so as to facilitate cleaning. Entrance to sludge withdrawal piping must be designed to prevent clogging. Provision must be made for the operator to observe and sample sludge being withdrawn from the unit. ( )

**e.** Blow-off outlets and drains must terminate and discharge at places acceptable to the Department in regard to control of potential cross connections. Cross connection control must be included for the potable water lines used to backflush sludge lines. ( )

**f.** The detention time must be established on the basis of the raw water characteristics and other local conditions that affect the operation of the unit. The Department may request data to support decisions made with respect to detention times. ( )

**g.** Controls for sludge withdrawal which minimize water losses must be provided. ( )

**h.** Unless otherwise approved by the Department, weirs must be adjustable and at least equivalent in length to the perimeter of the tank. Weir loading must not exceed ten (10) gallons per minute per foot of weir length for units used as clarifiers or twenty (20) gallons per minute per foot of weir length for units used for softening. Where orifices are used, the loading rates per foot of launder rates must be equivalent to weir loadings. Either must produce uniform rising rates over the entire area of the tank. ( )

**i.** Upflow rates must not exceed one (1) gallon per minute per square foot of area at the sludge separation line for units used as clarifiers or one and three-quarters (1.75) gallons per minute per foot of area at the slurry separation line for units used as softeners. The Department may consider higher rates if supporting data is provided. ( )

**10. Settler Units.** Settler units consisting of variously shaped tubes or plates installed in multiple layers and at an angle to the flow may be used for sedimentation following flocculation. ( )

**a.** Inlets and outlets must be designed to maintain velocities suitable for settling in the basin and to minimize short-circuiting. Plate units must be designed to minimize unequal distribution across the units. ( )

**b.** Drain piping from the settler units must be sized to facilitate a quick flush of the settler units and to prevent flooding other portions of the plant. ( )

**c.** Although most units will be located within a plant, outdoor installations must provide sufficient freeboard above the top of settlers to prevent freezing in the units. ( )

**d.** Water must be applied to tube settlers at a maximum rate of two (2) gallons per minute per square foot of cross-sectional area for tube settlers, unless higher rates are justified through pilot plant or in-plant demonstration studies in accordance with Subsection 501.19. ( )

**e.** Water must be applied to plate settlers at a maximum plate loading rate of one-half (0.5) gallons per minute per square foot, based on eighty (80) percent of the projected horizontal plate area. ( )

**f.** Flushing lines must be provided to facilitate maintenance and must be properly protected against backflow or back siphonage. ( )

**11. High Rate Clarification.** High rate clarification processes may be approved upon demonstrating satisfactory performance under on-site pilot in accordance with Subsection 501.19 or documentation of full scale plant operation with similar raw water quality conditions. Reductions in detention times or increases in weir loading rates must be justified. Examples of such processes include dissolved air flotation, ballasted flocculation, contact flocculation/clarification, and helical upflow. ( )

**521. SURFACE WATER TREATMENT: RAPID RATE GRAVITY FILTERS.**

**01. Pretreatment.** The use of rapid rate gravity filters requires pretreatment in the form of coagulation, flocculation, and sedimentation. ( )

**02. Rate of Filtration.** The filter rate must be proposed and justified by the design engineer in the Department approved PER. ( )

**03. Number of Units.** A minimum of two (2) units for redundancy must be provided for filtration such that plant design capacity can be maintained with any component out of service for maintenance or repairs. Where declining rate filtration is provided, the variable aspect of filtration rates, and the number of filters must be considered when determining the design capacity for the filters. ( )

**04. Structure and Hydraulics.** The filter structure must be designed to provide for: ( )

- a. There may be no protrusion of the vertical filter walls into the filter media. ( )
- b. Cover by superstructure with sufficient headroom to permit normal inspection and operation. ( )
- c. Minimum depth of filter box of eight and one-half (8.5) feet. ( )
- d. Minimum water depth over the surface of the filter media of three (3) feet. ( )
- e. Trapped effluent to prevent backflow of air to the bottom of the filters. ( )
- f. Prevention of floor drainage to the filter with a minimum four (4) inch curb around the filters. ( )
- g. Prevention of flooding by providing overflow. ( )
- h. Maximum velocity of treated water entering the filters of two (2) feet per second. ( )
- i. Cleanouts and straight alignment for influent pipes or conduits where solids loading is heavy, or following lime-soda softening. ( )
- j. Washwater drain capacity to carry maximum flow. ( )
- k. Walkways around filters to be not less than twenty-four (24) inches wide and equipped with safety handrails or walls. ( )
- l. Construction so as to prevent cross connections and common walls between potable water and non-potable fluids. ( )

**05. Wash Water Troughs.** Washwater troughs must be constructed to have: ( )

- a. The bottom elevation above the maximum level of expanded media during washing. ( )
- b. A two (2) inch freeboard at the maximum rate of wash. ( )
- c. The top edge level and all at the same elevation. ( )
- d. Spacing so that each trough serves the same number of square feet of filter area. ( )
- e. Maximum horizontal travel of suspended particles to reach the trough not to exceed three (3) feet. ( )

**06. Filter Material.** The media must be clean silica sand or other natural or synthetic media free from detrimental chemical or bacterial contaminants, approved by the Department, and having the following

- characteristics: ( )
- a. A total depth of not less than twenty-four (24) inches and generally not more than thirty (30) inches. ( )
  - b. An effective size range of the smallest material no greater than forty-five hundredths (0.45) of a millimeter to fifty-five hundredths (0.55) of a millimeter. ( )
  - c. A uniformity coefficient of the smallest material not greater than one and sixty-five hundredths (1.65). ( )
  - d. A minimum of twelve (12) inches of media with an effective size range no greater than forty-five hundredths (0.45) of a millimeter to fifty-five hundredths (0.55) of a millimeter and a specific gravity greater than other filtering materials within the filter. ( )
  - e. Types of filter media are as follows: ( )
    - i. Clean, crushed anthracite or a combination of anthracite and other media may be considered on the basis of experimental data specific to the project. The anthracite must have the following characteristics: ( )
      - (1) Effective size of forty-five hundredths (0.45) of a millimeter to fifty-five hundredths (0.55) of a millimeter with uniformity coefficient not greater than sixty-five hundredths (1.65) when used alone. ( )
      - (2) Effective size of eight tenths (0.8) of a millimeter to one and two-tenths (1.2) millimeters with a uniformity coefficient not greater than one and eighty-five hundredths (1.85) when used as a cap. ( )
      - (3) Effective size for anthracite used as a single media on potable groundwater for iron and manganese removal only must be a maximum of eight tenths (0.8) of a millimeter (effective sizes greater than this may be approved based upon onsite pilot plant studies or other demonstration acceptable to the Department). See Subsection 501.19 for general information on conducting pilot studies. ( )
    - ii. Sand media must have the following characteristics: ( )
      - (1) Effective size of forty-five hundredths (0.45) of a millimeter to fifty-five hundredths (0.55) of a millimeter. ( )
      - (2) Uniformity coefficient of not greater than one and sixty-five hundredths (1.65). ( )
      - (3) Larger size sand media may be allowed by the Department where full-scale tests have demonstrated that treatment goals can be met under all conditions. ( )
    - iii. Granular activated carbon (GAC) as a single media may be considered for filtration only after pilot or full-scale testing and with prior approval of the Department in accordance with Subsection 501.19. The design must include the following: ( )
      - (1) The media must meet the basic specifications for filter media as given in Subsections 521.06.a. through d., except that larger size media may be allowed where full scale tests have demonstrated that treatment goals can be met under all conditions. ( )
      - (2) There must be a means for periodic treatment of filter material for control of bacterial and other growth. ( )
      - (3) Provisions must be made for frequent replacement or regeneration. ( )
    - iv. Other media will be considered based on experimental data and operating experience. ( )
    - v. A three (3) inch layer of torpedo sand must be used as a supporting media for filter sand where

supporting gravel is used, and must have an effective size of eight-tenths (0.8) millimeters to two (2.0) millimeters, and a uniformity coefficient not greater than one and seven-tenths (1.7). ( )

vi. Gravel, when used as the supporting media, must consist of cleaned and washed, hard, durable, rounded silica particles and must not include flat or elongated particles. The coarsest gravel must be two and one-half (2.5) inches in size when the gravel rests directly on a lateral system and must extend above the top of the perforated laterals. Not less than four (4) layers of gravel must be provided in accordance with the size and depth distribution specified in the table below. Reduction of gravel depths and other size gradations may be considered upon justification to the Department when proprietary filter bottoms are specified.

Size of Gravel	Depth
2 ½ to 1 ½ inches	5 to 8 inches
1 ½ to ¾ inches	3 to 5 inches
¾ to ½ inches	3 to 5 inches
½ to 3/16 inches	2 to 3 inches
3/16 to 3/32 inches	2 to 3 inches

( )

**07. Filter Bottoms and Strainer Systems.** Departure from the standards set out in Subsection 521.07 may be acceptable for high rate filters and for proprietary bottoms. Porous plate bottoms must not be used where iron or manganese may clog them or with waters softened by lime. The design of manifold-type collection systems must:

( )

a. Minimize loss of head in the manifold and laterals. ( )

b. Ensure even distribution of wash water and even rate of filtration over the entire area of the filter. ( )

c. Provide the ratio of the area of the final openings of the strainer systems to the area of the filter at about three-thousandths (0.003), ( )

d. Provide the total cross-sectional area of the laterals at twice the total area of the final openings. ( )

e. Provide the cross-sectional area of the manifold at one and one-half (1.5) to two (2) times the total area of the laterals. ( )

f. Lateral perforations without strainers must be directed downward. ( )

**08. Surface or Subsurface Wash.** Surface or subsurface wash facilities are required except for filters used exclusively for iron or manganese removal, and may be accomplished by a system of fixed nozzles or a revolving-type apparatus. All devices must be designed with: ( )

a. Provision for water pressures of at least forty-five (45) pounds per square inch. ( )

b. A properly installed vacuum breaker or other approved device to prevent back siphonage if connected to the treated water system. ( )

c. Rate of flow of two (2.0) gallons per minute per square foot of filter area with fixed nozzles or one-half (0.5) gallon per minute per square foot with revolving arms. ( )

d. Air wash can be considered based on experimental data and operating experiences. ( )

**09. Air Scouring.** Air scouring can be considered in place of surface wash provided the following conditions are met: ( )

**a.** Air flow for air scouring the filter must be three (3) to five (5) standard cubic feet per minute square foot of filter area when the air is introduced in the underdrain; a lower air rate must be used when the air scour distribution system is placed above the underdrains. ( )

**b.** A method for avoiding excessive loss of the filter media during backwashing must be provided. ( )

**c.** Air scouring must be followed by a fluidization wash sufficient to restratify the media. ( )

**d.** Air must be free from contamination. ( )

**e.** Air scour distribution systems must be placed below the media and supporting bed interface with the following exception: if placed at the interface the air scour nozzles must be designed to prevent media from clogging the nozzles or entering the air distribution system. ( )

**f.** Piping for the air distribution system must not be flexible hose which will collapse when not under air pressure and must not be a relatively soft material which may erode at the orifice opening with the passage of air at high velocity. ( )

**g.** Air delivery piping must not pass down through the filter media nor may there be any arrangement in the filter design which allows short circuiting between the applied unfiltered water and the filtered water. ( )

**h.** The backwash water delivery system must be capable of fifteen (15) gallons per minute per square foot of filter surface area (37 m/hr); however, when air scour is provided the backwash water rate must be variable and not exceed eight (8) gallons per minute per square foot (20 m/hr) unless operating experience shows that a higher rate is necessary to remove scoured particles from filter media surfaces. ( )

**i.** The filter underdrains must be designed to accommodate air scour piping when the piping is installed in the underdrain. ( )

**10. Filter Appurtenances.** The following must be provided for every filter: ( )

**a.** Influent and effluent sampling taps. ( )

**b.** A gauge capable of indicating loss of head. ( )

**c.** A meter indicating rate-of flow. A modified rate controller which limits the rate of filtration to a maximum rate may be used. However, equipment that simply maintains a constant water level on the filters is not acceptable, unless the rate of flow onto the filter is properly controlled. A pump or a flow meter in each filter effluent line may be used as the limiting device for the rate of filtration only if approved by the Department on a site-specific basis. ( )

**11. Backwash.** Provisions must be made for washing filters as follows: ( )

**a.** A minimum backwash rate such that a fifty (50) percent expansion of the filter bed is achieved. ( )

**b.** Filtered water provided at the required rate by wash water tanks, a wash water pump, from the high service main, or a combination of these. ( )

**c.** Wash water pumps in duplicate unless an alternate means of obtaining wash water is available. ( )

- d. Not less than fifteen (15) minutes wash of one filter at the design rate of wash. ( )
- e. A wash water regulator or valve on the main wash water line to obtain the desired rate of filter wash with the wash water valves on the individual filters open wide. ( )
- f. A rate-of-flow indicator, preferably with a totalizer, on the main wash water line, located so that it can be easily read by the operator during the washing process. ( )
- g. Design to prevent rapid changes in backwash water flow. Backwash must be operator initiated. Automated systems must be operator adjustable. ( )

**12. Roof Drainage.** Roof drains must not discharge into the filters or basins and conduits preceding the filters. ( )

**522. SURFACE WATER TREATMENT: FILTRATION USING DIATOMACEOUS EARTH.**

The use of these filters may be considered for application to surface waters with low turbidity and low bacterial contamination, and may be used for iron removal for groundwaters providing the removal is effective and the water is of satisfactory sanitary quality before treatment. ( )

**01. Conditions of Use.** Diatomaceous earth filters are expressly excluded from consideration for the following conditions: ( )

- a. Bacteria removal; ( )
- b. Color removal; ( )
- c. Turbidity removal where either the gross quantity of turbidity is high or the turbidity exhibits poor filterability characteristics; or ( )
- d. Filtration of waters with high algae counts. ( )

**02. Treated Water Storage.** Treated water storage capacity in excess of normal requirements must be provided to allow operation of the filters at a uniform rate during all conditions of PWS demand at or below the approved filtration rate, and guarantee continuity of service during adverse raw water conditions without by-passing the system. ( )

**03. Number of Units.** A minimum of two (2) units for redundancy must be provided for filtration such that plant design capacity can be maintained with any component out of service for maintenance or repairs. ( )

**04. Precoat.** A uniform precoat must be applied hydraulically to each septum by introducing a slurry to the tank influent line and employing a filter-to-waste recirculation system. ( )

**05. Body Feed.** A body feed system to apply additional amounts of diatomaceous earth slurry during the filter run is required to avoid short filter runs or excessive head losses. ( )

- a. The rate of body feed is dependent on raw water quality and characteristics and must be determined in the pilot plant study in accordance with Subsection 501.19. ( )
- b. Continuous mixing of the body feed slurry is required. ( )

**06. Filtration Requirements.** ( )

- a. Rate of filtration must be controlled by a positive means. ( )
- b. Head loss must not exceed thirty (30) psi for pressure diatomaceous earth filters, or a vacuum of fifteen (15) inches of mercury for a vacuum system. ( )



c. A recirculation or holding pump must be employed to maintain differential pressure across the filter when the unit is not in operation in order to prevent the filter cake from dropping off the filter elements. A minimum recirculation rate of one-tenth (0.1) gallon per minute per square foot of filter area must be provided. ( )

d. The septum or filter elements must be structurally capable of withstanding maximum pressure and velocity variations during filtration and backwash cycles, and must be spaced such that no less than one (1) inch is provided between elements or between any element and a wall. ( )

e. The filter influent must be designed to prevent scour of the diatomaceous earth from the filter element. ( )

**07. Backwash.** A satisfactory method to thoroughly remove and dispose of spent filter cake must be provided. ( )

**08. Appurtenances.** The following must be provided for every filter: ( )

a. Sampling taps for raw and filtered water. ( )

b. Loss of head or differential pressure gauge. ( )

c. Rate-of-flow indicator. ( )

d. A throttling valve used to reduce rates below normal during adverse raw water conditions. ( )

e. Evaluation of the need for body feed, recirculation, and any other pumps. ( )

f. Provisions for filtering to waste with appropriate measures for backflow prevention. ( )

**09. Monitoring.** A continuous monitoring turbidimeter with recorder is required on each filter effluent for plants treating surface water. ( )

**523. SURFACE WATER TREATMENT: SLOW SAND FILTRATION.**

The use of slow sand filters requires prior engineering studies to demonstrate the adequacy and suitability of this method of filtration for the specific water supply. Slow Sand Filtration and Diatomaceous Earth Filtration for Small Water Systems, Manual of Design for Slow Sand Filtration, Slow Sand Filtration, and Recommended Operations and Optimization Goals, Slow Sand Filtration referenced in Subsection 002.02, may be used as guidance in design and operation of slow sand filtration facilities. ( )

**01. Quality of Raw Water.** Slow rate gravity filtration must be limited to waters having maximum turbidities of ten (10) nephelometric units and maximum color of fifteen (15) units; such turbidity must not be attributable to colloidal clay. Raw water quality data must include examinations for algae. For source water having variable turbidity, the potential use of a roughing filter or other pretreatment technology must be evaluated. The Department may allow the use of a pretreatment technology on raw waters that exceed the normal limits for turbidity and color, if it can be demonstrated to the Department's satisfaction that pretreatment will enable slow sand filtration to properly operate and comply with these Rules. ( )

**02. Number of Units.** A minimum of two (2) units for redundancy must be provided for filtration such that plant design capacity can be maintained with any component out of service for maintenance or repairs. The Department may allow a single bed filter if it can be demonstrated to the Department's satisfaction that an alternative water source is available such that the PWS can provide plant design capacity with the filter taken out of service for maintenance and repairs. ( )

**03. Structural Details and Hydraulics.** Slow rate gravity filters must be designed to provide a cover, unless otherwise approved by the Department, headroom to permit normal movement by operating personnel for scraping and sand removal operations, adequate access hatches and access ports for handling of sand and for ventilation, filtration to waste, an overflow at the maximum filter water level, and protection from freezing. A

permanent means of determining sand depth must be provided. ( )

**04. Underdrains.** Each filter unit must be equipped with a main drain and an adequate number of lateral underdrains to collect the filtered water. The underdrains must be so spaced that the maximum velocity of the water flow in the underdrain will not exceed three-fourths (0.75) feet per second. The maximum spacing of laterals is three (3) feet if pipe laterals are used. ( )

**05. Filter Material.** The following requirements apply: ( )

**a.** A minimum depth of thirty (30) inches of filter sand must be placed on graded gravel layers. ( )

**b.** The effective size must be between fifteen hundredths (0.15) of a millimeter and thirty-five hundredths (0.35) of a millimeter. Larger sizes may be considered by the Department based on the results of a pilot study in accordance with Subsection 501.19. ( )

**c.** The uniformity coefficient must not exceed three point zero (3.0). ( )

**d.** The sand must be cleaned and washed free from foreign matter. ( )

**e.** The sand must be rebbed to the original minimum depth of thirty (30) inches when scraping has reduced the bed depth to no less than twenty-four (24) inches. Where sand is to be reused in order to provide biological seeding and shortening of the ripening process, rebbeding must utilize a “throw over” technique whereby new sand is placed on the support gravel and existing sand is replaced on top of the new sand. The maximum filtration rate must not exceed zero point one (0.1) gallon per minute per square foot for each individual bed. ( )

**06. Filter Sand Support.** ( )

**a.** A three (3)-inch layer of sand must be used as a supporting media for filter sand. The supporting sand must have an effective size of zero point eight (0.8) millimeters to two point zero (2.0) millimeters and a uniformity coefficient not greater than one point seven (1.7). ( )

**b.** Gravel must consist of cleaned and washed, hard, durable, rounded rock particles and may not include flat or elongated particles. The coarsest gravel must be two and one-half (2.5) inches in size when the gravel rests directly on a lateral system and must extend above the top of the perforated laterals. Not less than four (4) layers of gravel may be provided in accordance with the size and depth distribution specified in the table below. Reduction of gravel depths and other size gradations may be considered upon justification to the Department.

Size of Gravel	Depth
2 1/2 to 1 1/2 inches	5 to 8 inches
1 1/2 to 3/4 inches	3 to 5 inches
3/4 to 1/2 inches	3 to 5 inches
1/2 to 3/16 inches	2 to 3 inches
3/16 to 3/32 inches	2 to 3 inches

( )

**07. Depth of Water Over Filter Beds.** The design must provide a depth of at least three (3) to six (6) feet of water over the sand. Influent water must not scour the sand surface. ( )

**08. Control Appurtenances.** Each filter must be equipped with a loss of head gauge, an orifice, Venturi meter, or other suitable means of discharge measurement installed on each filter to control the rate of filtration, and an effluent pipe designed to maintain the water level above the top of the filter sand. The effluent

pipings must not be directly interconnected with the other filter beds. A sample tap must be provided for each filter bed. ( )

**09. Ripening.** Slow sand filters must be filtered-to-waste until they are biologically mature before being put into service following construction, scraping, re-sanding, or reopening after extended shutdown. The period of filter-to-waste must be as follows: ( )

**a.** Filters must be filtered-to-waste after scraping or cleaning until the effluent turbidity falls consistently below the pre-cleaning level, unless otherwise approved by the Department. ( )

**b.** Filters must be filtered-to-waste following construction, re-sanding, or extended shutdown based on project specific protocols approved by the Department and incorporated into a Department approved operation and maintenance manual. These protocols may be based on factors from standard literature such as those listed in Subsection 002.02 but typically include factors such as minimum filter-to-waste time periods, bacteriological testing, and effluent turbidity. Sampling results from the filter-to-waste period must be provided to the Department for review and the Department must provide authorization prior to restarting service to the public. ( )

**10. Supernatant Drain Required.** Filter beds must be equipped with a supernatant drain to allow for quick removal of water standing over sand that has become impermeable because it requires scraping or rebedding. ( )

**11. Filter Bed Control and Minimum Rate of Flow.** Each filter bed must be controlled separately and filters must be operated at a constant filtration rate with any changes made gradually. The minimum rate of filtration must be at least two hundredths (0.02) gallons per minute per square foot. ( )

**524. SURFACE WATER TREATMENT: DIRECT FILTRATION.**

Direct filtration, as used herein, refers to the filtration of a surface water following chemical coagulation and possibly flocculation but without prior settling. The nature of the treatment process will depend upon the raw water quality. A full scale direct filtration plant must not be constructed without prior pilot studies which are acceptable to the Department. In-plant demonstration studies are required where conventional treatment plants are converted to direct filtration. Where direct filtration is proposed, an engineering report must be submitted prior to conducting pilot plant or in-plant demonstration studies in accordance with Subsection 501.19. ( )

**01. Filtration Requirements.** ( )

**a.** Filters must be rapid rate gravity filters with dual or mixed media. The final filter design must be based on the pilot plant or in-plant demonstration studies, and all portions of Section 518 apply. Pressure filters or single media sand filters will not be used. ( )

**b.** A continuous recording turbidimeter must be installed on each filter effluent line and on the composite filter effluent line. ( )

**c.** Additional continuous monitoring equipment such as particle counting or streaming current metering to assist in control of coagulant dose may be required by the Department. ( )

**02. Siting Requirements.** The plant design and land ownership surrounding the plant must allow for modifications of the plant. ( )

**03. Redundancy.** A minimum of two (2) units must be provided for filtration such that plant capacity can be maintained with any component out of service for maintenance or repairs. ( )

**525. LOW PRESSURE MEMBRANE FILTRATION.**

Low pressure filtration, as used herein, refers to microfiltration or ultrafiltration processes. Low pressure membrane systems can provide greater than 3-log removal of *Giardia lamblia* and *Cryptosporidium*, and ultrafiltration systems can also provide up to 2-log virus removal. The Department will determine maximum available removal credits for the specific membrane under consideration. The actual log removal credit that a low pressure membrane filtration system will receive is the lower of the values determined by the following: the removal efficiency demonstrated

during challenge testing, or the maximum log removal that can be verified by direct integrity testing required during the course of normal operation. Membrane systems must contain sufficient design to allow for offline direct integrity testing of all units or modules at the required interval while retaining the capability to supply maximum day demand to the PWS. Membrane systems must have at least two (2) units unless it can be demonstrated to the satisfaction of the Department that a secondary source or treatment component can supply the required minimum plant design capacity. ( )

**01. Membrane Selection and Design Considerations. ( )**

**a.** Challenge testing involves seeding feed water with an organism or particulate and measuring the log reduction of the organism or particulate between the feed and filtrate. It is a one-time product-specific test event performed by an approved third party designed to demonstrate the removal ability of the membrane. Challenge testing must be conducted by the third party entity in general conformance with the USEPA Membrane Filtration Guidance Manual referenced in Subsection 002.02 (Membrane Filtration Guidance Manual). The challenge test report is to be submitted to the Department along with the PER for the project. The Department may accept another state's challenge test report approval. ( )

**b.** A review of historical source water data must be conducted to determine the degree of pretreatment needed if any, the feasibility of membrane filtration, and an estimated cost of the system. At a minimum, the following parameters are to be investigated: Seasonal temperature and turbidity profiles, total organic loading, occurrence of algae, microbial activity, iron, manganese, and hardness levels, and any other inorganic or physical parameters determined to be necessary by the Department. The data will be used to determine anticipated fouling and scaling, backwash and cleaning cycles and regimens, acceptable trans-membrane pressure differentials, and design flux, especially during lowest anticipated water temperature. ( )

**c.** A pilot study must be conducted for a period that is determined by the design engineer and approved by the Department. The duration will include the season of lowest water temperatures and the season including the highest anticipated turbidity, algal bloom, TOC, and iron/manganese event or otherwise cover four seasons of source water quality conditions. The Department may approve a shorter duration proof pilot to verify design criteria that affect the reliable production capacity of the membrane system. The Department may approve the use of a full scale pilot study where the full scale facility will act as the pilot study. The Department may also waive the pilot study requirement. Proof pilot studies, full scale pilot studies, and the waiving of the pilot study requirement will only be approved in circumstances where source water conditions and fouling characteristics are already well understood. Such source waters include but are not limited to groundwater under the influence of surface water, waters with existing membrane plants, waters where sufficient pilot test data has already been generated, and extensively used or tested membrane products where production or test data on similar waters is available (i.e., same lake, reservoir, or same reach for stream sources). In addition to the requirements in Subsection 501.19, the pilot study must include: ( )

- i. A means to identify the best membrane to use for the anticipated water quality; ( )
- ii. Analysis of any need for pretreatment; ( )
- iii. Range of anticipated flux rates; ( )
- iv. Operating and transmembrane pressure; ( )
- v. Fouling and scaling potential; ( )
- vi. Backwash and recovery cleaning, cleaning processes, and intervals; ( )
- vii. Efficiency and process mass balance; ( )
- viii. Waste stream volume, characterization, and disposal method; ( )
- ix. Turbidity; and ( )

- x. Integrity testing results and procedures. ( )
- 02. Monitoring and Compliance Requirements for Membranes.** PWSs that use low pressure membrane filtration must comply with the following requirements. ( )
  - a. Initial Start-Up.** ( )
    - i. Notify the Department at least one (1) week in advance of the planned start-up date. ( )
    - ii. The design engineer will oversee start-up procedures. ( )
    - iii. All monitoring equipment will be calibrated prior to start-up. ( )
    - iv. The system must pass direct integrity testing prior to going on-line and producing water for distribution. ( )
    - v. A method for the disposal of start-up water needs to be approved by the Department prior to start-up. ( )
  - b. Direct Integrity Testing.** ( )
    - i. Testing must be conducted on each membrane skid in service at least daily for the first year of operation. ( )
    - ii. The test method used must have a resolution of three (3)  $\mu\text{m}$  or less for *Cryptosporidium* and *Giardia lamblia* removal credit. ( )
    - iii. The test method used must have sensitivity sufficient to verify the ability of the membrane filtration system to remove the constituent at a level commensurate with the credit awarded by the Department. ( )
      - (1) Formulae for sensitivity calculation for pressure-based tests are available in the Membrane Filtration Guidance Manual referenced in Subsection 002.02. The volumetric concentration factor used in the calculation may be either calculated or determined experimentally. ( )
      - (2) Formulae for sensitivity calculation for marker-based tests are available in the Membrane Filtration Guidance Manual referenced in Subsection 002.02. ( )
    - iv. A control limit must be established within the sensitivity limits of the direct integrity test that is indicative of an integral membrane unit capable of achieving the log removal credit awarded by the Department. ( )
      - (1) If the direct integrity test results exceed the control limit for any membrane unit, that unit must be removed from service. ( )
      - (2) Any unit taken out of service for exceeding a direct integrity test control limit cannot be returned to service until repairs are confirmed by subsequent direct integrity test results that are within the control limit. ( )
    - v. Direct integrity testing must be conducted on each membrane unit at a frequency of at least once per day that the unit is in operation. The Department may extend testing frequency up to a duration of once per week after one (1) year of daily testing showing a less than five percent (5%) testing failure rate for the previous year. During weekly testing, if at any time the system fails more than two (2) direct integrity tests within a three (3) month period, the system must return to daily testing. ( )
  - c. Indirect Integrity Monitoring.** ( )
    - i. Testing must be conducted on each membrane unit in service. ( )

ii. Continuous indirect integrity monitoring must be conducted using turbidity monitoring unless the Department approves an alternative method. ( )

iii. Continuous indirect integrity monitoring must be conducted at a frequency of at least one (1) reading every fifteen (15) minutes. The Department may allow a time delay in reporting compliance turbidity measurements if it can be demonstrated that elevated turbidity readings above fifteen hundredths (0.15) NTU immediately following direct integrity testing or maintenance are the result of factors related to entrained air or membrane wettability and are not related to membrane integrity. ( )

iv. If the continuous indirect integrity monitoring results exceed the specified control limit for any membrane unit for a period greater than fifteen (15) minutes (i.e., two (2) consecutive readings at fifteen (15) minute intervals), direct integrity testing must be immediately conducted on that unit. ( )

(1) The control limit for turbidity monitoring is fifteen hundredths (0.15) NTU. ( )

(2) Control limits for Department approved alternative methods will be established by the Department. ( )

**d.** A project specific operation and maintenance manual must be provided as required in Subsection 501.12. See definition of Operation and Maintenance Manual in Section 003 for the typical contents of an operation and maintenance manual and the included operations plan. The operations plan in the operation and maintenance manual for membrane systems must include, but is not limited to the following information: ( )

i. Filtration: ( )

(1) Control of feed flow to the membrane system; ( )

(2) Measurement of inlet/outlet pressures and filtrate flows; ( )

(3) Measurement of transmembrane pressure changes during filter run; and ( )

(4) Feed flow control in response to temperature changes. ( )

ii. Membrane backwashing: ( )

(1) Programming automated frequency; ( )

(2) Proper backwash venting and disposal; see Section 540; ( )

(3) Appropriate backwash rate; and ( )

(4) Monitoring during return of filter to service. ( )

iii. Chemical cleaning: ( )

(1) Selection of proper chemical washing sequence; ( )

(2) Proper procedures for dilution of chemicals; ( )

(3) Monitoring of pH through chemical cleaning cycle; ( )

(4) Rinsing of membrane system following chemical clean; and ( )

(5) Return of filter to service. ( )

iv. Chemical feeders (in the case that chemical pretreatment is applied): ( )

- (1) Calibration check; ( )
- (2) Settings and adjustments (how they are made); and ( )
- (3) Dilution of chemicals and polymers (proper procedures). ( )
- v. Monitoring and observing operation: ( )
  - (1) Observation of feed water or pretreated water turbidity; ( )
  - (2) Observation of trans-membrane pressure increase between backwashes; ( )
  - (3) Filtered water turbidity; ( )
  - (4) Procedures to follow if turbidity breakthrough occurs. ( )
- vi. Troubleshooting: ( )
  - (1) No raw water (feed water) flow to plant; ( )
  - (2) Can't control rate of flow of water through equipment; ( )
  - (3) Valving configuration for direct flow and cross-flow operation modes; ( )
  - (4) Poor raw water quality (raw water quality falls outside the performance range of the equipment); ( )
  - (5) Poor filtrate quality; ( )
  - (6) Failed membrane integrity test; ( )
  - (7) Low pump feed pressure; ( )
  - (8) Automatic operation (if provided) not functioning; ( )
  - (9) Filtered water turbidity too high; ( )
  - (10) Head loss builds up excessively rapidly; ( )
  - (11) Reduced flux; ( )
  - (12) Machine will not start and "Power On" indicator off; ( )
  - (13) Machine will not start and "Power On" indicator on; ( )
  - (14) Pump cavitation; ( )
  - (15) Valve stuck or won't operate; and ( )
  - (16) No electric power. ( )

**e.** The sensitivity, resolution, and frequency of the direct integrity test proposed for use with the full-scale facility must be reported to the Department prior to initial operation. The following must be reported to the Department on a monthly basis: ( )

**i.** Any direct integrity test results exceeding the control limit, as well as the corrective action taken in response, must be reported to the Department within ten (10) days of the end of the monthly monitoring cycle on a

Department reporting form. The form is available at [www.deq.idaho.gov](http://www.deq.idaho.gov); ( )

ii. Any continuous indirect integrity monitoring results triggering direct integrity testing, as well as any corrective action taken in response, must be reported to the Department within ten (10) days of the end of the monthly monitoring cycle on a Department reporting form. The form is available at [www.deq.idaho.gov](http://www.deq.idaho.gov); ( )

iii. Any additional information considered necessary by the Department on a case-specific basis to verify proper operation and maintenance of the membrane filtration process; and ( )

iv. All direct integrity test results and continuous indirect integrity monitoring results must be retained for a minimum of three (3) years. ( )

**526. -- 528. (RESERVED)**

**529. REQUIRED DISINFECTION OF DRINKING WATER, ULTRAVIOLET LIGHT.**

**01. General.** ( )

a. Ultraviolet (UV) light technology is a primary disinfectant typically used for *Cryptosporidium*, *Giardia lamblia*, and virus inactivation of both surface water and groundwater supplies. Reactor performance in terms of inactivation of any particular organism is a function of the delivered dose which is determined by validation testing. PWSs that are required to maintain a disinfectant residual in the distribution system must supplement UV disinfection with a chemical disinfectant. ( )

b. UV disinfection credit will be awarded for filtered PWSs and unfiltered PWSs if the unfiltered PWS meets the requirements in 40 CFR 141.71. PWSs will receive *Cryptosporidium*, *Giardia lamblia*, and virus treatment credits by achieving the corresponding UV dose values for the appropriate target pathogen and log reduction shown in Subsection 529.03, calculated to take into account the validation factor and reduction equivalent dose. The target pathogen and the target log inactivation is used to identify the corresponding required UV dose. ( )

c. For PWSs using UV light to meet microbial treatment requirements, at least ninety-five percent (95%) of the water delivered to the public every month must be treated by UV reactors operating within validated conditions for the required UV dose. ( )

d. When reviewing proposed UV disinfection projects, the Department will use the USEPA UV Disinfection Guidance Manual for the Final Long Term 2 Enhanced Surface Water Treatment Rule referenced in Subsection 002.02 (UV Disinfection Guidance Manual) for guidance. ( )

**02. Pilot Studies and Validation.** ( )

a. The Department may allow on-site pilot studies on a case-by-case basis in accordance with Subsection 501.19. Pilot studies are usually used to determine how much fouling occurs on site, to evaluate UV system reliability (e.g. UV sensors, UV transmittance (UVT) monitors, ballast reliability) and to provide operators experience running a UV system. They may also be used to assess lamp aging or impacts of power quality. ( )

b. Validation testing determines the operating conditions and monitoring algorithms that the UV system will use to define how much UV dose is being delivered by the reactor during operation. The validated dose as determined through validation testing is compared to the required dose in the UV Dose Table (Subsection 529.03) to determine inactivation credit. The validated dose is calculated by dividing the determined reduction equivalent dose by a validation factor to account for biases and experimental uncertainty. UV light treatment reactors must be validated by a third party entity approved by the Department. At a minimum, validation testing must account for the following: UV absorbance of the water; lamp fouling and aging; measurement uncertainty of on-line UV sensors; UV dose distributions arising from the velocity profiles through the reactor; failure of UV lamps and other critical system components; inlet and outlet piping configuration of the UV reactor; lamp and UV sensor locations; and other parameters required by the Department. The Department may allow alternative test microbes such as MS2 phage where the UV dose response better matches that of *Cryptosporidium* and *Giardia lamblia* to provide more accurate



and efficient UV dose monitoring. Additional guidance is available in the UV Disinfection Guidance Manual, referenced in Subsection 002.02, or another validation standard as approved by the Department. ( )

**c.** Validation testing must be conducted on full scale testing of a reactor that conforms uniformly to the UV reactors used by the PWS and inactivation of a test microorganism whose dose response characteristics have been quantified with a low pressure mercury vapor lamp. ( )

**d.** Validation testing must determine and establish validated operating conditions under which the reactor delivers the required UV dose in Subsection 529.03. Validated operating conditions include: ( )

- i. Flow rate; ( )
- ii. UV Intensity as measured by a UV sensor; ( )
- iii. UV lamp operating status. ( )
- e. The Department may approve an alternative approach to validation testing. ( )

**03. UV Dose Table.** The treatment credits listed in the dose table are based on UV light at a wavelength of two hundred fifty-four (254) nm as produced by a low pressure mercury vapor lamp. To receive treatment credit for other lamp types, the PWS must demonstrate an equivalent germicidal dose through validation testing.

UV Dose Table (millijoules per square centimeter)			
Log	Cryptosporidium	Giardia lamblia	Virus
0.5	1.6	1.5	39
1.0	2.5	2.1	58
1.5	3.9	3.0	79
2.0	5.8	5.2	100
2.5	8.5	7.7	121
3.0	12	11	143
3.5	15	15	163
4.0	22	22	186

( )

**04. Reactor Design.** Inlet and outlet conditions must ensure that UV dose delivery at the plant is equal to or exceeds that utilized during validation. At a minimum, design criteria need to address target pathogen(s), required log inactivation and UV dose, flow rate, UVT, and lamp aging and fouling factors. UVT and flow rate are to be selected to account for seasonal changes in UVT. Lamp aging and fouling factors must be supported by documentation or pilot study data. Recommended approaches of the UV Disinfection Guidance Manual, referenced in Subsection 002.02, are to be used in meeting this requirement. ( )

**a.** The reactor systems must be designed to monitor and record parameters to verify the operation within the validated operating conditions approved by the Department. The PWS must be equipped with facilities to monitor and record UV intensity as measured by a UV sensor, flow rate, lamp status, UVT, and other parameters designated by the Department. ( )

**b.** The ultraviolet treatment device must be designed to provide a UV light dose equal to or greater than that specified in the UV Dose Table for the required log reduction. The UV Disinfection Guidance Manual, referenced in Subsection 002.02, must be utilized in evaluating the appropriate dose required for the target microbe.

The reactor will need to deliver the target dose while operating within the validated operating conditions for that particular unit. ( )

**c.** The ultraviolet treatment assemblies must be designed to allow for cleaning and replacement of the lamp, lamp sleeves, and sensor window or lens. ( )

**d.** All ultraviolet treatment device designs must evaluate lamp fouling and aging issues and manufacturer's recommendations regarding fouling, aging, and replacement will be discussed in the Operation and Maintenance Manual. ( )

**e.** For in-situ cleaning of the lamp sleeve, the design must protect the potable water from cleaning solutions. ( )

**f.** When off-line chemical cleaning systems are used, the UV enclosure must be removed from service, drained, flushed with an NSF/ANSI Standard 60 certified solution, drained, and rinsed before being placed back in service. ( )

**g.** On-line systems that use wipers or brushes may use chemical solutions provided they are NSF/ANSI Standard 60 certified. ( )

**h.** An automatic shutdown valve must be installed in the water supply line from the ultraviolet treatment device such that if power is not provided to the reactor or valve, the valve will be in the closed position. ( )

**i.** The design of the inlet and outlet piping configuration and the locations of expansions, bends, tees and valves will assure that the UV dose delivery is equal to or greater than the required UV dose. Approach length prior to each reactor included in the credited dose calculations, downstream length following each reactor, and locations of any cleaning device/mechanism must be based on validation testing. ( )

**j.** For parallel trains, the flow to each reactor must be equally distributed and metered or otherwise account for uneven flows in the design to ensure that the required UV dose is delivered to each train under varying flow conditions. ( )

**k.** Valves must be provided to allow isolating and removing from service each UV reactor. ( )

**l.** Reactors will be provided with air relief and pressure control valves per manufacturer requirements. ( )

**m.** UVT analyzers must be provided if UVT is part of the dose monitoring strategy. It is recommended that UVT be monitored on a regular basis for all PWSs to assess UVT variability. ( )

**n.** A single train with a standby reactor or a sufficient number of parallel ultraviolet treatment devices must be installed to ensure that adequate disinfection is provided when one unit is out of service. The Department may approve an alternate method that provides adequate disinfection such as standby chlorination. Any PWS that produces water on an irregular schedule may provide documentation for the Department's review and approval that a single reactor is an acceptable design by demonstrating there is adequate time for maintenance and cleaning during operation shutdowns. ( )

**o.** No bypass of the ultraviolet treatment process may be installed unless an alternate method of providing adequate disinfection is provided. ( )

**05. Controls.** ( )

**a.** A delay mechanism must be installed to provide sufficient lamp warm-up prior to allowing water to flow from the ultraviolet treatment unit. ( )

**b.** An automatic shutdown must be designed to activate the shutdown valve in cases where the

ultraviolet light dose falls below the approved design dose or outside of the validated specifications. ( )

**06. Reliability.** The PWS must be capable of producing the plant design capacity at all times. ( )

**a.** Unless otherwise approved by the Department and in accordance with Subsection 529.04.n., a minimum of two (2) reactors is required to maintain disinfection when one unit is taken out of service. Each reactor must be sized to deliver the required UV dose under the operating conditions of flow and UVT that occur at the plant. The conditions must fall within the validated range of the reactor as determined during validation testing. ( )

**b.** The quality and reliability of the power supply must be analyzed and back-up power supplies will be discussed in the contingency plan. ( )

**c.** If UVT is above the validated range of UVT, the UV dose monitoring algorithm must default to the maximum of the validated range. If UVT is below the validated range, the UV system operation must be recorded as outside of the validated operating conditions. When UVT falls outside of ranges identified in the validated operating conditions, the contingency plan will be enacted if UVT is part of the dose monitoring strategy. ( )

**d.** A contingency plan for total UV disinfection failure, loss of power, or in the event that water quality changes produce water quality unsuitable for UV disinfection must be described in the PER. ( )

**07. Monitoring.** PWSs using UV light must monitor for the parameters necessary to demonstrate operation within the validated conditions of the required UV dose. PWS owners must check the calibration of UV sensors and online UVT monitors and recalibrate in accordance with a protocol approved by the Department. At a minimum, the following parameters must be monitored: ( )

**a.** If the flow rate is below the validated range, then the UV dose monitoring algorithm must default to the validated range. If the flow rate is above the validated range, then the UV system operation will be recorded as outside of the validated operating conditions; ( )

**b.** UV intensity as measured by UV sensors; ( )

**c.** UVT if UVT is part of the dose monitoring strategy; and ( )

**d.** Lamp status. ( )

**08. Alarms.** The settings or predetermined set points for the alarms must be specified in the PER. The report must also specify the alarms that will activate the contingency plan response. At a minimum, the following alarms are required: ( )

**a.** Low UV intensity; ( )

**b.** High turbidity if required by the Department; ( )

**c.** Low UVT; ( )

**d.** Low UV dose; ( )

**e.** Lamp failure; ( )

**f.** UVT monitor failure; ( )

**g.** UV sensor failure; ( )

**h.** Low water level; and ( )

**i.** High flow rate. ( )

**09. Initial Startup.** The following items must be tested and verified before UV disinfected water is distributed: ( )

- a. Electrical components; ( )
- b. Water level; ( )
- c. Flow split between reactor trains if applicable; ( )
- d. Controls and alarms; and ( )
- e. Instrument calibration. ( )

**10. Operation and Maintenance Manual.** A project specific operation and maintenance manual must be provided as required in Subsection 501.12. See definition of Operation and Maintenance Manual in Section 003 for the typical contents of an operation and maintenance manual and the included operations plan. The operations plan in the operation and maintenance manual must include, but is not limited to, the following information: ( )

- a. Lamp replacement intervals may be based on the degree of lamp aging as indicated by the UV sensors; ( )
- b. Lamp fouling analysis and cleaning procedures; ( )
- c. Lamp replacement; and ( )
- d. Lamp breakage. ( )

**530. DISINFECTION OF DRINKING WATER, DISINFECTING AGENTS.**

PWS owners may accomplish with gas and liquid chlorine, calcium or sodium hypochlorites, chlorine dioxide, ozone, or ultraviolet light. Other disinfecting agents will be considered, providing reliable application equipment is available and testing procedures for a residual are recognized in "Standard Methods for the Examination of Water and Wastewater," referenced in Subsection 002.02, or an equivalent means of measuring effectiveness exists. The required amount of primary disinfection needed will be specified by the Department. Consideration must be given to the formation of disinfection by-products (DBP) when selecting the disinfectant. See Section 531, Design Standards for Chemical Application. For PWSs using only groundwater and that voluntarily chlorinate, see Subsection 552.04. ( )

**01. Chlorination.** ( )

**a.** In addition to the requirements of Section 531, chlorination equipment must meet the following requirements: ( )

i. Solution-feed gas chlorinators or hypochlorite feeders of the positive displacement type must be provided. ( )

ii. Standby or backup equipment of sufficient capacity will be available to replace the largest unit. Spare parts will be on hand to replace parts subject to wear and breakage. ( )

iii. Automatic proportioning chlorinators are required where the rate of flow or chlorine demand is not reasonably constant. ( )

iv. Each eductor (submerged jet pump) must be selected for the point of application with particular attention given to the quantity of chlorine to be added, the maximum injector waterflow, the total discharge back pressure, the injector operating pressure, and the size of the chlorine solution line. ( )

v. The chlorine solution injector/diffuser must be compatible with the point of application to provide a rapid and thorough mix with all the water being treated. ( )

vi. Automatic switch-over of chlorination treatment units will be provided, where necessary, to assure continuous disinfection. ( )

b. Effective contact time and point of application requirements are as follows: ( )

i. Effective contact time sufficient to achieve the inactivation of target pathogens under the expected range of raw water pH and temperature variation must be demonstrated through tracer studies or other evaluations or calculations acceptable to the Department. Improving Clearwell Design for CT Compliance, referenced in Section 002.02, contains information that may be used as guidance for these calculations. Additional baffling can be added to new or existing basins to minimize short circuiting and increase contact time. ( )

ii. At least two (2) contactors must be provided which are each capable of providing the required effective contact time at one-half (1/2) of the plant design capacity. Alternatively, a single contactor that can provide effective contact time at plant design capacity may be designed with separate sections and bypass piping to allow sections to be cleaned or maintained individually during low flow conditions. Any PWS that produces water on an irregular schedule may provide documentation for the Department's review and approval that a single contactor is an acceptable design by demonstrating there is adequate time for maintenance and cleaning during operation shutdowns. ( )

iii. At plants treating surface water, except slow sand filtration systems: Unless otherwise approved by the Department, in addition to the injection point prior to the disinfection contact tank, injection points, including all appurtenant chemical feed piping, must also be provided for applying the disinfectant to the raw water, settled water, and water entering the distribution system. ( )

iv. For pipeline contactors, provision must be made to drain accumulated sediment from the bottom of the contactor if the discharge from the contactor is not located at the bottom. ( )

c. Chlorine residual test equipment recognized in the "Standard Methods for the Examination of Water and Wastewater," referenced in Subsection 002.02, must be provided for use by the operator. All surface water treatment plants that serve a population greater than three thousand three hundred (3,300) must have equipment to measure chlorine residuals continuously entering the distribution system. A sample tap must be provided to measure chlorine residual and will be located at a point after receiving the required contact time and at or prior to the first service connection. ( )

d. Chlorinator piping requirements: ( )

i. The chlorinator water supply piping must be designed to prevent contamination of the treated water supply by sources of questionable quality. At all facilities treating surface water, pre- and post-chlorination systems must be independent to prevent possible siphoning of partially treated water into the clear well. The water supply to each eductor must have a separate shut-off valve. No master shut-off valve will be allowed. ( )

ii. The pipes carrying elemental liquid or dry gaseous chlorine under pressure must be Schedule 80 seamless steel tubing or other materials recommended by the Chlorine Institute (never use PVC). Rubber, PVC, polyethylene, or other materials recommended by the Chlorine Institute must be used for chlorine solution piping and fittings. Nylon products are not acceptable for any part of the chlorine solution piping system. ( )

**02. Disinfection with Ozone.** PWSs that are required to maintain a disinfectant residual in the distribution system must supplement ozone disinfection with a chemical disinfectant. ( )

a. The following are requirements for feed gas preparation: ( )

i. Feed gas can be air, oxygen enriched air, or high purity oxygen. Sources of high purity oxygen include purchased liquid oxygen conforming with AWWA Standard B-304; on site generation using cryogenic air separation; or temperature, pressure or vacuum swing (adsorptive separation) technology. In all cases, the design engineer must ensure that the maximum dew point of -76°F (-60°C) will not be exceeded at any time. ( )

- ii. Air compression: ( )
- (1) Air compressors will be of the liquid-ring or rotary lobe, oil-less, positive displacement type for smaller systems or dry rotary screw compressors for larger systems. ( )
- (2) The air compressors will have the capacity to simultaneously provide for maximum ozone demand, provide the air flow required for purging the desiccant dryers (where required) and allow for standby capacity. ( )
- (3) Air feed for the compressor will be drawn from a point protected from rain, condensation, mist, fog and contaminated air sources to minimize moisture and hydrocarbon content of the air supply. ( )
- (4) A compressed air after-cooler, entrainment separator, or a combination of the two (2) with automatic drain will be provided prior to the dryers to reduce the water vapor. ( )
- (5) A back-up air compressor must be provided so that ozone generation is not interrupted in the event of a break-down. ( )
- iii. Air drying: ( )
- (1) Dry, dust-free and oil-free feed gas must be provided to the ozone generator. Dry gas is essential to prevent formation of nitric acid, to increase the efficiency of ozone generation and to prevent damage to the generator dielectrics. Sufficient drying to a maximum dew point of -76°F (-60°C) must be provided at the end of the drying cycle. ( )
- (2) Drying for high pressure systems may be accomplished using heatless desiccant dryers only. For low pressure systems, a refrigeration air dryer in series with heat-reactivated desiccant dryers will be used. ( )
- (3) A refrigeration dryer capable of reducing inlet air temperature to 40°F (4°C) will be provided for low pressure air preparation systems. The dryer can be of the compressed refrigerant type or chilled water type. ( )
- (4) For heat-reactivated desiccant dryers, the unit must contain two (2) desiccant filled towers complete with pressure relief valves, two (2) four-way valves and a heater. In addition, external type dryers must have a cooler unit and blowers. The size of the unit will be such that the specified dew point will be achieved during a minimum adsorption cycle time of sixteen (16) hours while operating at the maximum expected moisture loading conditions. ( )
- (5) Multiple air dryers will be provided so that the ozone generation is not interrupted in the event of dryer breakdown. ( )
- (6) Each dryer will be capable of venting “dry” gas to the atmosphere, prior to the ozone generator, to allow start-up when other dryers are “on-line.” ( )
- iv. Air filters: ( )
- (1) Air filters will be provided on the suction side of the air compressors, between the air compressors and the dryers and between the dryers and the ozone generators. ( )
- (2) The filter before the desiccant dryers will be of the coalescing type and be capable of removing aerosol and particulates larger than 0.3 microns in diameter. The filter after the desiccant dryer will be of the particulate type and be capable of removing all particulates greater than 0.1 microns in diameter, or smaller if specified by the generator manufacturer. ( )
- v. Piping in the air preparation system can be common grade steel, seamless copper, stainless steel or galvanized steel. The piping must be designed to withstand the maximum pressures in the air preparation system. ( )

- b. The following requirements apply to the ozone generator: ( )
- i. Capacity. ( )
- (1) The production rating of the ozone generators must be stated in pounds per day and kWhr per pound at a maximum cooling water temperature and maximum ozone concentration. ( )
- (2) The design will ensure that the minimum concentration of ozone in the generator exit gas will not be less than one (1) percent (by weight). ( )
- (3) Generators will be sized to have sufficient reserve capacity so that the PWS does not operate at peak capacity for extended periods of time resulting in premature breakdown of the dielectrics. ( )
- (4) The production rate of ozone generators will decrease as the temperature of the coolant increases. If there is to be a variation in the supply temperature of the coolant throughout the year, then pertinent data will be used to determine production changes due to the temperature change of the supplied coolant. The design will ensure that the generators can produce the required ozone at maximum coolant temperature. ( )
- (5) Appropriate ozone generator backup equipment must be provided. ( )
- ii. The generators can be low, medium or high frequency type. Specifications will require that the transformers, electronic circuitry and other electrical hardware be proven, high quality components designed for ozone service. ( )
- iii. Adequate cooling must be provided. The cooling water must be properly treated to minimize corrosion, scaling and microbiological fouling of the water side of the tubes. Where cooling water is treated, cross connection control must be provided to prevent contamination of the potable water supply. ( )
- iv. To prevent corrosion, the ozone generator shell and tubes must be constructed of Type 316L stainless steel. ( )
- c. The following requirements apply to ozone contactors: ( )
- i. Bubble diffusers. ( )
- (1) Where disinfection is the primary application, a minimum of two (2) contact chambers, each equipped with baffles to prevent short circuiting and induce countercurrent flow, will be provided. Ozone must be applied using porous-tube or dome diffusers. ( )
- (2) The minimum contact time will be ten (10) minutes. A shorter contact time (CT) may be approved by the Department if justified by appropriate design and "CT" considerations. ( )
- (3) Where taste and odor control is of concern, multiple application points and contactors will be considered. ( )
- (4) Contactors will be separate closed vessels that have no common walls with adjacent rooms. The contactor must be kept under negative pressure and sufficient ozone monitors will be provided to protect worker safety. ( )
- (5) Contact vessels can be made of reinforced concrete, stainless steel, fiberglass or other material which will be stable in the presence of residual ozone and ozone in the gas phase above the water level. If contact vessels are made of reinforced concrete, all reinforcement bars must be covered with a minimum of one and one-half (1.5) inches of concrete. ( )
- (6) Where necessary, a system is to be provided between the contactor and the off-gas destruct unit to remove froth from the air and return the other to the contactor or other location acceptable to the Department. If

foaming is expected to be excessive, then a potable water spray system must be placed in the contactor head space. ( )

(7) All openings into the contactor for pipe connections, hatchways, etc. must be properly sealed using welds or ozone resistant gaskets such as Teflon or Hypalon. ( )

(8) Multiple sampling ports must be provided to enable sampling of each compartment's effluent water and to confirm "CT" calculations. ( )

(9) A pressure/vacuum relief valve must be provided in the contactor and piped to a location where there will be no damage to the destruction unit. ( )

(10) The depth of water in bubble diffuser contactors must be a minimum of eighteen (18) feet. The contactor must also have a minimum of three (3) feet of freeboard to allow for foaming. ( )

(11) All contactors will have provisions for cleaning, maintenance and drainage of the contactor. Each contactor compartment must also be equipped with an access hatchway. ( )

(12) Aeration diffusers must be fully serviceable by either cleaning or replacement. ( )

ii. Other contactors, such as the venturi or aspirating turbine mixer contactor, may be approved by the Department provided adequate ozone transfer is achieved and the required contact times and residuals can be met and verified. ( )

**d.** The following requirements apply to ozone destruction units: ( )

i. A system for treating the final off-gas from each contactor must be provided in order to meet safety and air quality standards. Acceptable systems include thermal destruction and thermal/catalytic destruction units. ( )

ii. The maximum allowable ozone concentration in the discharge is 0.1 ppm (by volume). ( )

iii. At least two (2) units will be provided which are each capable of handling the entire gas flow. ( )

iv. Exhaust blowers must be provided in order to draw off-gas from the contactor into the destruct unit. ( )

v. Catalysts must be protected from froth, moisture and other impurities which may harm the catalyst. ( )

vi. The catalyst and heating elements will be located where they can easily be reached for maintenance. ( )

**e.** Only low carbon 304L and 316L stainless steels may be used for ozone service with 316L preferred. ( )

**f.** The following requirements apply to joints and connections: ( )

i. Connections on piping used for ozone service are to be welded where possible. ( )

ii. Connections with meters, valves or other equipment are to be made with flanged joints with ozone resistant gaskets, such as Teflon or Hypalon. Screwed fittings may not be used because of their tendency to leak. ( )

iii. A positive closing plug or butterfly valve plus a leak-proof check valve must be provided in the piping between the generator and the contactor to prevent moisture reaching the generator. ( )



- g.** The following instrumentation must be provided: ( )
- i.** Pressure gauges at the discharge from the air compressor, at the inlet to the refrigeration dryers, at the inlet and outlet of the desiccant dryers, at the inlet to the ozone generators and contactors, and at the inlet to the ozone destruction unit. ( )
  - ii.** A trip which shuts down the generator when the wattage exceeds a certain preset level. ( )
  - iii.** Dew point monitors for measuring the moisture of the feed gas from the desiccant dryers. Where there is potential for moisture entering the ozone generator from downstream of the unit or where moisture accumulation can occur in the generator during shutdown, post-generator dew point monitors must be used. ( )
  - iv.** Air flow meters for measuring air flow from the desiccant dryers to each of the other ozone generators, air flow to each contactor, and purge air flow to the desiccant dryers. ( )
  - v.** Temperature gauges for the inlet and outlet of the ozone cooling water and the inlet and outlet of the ozone generator feed gas and, if necessary, for the inlet and outlet of the ozone power supply cooling water. ( )
  - vi.** Water flow meters to monitor the flow of cooling water to the ozone generators and, if necessary, to the ozone power supply. ( )
  - vii.** Ozone monitors to measure ozone concentration in both the feed-gas and off-gas from the contactor and in the off-gas from the destruct unit. For disinfection systems, monitors for monitoring ozone residuals in the water. The number and location of ozone residual monitors must be such that the amount of time that the water is in contact with the ozone residual can be determined. ( )
  - viii.** A minimum of one ambient ozone monitor installed in the vicinity of the contactor and a minimum of one installed in the vicinity of the generator. Ozone monitors must be installed in any areas where ozone gas may accumulate. ( )
- h.** Safety requirements are as follows: ( )
- i.** The maximum allowable ozone concentration in the air to which workers may be exposed must not exceed one-tenth part per million (0.1 ppm) by volume. ( )
  - ii.** Noise levels resulting from the operating equipment of the ozonation system must be controlled to within acceptable limits by special room construction and equipment isolation. ( )
  - iii.** PWS owners must provide emergency exhaust fans in the rooms containing the ozone generators to remove ozone gas if leakage occurs. ( )
  - iv.** PWS owners must post a sign indicating “No smoking, oxygen in use” at all entrances to the treatment plant. In addition, no flammable or combustible materials may be stored within the oxygen generator areas. ( )
- 03. Disinfection with Chlorine Dioxide.** Chlorine dioxide may be considered as a primary and residual disinfectant, a pre-oxidant to control tastes and odors, to oxidize iron and manganese, and to control hydrogen sulfide and phenolic compounds. When choosing chlorine dioxide, consideration must be given to formation of the regulated by-products, chlorite and chlorate. ( )
- a.** Chlorine dioxide generation equipment must be factory assembled pre-engineered units with a minimum efficiency of ninety-five (95) percent. The excess free chlorine may not exceed three (3) percent of the theoretical stoichiometric concentration required. ( )
  - b.** Other design requirements include: ( )

- i. The design must comply with all applicable portions of Subsections 530.01.a. through 530.01.d. ( )
- ii. The maximum residual disinfectant level allowed is zero point eight (0.8) milligrams per liter (mg/l), even for short term exposures. ( )
- iii. Notification of a change in disinfection practices and the schedule for the changes must be made known to the public; particularly to hospitals, kidney dialysis facilities and fish breeders, as chlorine dioxide and its by-products may have effects similar to chloramines. ( )

**04. Other Disinfecting Agents.** Proposals for use of disinfecting agents other than those listed must be submitted to the Department for approval in the preliminary engineering report required under Section 503. ( )

**531. DESIGN STANDARDS FOR CHEMICAL APPLICATION.**

- 01. General Equipment Design.** General equipment design must be such that: ( )
  - a. Feeders will be able to supply, at all times, the necessary amounts of chemicals at an accurate rate, throughout the range of feed. ( )
  - b. Chemical-contact materials and surfaces are resistant to the aggressiveness of the chemical solution. ( )
  - c. Corrosive chemicals are introduced in such a manner as to minimize potential for corrosion. ( )
  - d. Chemicals that are incompatible are not stored or handled together. At facilities where more than one (1) chemical is stored or handled, tanks and pipelines must be clearly labeled to identify the chemical they contain. ( )
  - e. All chemicals are conducted from the feeder to the point of application in separate conduits. ( )
  - f. Chemical feeders are as near as practical to the feed point. ( )
  - g. Chemical feeders and pumps must operate at no lower than twenty percent (20%) of the feed range unless two fully independent adjustment mechanisms such as pump pulse rate and stroke length are fitted, then the pump must operate at no lower than ten percent (10%) of the rated maximum. ( )
  - h. Spare parts must be on hand for parts of feeders that are subject to frequent wear and damage. ( )
  - i. Redundant chemical feeders with automatic switchover must be provided when necessary to ensure adequate treatment. If the water treatment system includes at least two (2) process trains of equipment so that the plant design capacity can be maintained with any component out of service, redundant chemical feeders are not required on each process train. ( )
- 02. Facility Design.** ( )
  - a. Where chemical feed is necessary for the protection of the supply, such as disinfection, coagulation or other essential processes, a minimum of two feeders must be provided and a separate feeder will be used for each chemical applied. ( )
  - b. Chemical application control systems must meet the following requirements: ( )
    - i. Feeders may be manually or automatically controlled, with automatic controls being designed so as

- to allow override by manual controls. ( )
- ii. Chemical feeders will be energized by a flow sensing device so that injection of the chemicals will not continue when the flow of water stops. ( )
  - iii. Automatic proportioning chemical feeders are required where the rate of flow is not reasonably constant. ( )
  - iv. A means to measure water flow must be provided in order to determine chemical feed rates. ( )
  - v. Provisions will be made for measuring the quantities of chemicals used. ( )
  - vi. Weighing scales will be provided for weighing cylinders at all plants utilizing chlorine gas, fluoride solution feed. ( )
  - vii. Weighing scales must be capable of providing reasonable precision in relation to average daily dose. ( )
  - viii. Where conditions warrant, for example with rapidly fluctuating intake turbidity, coagulant and coagulant aid addition may be made according to turbidity, streaming current or other sensed parameter. ( )
- c.** Dry chemical feeders will measure chemicals volumetrically or gravimetrically, provide adequate solution water and agitation of the chemical in the solution pot, and completely enclose chemicals to prevent emission of dust to the operating room. ( )
- d.** Positive displacement type solution feed pumps must be capable of operating at the required maximum head conditions found at the point of injection. ( )
- e.** Liquid chemical feeders must be such that chemical solutions cannot be siphoned or overfed into the water supply, by assuring discharge at a point of positive pressure, or providing vacuum relief, or providing a suitable air gap, or providing other suitable means or combinations as necessary. ( )
- f.** Cross connection control must be provided to assure that the following requirements are satisfied. ( )
- i. The service water lines discharging to solution tanks must be properly protected from backflow. ( )
  - ii. No direct connection exists between any sewer and a drain or overflow from the feeder, solution chamber or tank by providing that all drains terminate at least six (6) inches or two pipe diameters, whichever is greater, above the overflow rim of a receiving sump, conduit or waste receptacle. ( )
- g.** Chemical feed equipment must be readily accessible for servicing, repair, and observation of operation. ( )
- h.** In-plant water supply for chemical mixing must be: ( )
- i. Ample in quantity and adequate in pressure. ( )
  - ii. Provided with means for measurement when preparing specific solution concentrations by dilution. ( )
  - iii. Properly treated for hardness, when necessary. ( )
  - iv. Properly protected against backflow. ( )

- v. Obtained from a location sufficiently downstream of any chemical feed point to assure adequate mixing. ( )
- i. Chemical storage facilities must satisfy the following requirements: ( )
  - i. Storage tanks and pipelines for liquid chemicals must be specified for use with individual chemicals and not used for different chemicals. Off-loading areas must be clearly labeled to prevent accidental cross-contamination. ( )
  - ii. Chemicals will be stored in covered or unopened shipping containers, unless the chemical is transferred into an approved storage unit. ( )
- j. Bulk liquid storage tanks must comply with the following requirements: ( )
  - i. A means which is consistent with the nature of the chemical stored will be provided in a liquid storage tank to maintain a uniform strength of solution. Continuous agitation will be provided to maintain slurries in suspension. ( )
  - ii. Means will be provided to measure the liquid level in the tank. ( )
  - iii. Bulk liquid storage tanks will be kept covered. Bulk liquid storage tanks with access openings will have such openings curbed and fitted with overhanging covers. ( )
  - iv. Subsurface locations for bulk liquid storage tanks will be free from sources of possible contamination, and assure positive drainage for groundwaters, accumulated water, chemical spills and overflows. ( )
  - v. Bulk liquid storage tanks will be vented, but may not vent through vents common with other chemicals or day tanks. Acid storage tanks must be vented to the outside atmosphere, but not through vents in common with other chemicals or day tanks. ( )
  - vi. Each bulk liquid storage tank will be provided with a valved drain, protected against backflow and cross-connections. ( )
  - vii. Bulk liquid storage tanks will have an overflow, when provided, that is turned downward with the end screened with a twenty-four (24) mesh or similar non-corrodible screen, have a free fall discharge, and be located where noticeable. ( )
  - viii. Where chemical feed is necessary for the protection of the supply, a means to assure continuity of chemical supply while servicing a bulk liquid storage tank will be provided. ( )
  - ix. Bulk liquid storage tanks will be provided with secondary containment so that chemicals from equipment failure, spillage, or accidental drainage will not enter the water in conduits, treatment, or storage basins. A common receiving basin may be provided for each group of compatible chemicals. The bulk liquid storage tank basin or the common receiving basin will provide a secondary containment volume sufficient to hold one hundred ten percent (110%) of the volume of the largest storage tank. Piping will be designed to minimize or contain chemical spills in the event of pipe ruptures. ( )
- k. Day tanks will be provided where bulk storage of liquid chemical is provided. However, upon approval by the Department, chemicals may be fed directly from shipping containers no larger than fifty-five (55) gallons. For the purposes of Section 531, day tanks are defined as liquid chemical tanks holding no more than a thirty (30) hour chemical supply. ( )
  - i. Day tanks are subject to the requirements in Subsections 531.02.j.i. through 531.02.j.vii. except shipping containers do not require overflow pipe and drains. ( )
  - ii. Where feasible, secondary containment will be provided so that chemicals from equipment failure,

spillage, or accidental drainage of day tanks will be fully contained. A common receiving basin may be provided for each group of compatible chemicals. The common receiving basin will provide a secondary containment volume sufficient to hold the volume of the largest storage tank. If secondary containment is not feasible, day tanks will be located and protective curbing provided so that chemicals from equipment failure, spillage, or accidental drainage of day tanks will not enter the water in conduits, treatment, or storage basins. Secondary containment is not required for a day tank if an Idaho licensed professional engineer demonstrates to the Department that the chemical concentration and volume, if spilled, will not be a safety hazard to employees, will not be hazardous to the public health, and will not harm the environment. ( )

iii. Day tanks and the tank refilling line entry points will be clearly labeled with the name of the chemical contained. ( )

iv. Filling of day tanks may not be automated unless otherwise approved by the Department. ( )

l. Provisions must be made for measuring quantities of chemicals used to prepare feed solutions. ( )

m. Vents from feeders, storage facilities and equipment exhaust must discharge to the outside atmosphere above grade and remote from air intakes. ( )

**03. Chemicals.** Chemical shipping containers must be fully labeled to include chemical name, purity and concentration, supplier name and address, and evidence of ANSI/NSF certification where applicable. ( )

**04. Safety Requirements for Chemical Facilities.** ( )

a. The following requirements apply to chlorine gas feed and storage rooms: ( )

i. Each storage room will be enclosed and separated from other operating areas. They will be constructed in such a manner that all openings between the chlorine room and the remainder of the plant are sealed, and provided with doors equipped with panic hardware, assuring ready means of exit and opening outward only to the building exterior. ( )

ii. Each room will be provided with a shatter resistant inspection window installed in an interior wall. ( )

iii. Each room will have a ventilating fan with a capacity which provides one (1) complete air change per minute when the room is occupied. Where this is not appropriate due to the size of the room, a lesser rate may be allowed by the Department on a site specific basis. ( )

iv. The ventilating fan will take suction near the floor as far as practical from the door and air inlet, with the point of discharge located as far away as possible from doors, air inlets to any rooms or structures, or occupied areas. Air inlets will be through louvers near the ceiling. ( )

v. Louvers for chlorine room air intake and exhaust will facilitate airtight closure. ( )

vi. Separate switches for the fan and lights will be located outside of the chlorine room and at the inspection window. Outside switches will be protected from vandalism. A signal light indicating fan operation will be provided at each entrance when the fan can be controlled from more than one (1) point. ( )

vii. Vents from feeders and storage will discharge to the outside atmosphere, above grade. ( )

viii. Where provided, floor drains will discharge to the outside of the building and will not be connected to any internal drainage systems or external drainage systems unless the external drainage systems drain to an approved discharge point. ( )

ix. Chlorinator rooms will be heated to sixty degrees Fahrenheit (60°F) and be protected from excessive heat. Cylinders and gas lines will be protected from temperatures above that of the feed equipment. ( )

- x. Pressurized chlorine feed lines may not carry chlorine gas beyond the chlorinator room. ( )
  - xi. Critical isolation valves will be conspicuously marked and access kept unobstructed. ( )
  - xii. All chlorine rooms, buildings, and areas will be posted with a prominent danger sign warning of the presence of chlorine. ( )
  - xiii. Full and empty cylinders of chlorine gas will be isolated from operating areas and stored in definitely assigned places away from elevators, stairs, or gangways. They will be restrained in position to prevent being knocked over or damaged by passing or falling objects. In addition, they will be stored in rooms separate from ammonia storage, out of direct sunlight, and at least twenty (20) feet from highly combustible materials. Cylinders may not be kept in unventilated enclosures such as lockers and cupboards. ( )
  - b. Where acids and caustics are used, they must be kept in closed corrosion-resistant shipping containers or storage units. Acids and caustics may not be handled in open vessels, but will be pumped in undiluted form from original containers through suitable hose to the point of treatment or to a covered day tank. ( )
  - c. Proposals for the storage and use of sodium chlorite must be approved by the Department prior to the preparation of final plans and specifications. Provisions must be made for proper storage and handling of sodium chlorite to eliminate any danger of fire or explosion associated with its oxidizing nature. ( )
  - i. Chlorite (sodium chlorite) will be stored by itself in a separate room. It must be stored away from organic materials. The storage structure will be constructed of noncombustible materials. If the storage structure must be located in an area where a fire may occur, water must be available to keep the sodium chlorite area cool enough to prevent heat-induced explosive decomposition of the chlorite. ( )
  - ii. Care will be taken to prevent spillage. An emergency plan of operation will be available for the clean up of any spillage. Storage drums will be thoroughly flushed prior to recycling or disposal. ( )
  - d. Where ammonium hydroxide is used, an exhaust fan must be installed to withdraw air from high points in the room and makeup air must be allowed to enter at a low point. The feed pump, regulators, and lines must be fitted with pressure relief vents discharging outside the building away from any air intake and with water purge lines leading back to the headspace of the bulk storage tank. ( )
  - e. Where anhydrous ammonia is used, the storage and feed systems (including heaters where required) must be enclosed and separated from other work areas and constructed of corrosion resistant materials. ( )
  - i. Pressurized ammonia feed lines will be restricted to the ammonia room. ( )
  - ii. An emergency air exhaust system, as described in Subsection 531.04.a., but with an elevated intake, must be provided in the ammonia storage room. ( )
  - iii. Leak detection systems must be fitted in all areas through which ammonia is piped. ( )
  - iv. Special vacuum breaker/regulator provisions must be made to avoid potentially violent results of backflow of water into cylinders or storage tanks. ( )
  - v. Consideration must be given to the provision of an emergency gas scrubber capable of absorbing the entire contents of the largest ammonia storage unit whenever there is a risk to the public as a result of potential ammonia leaks. ( )
- 05. Operator Safety.** The Idaho General Safety and Health Standards, referenced in Subsection 002.02, may be used as guidance in designing facilities to ensure the safety of operators. Facilities must meet applicable regulations from the Occupational Health and Safety Administration. ( )

**06. Design Requirements for Specific Applications.** In addition to Subsection 531.01 through 531.03, the following design requirements apply for the specific applications within Subsection 531.06 of this rule. ( )

**a.** Positive displacement feeders will be provided for sodium chlorite used for chlorine dioxide generation. Tubing for conveying sodium chlorite or chlorine dioxide solutions must be Type 1 PVC, polyethylene or materials recommended by the manufacturer. Chemical feeders may be installed in chlorine rooms if sufficient space is provided. Otherwise, facilities meeting the requirements of chlorine rooms will be provided. Feed lines will be installed in a manner to prevent formation of gas pockets and will terminate at a point of positive pressure. Check valves will be provided to prevent the backflow of chlorine into the sodium chlorite line. ( )

**b.** Hypochlorite facilities must meet the following requirements: ( )

**i.** Hypochlorite will be stored in the original shipping containers or in hypochlorite compatible containers. Storage containers or tanks will be sited out of the sunlight in a cool and ventilated area. ( )

**ii.** Stored hypochlorite will be pumped undiluted to the point of addition. Where dilution is unavoidable, deionized or softened water will be used unless otherwise approved by the Department. ( )

**iii.** Storage areas, tanks, and pipe work will be designed to avoid the possibility of uncontrolled discharges and a sufficient amount of appropriately selected spill absorbent will be stored on-site. ( )

**iv.** Hypochlorite feeders will be positive displacement pumps with compatible materials for wetted surfaces. ( )

**v.** To avoid air locking in smaller installations, small diameter suction lines will be used with foot valves and degassing pump heads. In larger installations flooded suction will be used with pipe work arranged to ease escape of gas bubbles. Calibration tubes or mass flow monitors which allow for direct physical checking of actual feed rates will be fitted. ( )

**vi.** Injectors will be made removable for regular cleaning where hard water is to be treated. ( )

**c.** When ammonium sulfate is used, the tank and dosing equipment contact surfaces must be made of corrosion resistant non-metallic materials. Provision will be made for removal of the agitator after dissolving the solid. The tank will be fitted with a lid and vented outdoors. Injection of the solution will take place in the center of treated water flow at a location where there is high velocity movement. ( )

**d.** When aqua ammonia (ammonium hydroxide) is used, the feed pumps and storage will be enclosed and separated from other operating areas. The aqua ammonia room will be equipped as required for chlorinator rooms with the following changes: ( )

**i.** A corrosion resistant, closed, unpressurized tank will be used for bulk storage, vented through an inert liquid trap to a high point outside and an incompatible connector, or lockout provisions will be made to prevent accidental addition of other chemicals to the storage tank. ( )

**ii.** The storage tank will be designed to avoid conditions where temperature increases cause the ammonia vapor pressure over the aqua ammonia to exceed atmospheric pressure. This capability can be provided by cooling/refrigeration or diluting or mixing the contents with water without opening the system. ( )

**iii.** The aqua ammonia will be conveyed direct from storage to the treated water stream injector without the use of a carrier water stream unless the carrier stream is softened. ( )

**iv.** The point of delivery to the main water stream will be placed in a region of turbulent water flow. ( )

**v.** Provisions will be made for easy access for removal of calcium scale deposits from the injector. ( )

**532. DESIGN STANDARDS FOR SOFTENING.**

The softening process selected must be based upon the mineral qualities of the raw water and the desired finished water quality in conjunction with requirements for disposal of sludge or brine waste (see Section 540), cost of plant, cost of chemicals, and plant location. Applicability of the process chosen must be demonstrated. ( )

**01. Lime or Lime-Soda Process.** Rapid mix, flocculation, and sedimentation processes must meet the requirements of Section 520. In addition the following requirements must be met: ( )

**a.** When split treatment is used, an accurate means of measuring and splitting the flow must be provided. ( )

**b.** Rapid mix basins must provide not more than thirty (30) seconds detention time with adequate velocity gradients to keep the lime particles dispersed. ( )

**c.** Equipment for stabilization of water softened by the lime or lime-soda process is required, see Section 537. ( )

**d.** Mechanical sludge removal equipment will be provided in the sedimentation basin. ( )

**e.** Provisions must be included for proper disposal of softening sludges; see Section 540. ( )

**f.** The plant processes must be manually started following shut-down. ( )

**02. Cation Exchange Process.** ( )

**a.** Pre-treatment is required when the content of iron, manganese, or a combination of the two, is one milligram per liter (1 mg/L) or more. ( )

**b.** The units may be of pressure or gravity type, of either an upflow or downflow design. Automatic regeneration based on volume of water softened will be used unless manual regeneration is justified and is approved by the Department. A manual override will be provided on all automatic controls. ( )

**c.** Rate-of-flow controllers or the equivalent will be used to control the hydraulic loading of cation exchange units. ( )

**d.** The bottoms, strainer systems and support for the exchange resin will conform to the criteria provided for rapid rate gravity filters in Section 521. ( )

**e.** Backwash, rinse and air relief discharge pipes will be installed in such a manner as to prevent any possibility of back-siphonage. ( )

**f.** A bypass must be provided around softening units to produce a blended water of desirable hardness. Totalizing meters must be installed on the bypass line and on each softener unit. The bypass line must have a shutoff valve. ( )

**g.** When the applied water contains a chlorine residual, the cation exchange resin must be a type that is not damaged by residual chlorine. ( )

**h.** Smooth-nose sampling taps must be provided for the collection of representative samples. The taps will be located to provide for sampling of the softener influent, effluent, blended water, and on the brine tank discharge piping. The sampling taps for the blended water will be at least twenty (20) feet downstream from the point of blending. Petcocks are not acceptable as sampling taps. ( )

**i.** Brine and salt storage tanks must meet the following requirements: ( )

**i.** Salt dissolving or brine tanks and wet salt storage tanks must be covered and must be corrosion-



- resistant. ( )
- ii. The make-up water inlet must be protected from back-siphonage. ( )
  - iii. Wet salt storage basins must be equipped with manholes or hatchways for access and for direct dumping of salt from truck or rail car. Openings must be provided with raised curbs and watertight covers having overlapping edges similar to those required for finished water reservoirs. ( )
  - iv. Overflows, where provided, must be protected with twenty-four (24) mesh or similar non-corrodible screens, and must terminate with either a turned down bend having a proper free fall discharge or a self-closing flap valve. ( )
  - v. The salt will be supported on graduated layers of gravel placed over a brine collection system. ( )
  - vi. Alternative designs which are conducive to frequent cleaning of the wet salt storage tank may be considered. ( )
  - vii. An eductor may be used to transfer brine from the brine tank to the softeners. If a pump is used, a brine measuring tank or means of metering will be provided to obtain the proper dilution. ( )
  - j. Suitable disposal must be provided for brine waste; see Section 540. Where the volume of spent brine must be reduced, consideration may be given to using a part of the spent liquid concentrate for a subsequent regeneration. ( )
  - k. Pipes and contact materials must be resistant to the aggressiveness of salt. Plastic and red brass are acceptable piping materials. Steel and concrete must be coated with a non-leaching protective coating which is compatible with salt and brine. ( )
  - l. Bagged salt and dry bulk salt storage will be enclosed and separated from other operating areas in order to prevent damage to equipment. ( )

**533. DESIGN STANDARDS FOR TASTE AND ODOR CONTROL.**

Provision must be made for the control of taste and odor. Chemicals must be added sufficiently ahead of other treatment processes to assure adequate contact time for an effective and economical use of the chemicals. Where severe taste and odor problems are encountered, in-plant studies, pilot plant studies, or both in-plant and pilot plant studies may be required in accordance with Subsection 501.19. ( )

**01. Chlorination.** When using chlorination as a method of taste and odor control adequate contact time must be provided to complete the chemical reactions involved. ( )

**02. Chlorine Dioxide.** Provisions must be made for proper storing and handling of the sodium chlorite, so as to eliminate any danger of explosion. ( )

**03. Powdered Activated Carbon.** ( )

**a.** The PWS owner can add carbon as a pre-mixed slurry or by means of a dry-feed machine as long as the carbon is properly wetted. ( )

**b.** Continuous agitation or resuspension equipment is necessary to keep the carbon from depositing in the slurry storage tank. ( )

**c.** The PWS owner must provide for adequate dust control. ( )

**d.** The PWS owner must handle powdered activated carbon as a potentially combustible material. ( )

**04. Granular Activated Carbon.** Replacement of anthracite with GAC may be considered as a control measure for geosmin and methylisoborneol (MIB) taste and odors from algae blooms in surface water applications. Demonstration studies are required by the Department. ( )

**05. Copper Sulfate and Other Copper Compounds.** Continuous or periodic treatment of surface water with copper compounds to kill algae or other growths must be controlled to prevent copper in excess of one point zero (1.0) milligrams per liter as copper in the plant effluent or distribution system. Care must be taken to assure an even distribution of the chemical within the treatment area. ( )

**06. Potassium Permanganate.** Application of potassium permanganate may be considered, providing the treatment will be designed so that the products of the reaction are not visible in the finished water. ( )

**07. Ozone.** Ozonation may be used as a means of taste and odor control. Adequate contact time must be provided to complete the chemical reactions involved. ( )

**08. Other Methods.** Other methods of taste and odor control may be made only after pilot plant tests and approval of the Department. ( )

**534. AERATION PROCESSES.**

PWS owners that install aeration treatment are subject to IDAPA 58.01.01, "Rules for the Control of Air Pollution in Idaho." The PWS owner or the design engineer must contact one of the Department's regional offices for information on obtaining a permit or an exemption for the emissions resulting from the aeration process. General information may be found on the Department website <http://www.deq.idaho.gov>. ( )

**01. Natural Draft Aeration.** Design must provide: ( )

**a.** Perforations in the distribution pan three sixteenths to one-half ( $3/16 - 1/2$ ) inches in diameter, spaced one to three (1-3) inches on centers to maintain a six (6) inch water depth. ( )

**b.** Distribution of water uniformly over the top tray. ( )

**c.** Discharge through a series of three (3) or more trays with separation of trays not less than twelve (12) inches. ( )

**d.** Loading at a rate of one to five (1-5) gallons per minute for each square foot of total tray area. ( )

**e.** Trays with slotted, heavy wire (1/2 inch openings) mesh or perforated bottoms. ( )

**f.** Construction of durable material resistant to aggressiveness of the water and dissolved gases. ( )

**g.** Protection from insects by twenty-four (24) mesh or similar non-corrodible screen. ( )

**02. Forced or Induced Draft Aeration.** Design must provide: ( )

**a.** Include a blower with a weatherproof motor in a tight housing and screened enclosure. ( )

**b.** Ensure adequate counter current of air through the enclosed aerator column. ( )

**c.** Exhaust air directly to the outside atmosphere. ( )

**d.** Include a down-turned and twenty-four (24) mesh or similar non-corrodible screened air outlet and inlet. ( )

**e.** Be such that air introduced in the column will be as free from obnoxious fumes, dust, and dirt as possible. ( )

- f. Be such that sections of the aerator can be easily reached or removed for maintenance of the interior or installed in a separate aerator room. ( )
- g. Provide loading at a rate of one to five (1-5) gallons per minute for each square foot of total tray area. ( )
- h. Ensure that the water outlet is adequately sealed to prevent unwarranted loss of air. ( )
- i. Discharge through a series of five (5) or more trays with separation of trays not less than six (6) inches or as approved by the Department. ( )
- j. Provide distribution of water uniformly over the top tray. ( )
- k. Be of durable material resistant to the aggressiveness of the water and dissolved gases. ( )
- 03. Spray Aeration.** Design must provide: ( )
  - a. A hydraulic head of between five (5) and twenty-five (25) feet. ( )
  - b. Nozzles, with the size, number, and spacing of the nozzles being dependent on the flowrate, space, and the amount of head available. ( )
  - c. Nozzle diameters in the range of one (1) to one and one-half (1.5) inches to minimize clogging. ( )
  - d. An enclosed basin to contain the spray. Any openings for ventilation must be protected with a twenty-four (24) mesh or similar non-corrodible screen. ( )
- 04. Pressure Aeration.** Pressure aeration may be used for oxidation purposes only if the pilot plant study indicates the method is applicable; it is not acceptable for removal of dissolved gases. Filters following pressure aeration must have adequate exhaust devices for release of air. Pressure aeration devices must be designed to give thorough mixing of compressed air with water being treated and provide twenty-four (24) mesh or similar non-corrodible screened and filtered air, free of obnoxious fumes, dust, dirt and other contaminants. ( )
- 05. Packed Tower Aeration.** Packed tower aeration may be used for the removal of volatile organic chemicals, trihalomethanes, carbon dioxide, and radon. Final design must be based on the results of pilot studies and be approved by the Department. ( )
  - a. Process design criteria. ( )
    - i. Justification for the design parameters selected (i.e., height and diameter of unit, air to water ratio, packing depth, surface loading rate, etc.) must be provided to the Department for review. The pilot study must evaluate a variety of loading rates and air to water ratios at the peak contaminant concentration. Special consideration will be given to removal efficiencies when multiple contaminations occur. Where there is considerable past performance data on the contaminant to be treated and there is a concentration level similar to previous projects, the Department may approve the process design based on use of appropriate calculations without a pilot study. ( )
    - ii. The tower must be designed to reduce contaminants to below the maximum contaminant level and to the lowest practical level. ( )
    - iii. The type and size of the packing used in the full scale unit must be the same as that used in the pilot study. ( )
    - iv. The maximum air to water ratio for which credit will be given is 80:1. ( )
    - v. The design must consider potential fouling problems from calcium carbonate and iron precipitation

and from bacterial growth. It may be necessary to provide pretreatment. Disinfection capability will be provided prior to and after packed tower aeration. ( )

vi. The effects of temperature must be considered. ( )

vii. Redundant packed tower aeration capacity at the design flowrate will be provided. ( )

**b.** The tower may be constructed of stainless steel, concrete, aluminum, fiberglass or plastic. Uncoated carbon steel is not allowed. Towers constructed of light-weight materials must be provided with adequate support to prevent damage from wind. Packing materials must be resistant to the aggressiveness of the water, dissolved gases and cleaning materials and must be suitable for contact with potable water. ( )

**c.** Water flow system. ( )

i. Water must be distributed uniformly at the top of the tower using spray nozzles or orifice-type distributor trays that prevent short circuiting. ( )

ii. A mist eliminator must be provided above the water distributor system. ( )

iii. A side wiper redistribution ring must be provided at least every ten (10) feet in order to prevent water channeling along the tower wall and short circuiting. ( )

iv. Sample taps must be provided in the influent and effluent piping. The sample taps must satisfy the requirements of Subsection 501.09. ( )

v. The effluent sump, if provided, must have easy access for cleaning purposes and be equipped with a drain valve. The drain may not be connected directly to any storm or sanitary sewer. ( )

vi. The design must prevent freezing of the influent riser and effluent piping when the unit is not operating. ( )

vii. The water flow to each tower must be metered. ( )

viii. An overflow line must be provided which discharges twelve (12) to fourteen (14) inches above a splash pad or drainage inlet. Proper drainage must be provided to prevent flooding of the area. ( )

ix. Means must be provided to prevent flooding of the air blower. ( )

**d.** Air flow system. ( )

i. The air inlet to the blower and the tower discharge vent must be down-turned and protected with a non-corrodible twenty-four (24) mesh screen to prevent contamination from extraneous matter. ( )

ii. The air inlet must be in a protected location. ( )

iii. An air flow meter must be provided on the influent air line or an alternative method to determine the air flow will be provided. ( )

iv. A positive air flow sensing device and a pressure gauge must be installed on the air influent line. The positive air flow sensing device must be a part of an automatic control system which will turn off the influent water if positive air flow is not detected. The pressure gauge will serve as an indicator of fouling buildup. ( )

v. A backup motor for the air blower must be readily available. ( )

**e.** Other features that must be provided: ( )

i. A sufficient number of access ports with a minimum diameter of twenty-four (24) inches to

- facilitate inspection, media replacement, media cleaning and maintenance of the interior. ( )
- ii. A method of cleaning the packing material when iron, manganese, or calcium carbonate fouling may occur. ( )
  - iii. Tower effluent collection and pumping wells constructed to clearwell standards. ( )
  - iv. Provisions for extending the tower height without major reconstruction. ( )
  - v. No bypass may be provided unless specifically approved by the Department. ( )
  - vi. Disinfection and adequate contact time after the water has passed through the tower and prior to the distribution system. ( )
  - vii. Adequate packing support to allow free flow of water and to prevent deformation with deep packing heights. ( )
  - viii. Operation of the blower and disinfectant feeder equipment during power failures. ( )
  - ix. Adequate foundation to support the tower and lateral support to prevent overturning due to wind loading. ( )
  - x. Fencing and locking gate to prevent vandalism. ( )
  - xi. An access ladder with safety cage for inspection of the aerator including the exhaust port and demister. ( )
  - xii. Electrical interconnection between blower, disinfectant feeder and supply pump. ( )

**06. Other Methods of Aeration.** Other methods of aeration may be used if applicable to the treatment needs. Such methods include but are not restricted to spraying, diffused air, cascades and mechanical aeration. The treatment processes are subject to the approval of the Department. ( )

**07. Protection of Aerators.** All aerators except those discharging to lime softening or clarification plants must be protected from contamination by birds, insects, wind borne debris, rainfall and water draining off the exterior of the aerator. ( )

**08. Disinfection.** Groundwater supplies exposed to the atmosphere by aeration must receive disinfection as described in Section 530 as the minimum additional treatment. ( )

**535. DESIGN STANDARDS FOR IRON AND MANGANESE CONTROL SYSTEMS.**

Iron and manganese control, as used herein, refers solely to treatment processes designed specifically for this purpose. The treatment process used will depend upon the character of the raw water. The selection of one (1) or more treatment processes must meet specific local conditions as determined by engineering investigations, including chemical analyses of representative samples of water to be treated, and receive the approval of the Department. The Department may require a pilot plant study in order to gather all information pertinent to the design in accordance with Subsection 501.19. ( )

**01. Removal by Oxidation, Detention and Filtration.** ( )

**a.** Oxidation may be by aeration or by chemical oxidation with chlorine, potassium permanganate, ozone or chlorine dioxide. ( )

**b.** Detention time: ( )

**i.** A minimum detention time of thirty (30) minutes must be provided following aeration to ensure that the oxidation reactions are as complete as possible. This minimum detention may be omitted only where a pilot

plant study indicates no need for detention. The detention basin may be designed as a holding tank without provisions for sludge collection but with sufficient baffling to prevent short circuiting. ( )

ii. Sedimentation basins must be provided when treating water with high iron or manganese content, or where chemical coagulation is used to reduce the load on the filters. Provisions for sludge removal must be made. ( )

c. Rapid rate pressure filters are normally used for iron and manganese removal. Pressure filters may not be used in the filtration of surface or other polluted waters or following lime-soda softening. ( )

i. The rate of filtration may not exceed three (3) gallons per minute per square foot of filter area except where in-plant testing as approved by the Department has demonstrated satisfactory results at higher rates. ( )

ii. The filters must be designed to provide for: ( )

(1) Loss of head gauges on the inlet and outlet pipes of each battery of filters. ( )

(2) An easily readable meter or flow indicator on each battery of filters. ( )

(3) Filtration and backwashing of each filter individually with an arrangement of piping as simple as possible to accomplish these purposes. ( )

(4) Minimum side wall shell height of five (5) feet. A corresponding reduction in side wall height is acceptable where proprietary bottoms permit reduction of the gravel depth. ( )

(5) The top of the wash water collectors to be at least eighteen (18) inches above the surface of the media, ( )

(6) The underdrain system to efficiently collect the filtered water and to uniformly distribute the backwash water at a rate not less than fifteen (15) gallons per minute per square foot of filter area. ( )

(7) Backwash flow indicators and controls that are easily readable while operating the control valves. ( )

(8) An air release valve on the highest point of each filter. ( )

(9) An accessible manhole to facilitate inspection and repairs for filters thirty-six (36) inches or more in diameter. Sufficient handholds will be provided for filters less than thirty-six (36) inches in diameter. ( )

(10) A means to observe the wastewater during backwashing and construction to prevent cross connection. ( )

**02. Removal by Manganese Coated Media Filtration.** This process consists of a continuous or batch feed of potassium permanganate to the influent of a manganese coated media filter. ( )

a. Other oxidizing agents or processes such as chlorination or aeration may be used prior to the permanganate feed to reduce the cost of the chemical. ( )

b. An anthracite media cap of at least six (6) inches or more as required by the Department must be provided over manganese coated media. ( )

c. Normal filtration rate must be three (3) gallons per minute per square foot. ( )

d. Normal wash rate will be eight (8) to ten (10) gallons per minute per square foot with manganese greensand and fifteen (15) to twenty (20) gallons per minute with manganese coated media. ( )

e. Sample taps must be provided prior to application of permanganate, immediately ahead of filtration, at points between the anthracite media, and at the filter effluent. The sample taps must satisfy the requirements of Subsection 501.09. ( )

**03. Removal by Ion Exchange.** This process is not acceptable where either the raw water or wash water contains dissolved oxygen or other oxidants. ( )

**04. Biological Removal.** Biofiltration to remove manganese, iron, or a combination of manganese and iron requires on-site piloting testing to establish effectiveness. The final filter design must be based on the on-site pilot plant studies. ( )

**05. Sequestration by Polyphosphates.** This process may not be used when iron, manganese or a combination thereof exceeds one point zero (1.0) mg/l. The total phosphate applied must not exceed ten (10) mg/l as PO<sub>4</sub>. Where phosphate treatment is used, satisfactory chlorine residuals must be maintained in the distribution system. Possible adverse affects on corrosion must be addressed when phosphate addition is proposed for iron sequestering. ( )

a. Stock phosphate solution must be kept covered and disinfected by carrying approximately ten (10) mg/l free chlorine residual unless it is demonstrated to the satisfaction of the Department that the phosphate solution is not able to support bacterial growth and the phosphate solution is being fed from the covered shipping container or an approved disinfected tank. Phosphate solutions having a pH of two point zero (2.0) or less may also be exempted from this requirement by the Department. ( )

b. Polyphosphates may not be applied ahead of iron and manganese removal treatment. The point of application must be prior to any aeration, oxidation or disinfection if no iron or manganese removal treatment is provided. ( )

**06. Sequestration by Sodium Silicates.** Sodium silicate sequestration of iron and manganese is allowed only for groundwater supplies prior to air contact. On-site pilot studies are required to determine the suitability of sodium silicate for the particular water and the minimum feed needed. Rapid oxidation of the metal ions such as by chlorine or chlorine dioxide must accompany or closely precede the sodium silicate addition. ( )

a. Sodium silicate addition is applicable to waters containing up to two (2) mg/l of iron, manganese or combination thereof. ( )

b. Chlorine residuals must be maintained throughout the distribution system to prevent biological breakdown of the sequestered iron. ( )

c. The amount of silicate added must be limited to twenty (20) mg/l as SiO<sub>2</sub>, but the amount of added and naturally occurring silicate may not exceed sixty (60) mg/l as SiO<sub>2</sub>. ( )

d. Sodium silicate must not be applied ahead of iron or manganese removal treatment. ( )

**07. Sampling Taps.** Smooth-nosed sampling taps must be provided for control purposes. Taps will be located on each raw water source, each treatment unit influent and each treatment unit effluent. The sample taps must satisfy the requirements of Subsection 501.09. ( )

**536. DESIGN STANDARDS FOR FLUORIDATION.**

**01. Chemical Feed Equipment and Methods.** In addition to the requirements in Section 531, fluoride feed equipment must meet the following requirements: ( )

a. Scales, loss-of-weight recorders or liquid level indicators, as appropriate, accurate to within five (5) percent of the average daily change in reading will be provided for chemical feeds. ( )

b. The accuracy of chemical feeders used for fluoridation will be plus or minus five (5) percent of the intended dose. ( )

- c. Unsealed storage units for fluorosilicic acid will be vented to the atmosphere at a point outside any building. ( )
- d. Fluoride compound may not be added before lime-soda softening or ion exchange softening. ( )
- e. The point of application of fluorosilicic acid, if into a horizontal pipe, will be in the lower half of the pipe. ( )
- f. A fluoride solution will be applied by a positive displacement pump having a stroke rate not less than twenty (20) strokes per minute, and at a feed rate not less than twenty (20) percent of the rated capacity of the feed pump. ( )
- g. A spring opposed diaphragm type anti-siphon device will be provided for all fluoride feed lines and dilution water lines. ( )
- h. Except for constant flow systems, a device to measure the flow of water to be treated is required. ( )
- i. The dilution water pipe will terminate at least two (2) pipe diameters above the solution tank. ( )
- j. Water used for sodium fluoride dissolution will be softened if hardness exceeds seventy-five (75) mg/l as calcium carbonate. ( )
- k. Fluoride solutions will be injected at a point of continuous positive pressure or a suitable air gap provided. ( )
- l. The electrical outlet used for the fluoride feed pump will be interconnected with the well or service pump. ( )
- m. Consideration will be given to providing a separate room for fluorosilicic acid storage and feed. ( )

**02. Secondary Controls.** Secondary control systems for fluoride chemical feed devices must be provided as a means of reducing the possibility for overfeed; these may include flow or pressure switches or other devices. ( )

**03. Dust Control.** Provision must be made for the transfer of dry fluoride compounds from shipping containers to storage bins or hoppers in such a way as to minimize the quantity of fluoride dust which may enter the room in which the equipment is installed. The enclosure must be provided with an exhaust fan and dust filter which places the hopper under a negative pressure. Air exhausted from fluoride handling equipment must discharge through a dust filter to the outside atmosphere of the building. ( )

**537. DESIGN STANDARDS FOR STABILIZATION.**

Water that is unstable due either to natural causes or to subsequent treatment must be stabilized. The expected treated water quality will be evaluated to determine what, if any, treatment is necessary. ( )

**01. Carbon Dioxide Addition.** ( )

- a. Recarbonation basin design must provide the following: ( )
  - i. A total detention time of twenty (20) minutes. ( )
  - ii. A mixing compartment having a detention time of at least three (3) minutes. ( )



- iii. A reaction compartment. ( )
- iv. The mixing and reaction compartments will have a depth sufficient to provide a diffuser submergence of not less than seven and one-half (7.5) feet and no greater than the manufacturer's recommendation. ( )
- b. Where liquid carbon dioxide is used, adequate precautions must be taken to prevent carbon dioxide from entering the plant from the recarbonation process. ( )
- c. Recarbonation tanks must be located outside or be sealed and vented to the outside with adequate seals and adequate purge flow of air to ensure workers safety. ( )
- d. Provisions must be made for draining the recarbonation basin and removing sludge. ( )
- 02. Phosphates.** The feeding of phosphates may be used for sequestering calcium, for corrosion control, and in conjunction with alkali feed following ion exchange softening. ( )
- a. Stock phosphate solution must be kept covered and disinfected by carrying approximately ten (10) mg/l free chlorine residual unless the phosphate is not able to support bacterial growth and the phosphate is being fed from the covered shipping container. Phosphate solutions having a pH of two point zero (2.0) or less are exempted from this requirement. ( )
- b. Satisfactory chlorine residuals must be maintained in the distribution system when phosphates are used. ( )
- 03. Split Treatment.** Raw water may be blended with lime-softened water to partially stabilize the water prior to secondary clarification and filtration. Treatment plants designed to utilize split treatment must also contain facilities for further stabilization by other methods. ( )
- 04. Water Unstable Due to Biochemical Action in Distribution System.** Unstable water resulting from the bacterial decomposition of organic matter in water (especially in dead end mains), the biochemical action within tubercles, and the reduction of sulfates to sulfides must be prevented by the maintenance of a free or combined chlorine residual throughout the distribution system. ( )

**538. – 539. (RESERVED)**

**540. DESIGN STANDARDS FOR TREATMENT AND DISPOSAL OF TREATMENT PLANT WASTE RESIDUALS.**

PWS owners must provide proper disposal of water treatment plant waste such as sanitary, laboratory, clarification sludge, softening sludge, iron sludge, filter backwash water, and liquid concentrates. In locating waste disposal facilities, due consideration must be given to preventing potential contamination of the water supply. ( )

**01. Sanitary Waste.** The sanitary waste from water treatment plants, pumping stations, and other waterworks installations must receive treatment. Waste from these facilities must be discharged directly to a sanitary sewer system, when available and feasible, or to an adequate on-site waste treatment facility approved under the provisions of IDAPA 58.01.03, "Individual/Subsurface Sewage Disposal Rules." ( )

**02. Liquid Concentrates.** ( )

a. Waste from ion exchange plants, demineralization plants, reverse osmosis, on-site chlorine generators, red water filters, or other plants which produce liquid concentrates may be disposed of by the following methods: ( )

i. Liquid concentrates that contain radionuclides must be further treated to remove the radioactive constituents as sludge. See Subsection 540.03.e. for disposal requirements for sludge that contains radionuclides. The residual liquids from which radionuclides have been removed may be disposed of in accordance with Subsections 540.02.a.ii. through 540.02.a.iv. ( )

ii. Controlled discharge to a stream or other receiving water body if a surface water discharge permit has been issued by the applicable permitting authority and limits and conditions of discharge permit can be reasonably met. ( )

iii. Liquid concentrates may be discharged to a sanitary sewer, if available and feasible. Acceptance of such waste must be approved by the sewer authority. ( )

iv. Subsurface disposal, land application, or total containment lagoons may be considered for liquid concentrate when in compliance with IDAPA 58.01.16, "Wastewater Rules." Untreated liquid concentrates may not be permitted for subsurface or land application unless otherwise approved by the Department and in accordance with IDAPA 58.01.03, "Individual/Subsurface Sewage Disposal Rules" for subsurface disposal or IDAPA 58.01.17, "Recycled Water Rules" for land application. ( )

b. If the nature of the liquid concentrate causes it to be ineligible for permitted discharge as described in Subsection 540.02.a., further onsite treatment of the liquid concentrate may be required in order to produce sludge and liquid waste that will meet the permit criteria for one (1) or more of the disposal options. ( )

c. If sand filters are used to treat the waste filter wash water, red water, from iron and manganese removal plants, they must have the following features: ( )

i. Total filter area sufficient to adequately dewater applied solids. Unless the filter is small enough to be cleaned and returned to service in one (1) day, two (2) or more cells are required. ( )

ii. Sufficient capacity to contain, above the level of the sand, the entire volume of wash water produced by washing all of the production filters in the plant, unless the production filters are washed on a rotating schedule and the flow through the production filters is regulated by true rate of flow controllers. Sufficient volume will be provided to dispose of the wash water involved. ( )

iii. Provisions for covering the filters during winter months where freezing is a problem. ( )

**03. Sludge Waste.** Sludge is the solid waste resulting from coagulation, precipitation, or passive settling of liquid concentrates. Depending on composition, liquids remaining after sludge removal may be disposed of by methods described in Subsection 540.02, recycled through the treatment plant, or may be pure enough to be unregulated. The following methods of treatment and disposal apply to sludge: ( )

a. Precipitative Softening Sludge. ( )

i. At least two (2) temporary storage lagoons must be provided in order to give flexibility in operation. Provisions must be made for convenient cleaning. An acceptable means of final sludge disposal must be provided. ( )

ii. Liquid or dewatered precipitative softening sludge may be applied to farm land if heavy metals or other contaminants do not exceed the requirements of IDAPA 58.01.02, "Water Quality Standards." ( )

iii. Dewatered precipitative softening sludge may be disposed of in a sanitary landfill in accordance with the requirements of IDAPA 58.01.06, "Solid Waste Management Rules." Acceptance of such waste is at the discretion of the landfill authority. ( )

b. Alum or Ferric Sludge. ( )

i. Temporary storage lagoons must contain at least two (2) compartments to facilitate independent filling and dewatering operations. Mechanical concentration may be considered. If mechanical dewatering is used, it must be preceded by sludge concentration and chemical pre-treatment. A pilot plant study is required before the design of a mechanical dewatering installation in accordance with Subsection 501.19. ( )

ii. Alum or ferric sludge may be discharged to a sanitary sewer if available and feasible. Acceptance

of such waste must be approved by the sewer authority. ( )

iii. Dewatered alum or ferric sludge may be disposed of in a sanitary landfill in accordance with the requirements of IDAPA 58.01.06, "Solid Waste Management Rules." Acceptance of such waste is at the discretion of the landfill authority. ( )

iv. Alum or ferric sludge may be disposed of by land application if the permitting requirements of IDAPA 58.01.02, "Water Quality Standards," and IDAPA 58.01.17, "Recycled Water Rules," are met. ( )

v. Water removed from alum or ferric sludge may be disposed of in the same manner as liquid concentrates, as described in Subsection 540.02. ( )

**c. Filter Backwash Sludge.** ( )

i. Recycling is permitted if the backwash waters are returned to the head of the treatment plant or another entry point if supported by engineering studies. Backwash water will be held for a sufficient time prior to recycling to allow solids to settle out. ( )

ii. Dewatered sludge from backwash water clarification processes may be disposed of in a sanitary landfill in accordance with the requirements of IDAPA 58.01.06, "Solid Waste Management Rules." Acceptance of such waste must be approved by the landfill authority. ( )

**d. Waste residuals containing radioactive substances, including, but not limited to granular activated carbon used for radon removal or ion-exchange regeneration waste from uranium removal, must be disposed of in accordance with IDAPA 58.01.10, "Rules Regulating the Disposal of Radioactive Materials Not Regulated Under The Atomic Energy Act of 1954, As Amended."** ( )

i. The buildup of radioactive materials such as uranium or radon and its decay products must be considered and adequate shielding and safeguards will be provided for operators and visitors. ( )

ii. Waste residuals containing naturally occurring radioactive materials that have been concentrated by human activities must be disposed of in an approved hazardous waste landfill (Class D), in accordance with the IDAPA 58.01.10, "Rules Regulating the Disposal of Radioactive Materials not Regulated Under the Atomic Energy Act of 1954, as Amended," and IDAPA 58.01.06, "Solid Waste Management Rules." ( )

iii. Waste residuals containing greater than point zero five (.05) percent by weight of uranium are subject to licensing and disposal under the regulations of the U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, TX 76011, Phone 817-860-8299. ( )

**e. Solid waste residuals containing arsenic at a concentration less than five (5) mg/l may be disposed of at a sanitary landfill if permitted under IDAPA 58.01.06, "Solid Waste Management Rules." Solid waste containing arsenic at a concentration greater than five (5) mg/l must be disposed of at an approved hazardous waste landfill. Liquid wastes generated by arsenic treatment processes are subject to the handling and disposal requirements for liquid concentrates, as discussed under Subsection 540.02.** ( )

**04. Spent Media.** Exhausted ion exchange media, adsorption media, disposable filters, and other components of treatment processes that contain concentrated contaminants must be disposed of in accordance with IDAPA 58.01.06, "Solid Waste Management Rules," or IDAPA 58.01.10, "Rules Regulating the Disposal of Radioactive Materials not Regulated Under the Atomic Energy Act of 1954, as Amended." ( )

#### **541. PUMPING FACILITIES.**

Pumping facilities must be designed to maintain the sanitary quality of pumped water. ( )

**01. Pump Houses.** Unless otherwise approved by the Department, pump house components must be located above-grade. The following requirements apply to pump houses as defined in Section 003 unless it can be shown that some or all of these requirements are not needed to protect the combination of system components in a given structure: ( )

- a.** Pump houses must be readily accessible for operation, maintenance, and repair at all times and under all weather conditions unless permitted to be out of service for a period of inaccessibility. ( )
- b.** Pump houses must be protected from flooding and must be adequately drained. The ground surface will be graded so as to lead surface drainage away from the pump house. Unless otherwise approved by the Department, the floor surface will be at least six (6) inches above the final ground surface and pump house components will be located at least six (6) inches above the floor surface. ( )
- c.** Pump houses must be of durable construction, fire and weather resistant, and with outward-opening doors. All underground structures must be waterproofed. ( )
- d.** Provisions must be made for adequate heating for the comfort of the operator and the safe and efficient operation of the equipment. In pump houses not occupied by personnel, only enough heat need be provided to prevent freezing of equipment or treatment processes. ( )
- e.** Ventilation must conform to existing local and state codes. Adequate ventilation will be provided for all pumping stations for operator comfort and dissipation of excess heat and moisture from the equipment. In all cases, measures must be taken to minimize corrosion of metallic and electrical components. ( )
- f.** Pump houses must be provided with a locking door or access to prohibit unauthorized entrance and must be protected to prevent vandalism and entrance by animals. Plans and specifications for pump houses must provide enough detail to enable the Department to determine that the facility is secure, safe, accessible, and that it conforms to electrical and plumbing codes. ( )
- g.** Pump houses must be kept clean and in good repair and may not be used to store toxic or hazardous materials other than those materials required for treatment processes. ( )
- h.** A suitable outlet must be provided for drainage from pump glands without discharging onto the floor. ( )
- i.** Floor drains may not be connected to sewers, storm drains, chlorination room drains, or any other source of contamination unless otherwise approved by the Department. Gas chlorination room drains may not be connected to any other drainage system and must terminate in a properly located below ground sump. Sumps for pump house floor drains may not be closer than thirty (30) feet from any well. ( )
- j.** Adequate space must be provided for the installation of potential additional units and for the safe and efficient servicing of all equipment. ( )
- k.** Suction basins must be watertight, have floors sloped to permit removal of water and settled solids, be covered or otherwise protected against contamination, and have two (2) pumping compartments or other means to allow the suction basin to be taken out of service for inspection maintenance or repair. ( )
- l.** Pump houses must be designed to allow efficient equipment servicing. Crane ways, hoist beams, eye bolts, or other adequate facilities for servicing or removal of pumps, motors or other heavy equipment will be provided. Openings in floors, roofs or wherever else must be provided as needed for removal of heavy or bulky equipment. ( )
- m.** All remote controlled stations must be electrically operated and controlled and have signaling apparatus of proven performance. Signaling apparatus must report automatically when the station is out of service. ( )
- n.** Any threaded hose bib installed in the pump house must be equipped with an appropriate backflow prevention device. ( )

**02. Pumping Units.** At least two (2) pumping units must be provided for raw water and surface source pumps. Pumps using seals containing mercury may not be used in PWS facilities. With any pump out of service, the

remaining pump or pumps must be capable of providing the peak hour demand of the PWS or a minimum of the maximum day demand plus equalization storage. See Subsection 501.18 for general design requirements concerning fire flow capacity and Subsection 501.07 regarding reliability and emergency operation. The pumping units must meet the following requirements: ( )

a. The pumps have ample capacity to supply the maximum demand against the required pressure without dangerous overloading. ( )

b. The pumps are driven by prime movers able to meet the maximum horsepower condition of the pumps. ( )

c. The pumps are provided with readily available spare parts and tools. ( )

d. The pumps are to be served by control equipment that has proper heater and overload protection for air temperature encountered. ( )

e. Suction lift is avoided if possible. When suction lift is used, it must be within the limits allowed by the manufacturer of the pumps, and provision will be made for priming the pumps. ( )

f. Prime water must not be of lesser sanitary quality than that of the water being pumped. Means will be provided to prevent either backpressure or back-siphonage backflow. When an air-operated ejector is used, the twenty-four (24) mesh or similar non-corrodible screened intake will draw clean air from a point at least ten (10) feet above the ground or other source of possible contamination, unless the air is filtered by an apparatus approved by the Department. Vacuum priming may be used. ( )

**03. Appurtenances.** The following appurtenances must be provided for all water pumps. Additional requirements specific to well pumps are provided in Section 511. ( )

a. Pumps must be protected against freezing and valved to permit satisfactory operation, maintenance, and repair of the equipment. If foot valves are necessary, they must have a net valve area of at least two and one-half (2.5) times the area of the suction pipe and be screened. Each pump must have an accessible check valve on the discharge side between the pump and the shut-off valve or a combination valve that performs both control valve and check valve functions. Surge relief measures must be designed to minimize hydraulic transients. ( )

b. Piping must be designed with watertight joints, friction losses minimized, protection against surge or water hammer, suitable restraints, and not be subject to contamination. ( )

c. Each pump must have an individual suction line or manifolded suction lines such that they will ensure similar hydraulic and operating conditions. ( )

d. Each pump station must have a standard pressure gauge on its discharge line and suction line. ( )

e. Water seals may not be supplied with water of a lesser sanitary quality than that of the water being pumped. Where pumps are sealed with potable water and are pumping water of lesser sanitary quality, the seal must: ( )

i. Be provided with either an approved reduced pressure principle backflow preventer or a break tank open to atmospheric pressure, ( )

ii. Where a break tank is provided, have an air gap of at least six (6) inches or two (2) pipe diameters, whichever is greater, between the feeder line and the flood rim of the tank. ( )

f. Pumps, their prime movers, and accessories must be controlled in such a manner that they will operate at rated capacity without dangerous overload. Where two (2) or more pumps are installed, provision must be made for alternation. Provision must be made to prevent energizing the motor in the event of a backspin cycle. Equipment will be provided or other arrangements made to prevent surge pressures from activating controls which

switch on pumps or activate other equipment outside the normal design cycle of operation. ( )

**04. Booster Pumps.** In addition to other applicable requirements in Section 541, booster pumps must comply with the following: ( )

**a.** In-line booster pumps must maintain an operating pressure that is consistent with the requirements specified in Subsection 552.01, and be supplied with an automatic cutoff when intake pressure is less than or equal to five (5) psi. ( )

**b.** Booster pumps with a suction line directly connected to any storage reservoirs must be protected by an automatic cutoff to prevent pump damage and avoid excessive reservoir drawdown. ( )

**c.** Each booster pumping station must contain not less than two (2) pumps with capacities such that peak hour demand, or a minimum of the maximum day demand plus equalization storage, can be satisfied with any pump out of service. See Subsection 501.18 for general design requirements concerning fire flow capacity. ( )

#### **542. DISTRIBUTION SYSTEM.**

**01. Protection from Contamination.** The distribution system must be protected from contamination and be designed to prevent contamination by steam condensate or cooling water from engine jackets or other heat exchange devices. ( )

**02. Installation of Water Mains.** Division 400 of “Idaho Standards for Public Works Construction,” referenced in Subsection 002.02, may be used as guidance for installation of water mains. In addition, the following provisions apply: ( )

**a.** Installed pipe must be pressure tested and leakage tested in accordance with the applicable AWWA Standards, incorporated by reference into these rules at Subsection 002.01. ( )

**b.** New, cleaned, and repaired water mains must be disinfected in accordance with AWWA Standard C651, incorporated by reference into these rules at Subsection 002.01. The specifications must include detailed procedures for the adequate flushing, disinfection, and microbiological testing of all water mains. ( )

**c.** In areas where aggressive soil conditions are suspected or known to exist, analyses must be performed to determine the actual aggressiveness of the soil. If soils are found to be aggressive, action must be taken to protect metallic joint restraints and the water main, such as encasement in polyethylene, provision of cathodic protection, or use of corrosion resistant materials. ( )

**d.** The Department must approve any interconnection between potable water sources, taking into account differences in water quality between the two systems. ( )

**e.** A continuous and uniform bedding must be provided in the trench for all buried pipe. Backfill material must be tamped in layers around the pipe and to a sufficient height above the pipe to adequately support and protect the pipe. Stones found in the trench must be removed for a depth of at least six (6) inches below the bottom of the pipe. ( )

**f.** Water mains must be covered with sufficient earth or other insulation to prevent freezing. ( )

**g.** All tees, bends, plugs and hydrants must be provided with reaction blocking, tie rods or joints designed to prevent movement. ( )

**03. Pressure Relief Valves.** All pumps connected directly to the distribution system must be designed in conjunction with a water pressure relief valve of type, size, and material approved by the Department unless the Department approves another method that will prevent excessive pressure development. ( )

**04. Flow Meter Required.** Unless otherwise approved by the Department, all source pumps and booster pumps connected directly to the distribution system must have an instantaneous and totalizing flow meter,

equipped with nonvolatile memory, installed in accordance with manufacturer's specifications. ( )

**05. Pipe and Jointing Materials.** Pipe and jointing materials comply with the standards set forth in Subsection 501.01. Pipe must be manufactured of materials resistant internally and externally to corrosion and not imparting tastes, odors, color, or any contaminant into the PWS. Where distribution systems are installed in areas of groundwater contaminated by organic compounds: ( )

**a.** Pipe and joint materials which do not allow permeation of the organic compounds must be used; and ( )

**b.** Non-permeable materials must be used for all portions of the PWS including pipe, joint materials, hydrant leads, and service connections. ( )

**06. Size of Water Mains.** When fire hydrants are provided, they may not be connected to water mains smaller than six (6) inches in diameter, and fire hydrants may not be installed unless fire flow volumes are available. If fire flow is not provided, water mains will be no less than three (3) inches in diameter. Any departure from these minimum standards must be supported by hydraulic analysis and detailed projections of water use. ( )

**07. Separation of Potable, Non-Potable, and Raw Water Pipelines.** The requirements for the protection of potable pipelines from contamination by non-potable pipelines are described in Subsections 542.07.a. through 542.07.d. For the purposes of Subsection 542.07, the term "pipeline" applies to both mains and services. The Department will use the Memorandum of Understanding with the Plumbing Bureau as guidance in determining the relative responsibilities for reviewing service lines. The conditions of Subsections 542.07.a. through 542.07.d. apply to all potable services constructed or reconstructed after April 15, 2007 and where the Department or the QLPE is the reviewing authority. Raw water pipelines must be protected from contamination from non-potable pipelines, and must not contaminate potable pipelines. They must meet equivalent separation distances shown below from either potable or non-potable pipelines. ( )

**a.** Alternative separation distances may be considered for Subsections 542.07.b through 542.07.c. on a case-by-case basis when considering constructability, public health risk, environmental risk, and cost. The design engineer must submit data to the Department for review and approval showing that the proposed installation will be protective of public health and the environment. ( )

**b.** Parallel installation requirements. ( )

**i.** Potable mains in relation to non-potable mains. ( )

(1) Greater than ten (10) feet separation: no additional requirements. ( )

(2) Ten (10) feet to six (6) feet separation: separate trenches, with the bottom of the potable main above the top of the non-potable main, and non-potable main constructed with potable water class pipe. ( )

(3) Non-potable mains are prohibited from being located in the same trench as potable mains. ( )

**ii.** Potable services in relation to non-potable pipelines and non-potable services in relation to potable pipelines. ( )

(1) Greater than six (6) feet separation: no additional requirements. ( )

(2) Potable services are prohibited from being located in the same trench as non-potable pipelines. ( )

**c.** Requirements for potable water pipelines crossing non-potable pipelines. Crossings must be perpendicular, unless otherwise approved by the Department. ( )

**i.** If there is eighteen (18) inches or more vertical separation with the potable water pipeline above the non-potable pipeline, then the potable pipeline joints must be as far as possible from the non-potable water pipeline.

- ( )
- ii. If there is eighteen (18) inches or more vertical separation with the potable water pipeline below the non-potable pipeline, then the potable pipeline joints must be as far as possible from the non-potable pipeline, and the non-potable pipeline must be supported through the crossing to prevent settling. ( )
  - iii. Less than eighteen (18) inches vertical separation: ( )
    - (1) Potable pipeline joint must be as far as possible from the non-potable pipeline; and either: ( )
      - (a) Non-potable pipeline must be constructed with potable water class pipe for a minimum of ten (10) feet either side of potable pipeline with a single twenty (20) foot section of potable water class pipe centered on the crossing; or ( )
      - (b) The non-potable or potable pipeline must be sleeved with potable water class pipe for ten (10) feet either side of crossing. Use of hydraulic cementitious materials such as concrete, controlled density fill, and concrete slurry encasement is not allowed as a substitute for sleeving. ( )
    - (2) If potable pipeline is below non-potable pipeline, the non-potable pipeline must also be supported through the crossing to prevent settling. ( )
  - c. Non-potable pressure pipelines must not be: ( )
    - i. Closer horizontally than ten (10) feet from potable mains. ( )
    - ii. Closer vertically than eighteen (18) inches from potable pipelines. ( )
- 08. Separation from Subsurface Wastewater Systems and Other Sources of Contamination.** A minimum horizontal distance of twenty-five (25) feet must be maintained between any potable water pipe and a septic tank or subsurface wastewater disposal system. Guidance on separation from other potential sources of contamination, such as stormwater facilities, may be found on the Department website <http://www.deq.idaho.gov>. ( )
- 09. Dead End Mains.** All dead end water mains must be equipped with a means of flushing at a water velocity of two and one-half (2.5) feet per second. ( )
- a. Dead ends must be minimized by looping whenever practical in order to provide increased reliability of service and reduce head loss. ( )
  - b. Flushing must be designed in such a way as to minimize any erosion of unprotected areas and, if applicable, be coordinated with the owner of the receiving system. No water main flushing device may be directly connected to any sewer. ( )
  - c. Stub outs for future main connections must meet all requirements for dead end mains listed in Subsection 542.09 as determined by the Department. Flushing devices may be temporary in nature. ( )
- 10. Repair of Leaks.** Leaking water mains must be repaired or replaced upon discovery and disinfected in accordance with American Water Works Association (AWWA) Standards, incorporated by reference into these rules at Subsection 002.01. ( )
- 11. Separation from Structures.** Water mains must be separated by at least five (5) feet from buildings, industrial facilities, and other permanent structures. ( )
- 12. Shut-Off Valve Required.** All new PWSs, and portions of existing systems undergoing material modification of distribution or transmission lines, must include an accessible and lockable shut-off valve at each service connection in the section of distribution or transmission line that is being constructed or modified within the project. Shut-off valves may be installed in a meter vault. ( )



**13. Minimum Pressure at Building Sites.** Any PWS constructed or undergoing material modification where topographical relief may affect water pressure at the customers' premises must provide the Department with an analysis which demonstrates that the pressure at each designated building site will be at least forty (40) psi, based on dynamic pressure in the main, as set forth in Subsections 552.01.b.i. and 552.01.b.v., plus a static compensation from the elevation of the main to the elevation of each building site. ( )

**a.** If forty (40) psi cannot be provided at each designated building site, the Department may require that reasonable effort be made to provide notification to existing and potential customers of the expected pressure. ( )

**b.** The Department will not authorize a service connection at any designated building site where analysis indicates that pressure will be less than twenty (20) psi dynamic pressure (or twenty-six point five (26.5) psi for two (2) story buildings). ( )

**14. Isolation Valves.** A sufficient number of valves must be provided on water mains to minimize inconvenience and sanitary hazards during repairs. ( )

**15. Air Valves.** At high points in water mains where air can accumulate, provisions must be made to remove the air by means of air release and vacuum relief valves or combination air release/vacuum relief valves. Air release valves, vacuum relief valves, or combination air release/vacuum relief valves may not be required if vacuum relief and air release functions in the pipeline can be adequately handled by approved appurtenances such as fire hydrants. ( )

**a.** The open end of an air valve must be extended to at least one (1) foot above grade and provided with a twenty-four (24) mesh or similar non-corrodible screened, downward-facing elbow. When the air vent on an air relief valve cannot be practically installed above ground, the vent may be below grade provided the air vent is extended to the top of the valve vault and provided with a twenty-four (24) mesh or similar non-corrodible screened, downward-facing elbow. In addition, for below ground vents, the valve vault must be rated for appropriate traffic loading in traffic areas and the vault drained to daylight or provided with adequate drainage to prevent flooding of the vault. ( )

**b.** Discharge piping from air valves or combination air release/vacuum relief valves may not connect directly to any storm drain, storm sewer, or sanitary sewer. ( )

**16. Backflow Protection.** Automatic air relief valves must be equipped with a means of backflow protection. ( )

**17. Surface Water Crossings.** For the purposes of Subsection 542.17, surface water is defined as all surface accumulations of water, natural or artificial, public or private, or parts thereof which are wholly or partially within, which flow through or border upon the state. This includes, but is not limited to, rivers, streams, canals, ditches, lakes, and ponds. Surface water crossings, whether over or under water, must be constructed as follows: ( )

**a.** Pipe used in above water crossings must be adequately supported and anchored, protected from damage and freezing, and be accessible for repair or replacement. ( )

**b.** Pipe used in under water crossings must have a minimum cover of two (2) feet. When crossing a water course that is greater than fifteen (15) feet in width, the following must be provided: ( )

**i.** The pipe will be of special construction, having flexible, restrained, or welded water-tight joints; and ( )

**ii.** Valves are to be provided at both ends of water crossings so that the section can be isolated for testing or repair; the valves will be easily accessible and not subject to flooding; and ( )

**iii.** Permanent taps or other provisions to allow insertion of a small meter to determine leakage and ( )

obtain water samples will be made on each side of the valve closest to the supply source. ( )

**543. CROSS CONNECTION CONTROL.**

There must be no connection between the distribution system and any pipes, pumps, hydrants, water loading stations, or tanks whereby unsafe water or other contaminating materials may be discharged or drawn into a PWS. Community PWS owners must meet the cross connection control program requirements in Subsection 552.06. ( )

**01. Testable Assemblies.** All double check valve backflow prevention assemblies, reduced pressure principle backflow prevention assemblies, spill resistant vacuum breakers, and pressure vacuum breakers used must pass a performance test conducted by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research (USC Foundation) and be included on the USC Foundation “List of Approved Assemblies” for the application and orientation for which they are installed. ( )

**02. Atmospheric Vacuum Breakers.** All atmospheric vacuum breakers used must be marked approved either by the International Association of Plumbing and Mechanical Officials (IAPMO) or by the American Society of Sanitation Engineers (ASSE). ( )

**03. Replacement Parts and Components.** All replacement parts and components, including resilient seated shutoff valves, must meet original manufacturer’s specifications or otherwise be approved by the USC Foundation as replacement parts or components for use on double check valve backflow prevention assemblies, reduced pressure principle backflow prevention assemblies, pressure vacuum breakers, and spill resistant pressure vacuum breakers. The design, material, or operational characteristics of any assembly must not be altered during maintenance or repair. ( )

**04. Assembly Selection.** Appropriate and adequate backflow prevention assembly types for various facilities, fixtures, equipment, and uses of water must be selected from the AWWA Recommended Practice for Backflow Prevention and Cross Connection Control (M14), the USC Foundation Manual of Cross Connection Control, or other sources deemed acceptable by the Department. The selected assembly manufacturer model number must be included on the USC Foundation “List of Approved Assemblies” and must comply with local ordinances. ( )

**544. GENERAL DESIGN OF FINISHED WATER STORAGE.**

The materials and designs used for finished water storage structures must provide stability and durability as well as protect the quality of the stored water. Finished water storage structures must be designed to maintain water circulation and prevent water stagnation. Steel structures and facilities such as steel tanks, standpipes, reservoirs, and elevated tanks must be designed and constructed in accordance with applicable AWWA Standards, incorporated by reference into these rules at Subsection 002.01. Other materials of construction are acceptable when properly designed to meet the requirements of Section 544. ( )

**01. Sizing and Isolation Requirements. ( )**

**a.** Storage facilities must have sufficient capacity, as determined from engineering studies that consider peak flows, fire flow capacity, and analysis of the need for various components of finished storage as defined under the term “Components of Finished Water Storage” in Section 003. The requirement for storage may be reduced when the source and treatment facilities have sufficient capacity with standby power to supply peak demands of the PWS. ( )

**b.** All storage structures which provide pressure directly to the distribution system, such as elevated storage structures or ground level storage structures with associated pumping systems, must be designed so they can be isolated and drained for cleaning or maintenance without causing a loss of pressure in the distribution system. ( )

**02. Location.** Storage facilities must be located in a manner that protects against contamination, ensures structural stability, protects against flooding, and provides year-round access by vehicles and equipment needed for repair and maintenance. ( )

**a.** If the bottom elevation of a storage reservoir must be below normal ground surface, it must be

placed above the seasonal high groundwater table. The top of a partially buried storage structure may not be less than two (2) feet above normal ground surface. ( )

b. Minimum separation distances from storage facilities must meet the following requirements: ( )

Minimum Separation Distances From Storage Facilities (feet)				
Feature of Concern	Storage Facility Type			
	Below Ground	Partially Buried	Ground Level	Above Ground
Non-Potable Pipelines	50	50		
Non-Potable Pipelines Constructed of Water Class Pipe	20	20		
Standing Water	50	50	50	
Possible Sources of Contamination	50	50	20	20
Nearest Property Line	50	50	20	20
Municipal or Industrial Wastewater Treatment Plant	500	500	500	500
Land Which is Spray Irrigated With Wastewater or Used for Sludge Disposal	500	500	500	500

( )

**03. Protection from Contamination.** All finished water storage structures must have suitable watertight roofs which exclude birds, animals, insects, and excessive dust. The installation of appurtenances, such as antennas, must be done in a manner that ensures no damage to the tank, coatings or water quality, or corrects any damage that occurred. ( )

**04. Protection from Trespassers.** Fencing, locks on access manholes, and other necessary precautions must be provided to prevent trespassing, vandalism, and sabotage. ( )

**05. Drains.** No drain on a water storage structure may have a direct connection to a sewer or storm drain. The design must allow draining the storage facility for cleaning or maintenance without causing loss of pressure in the distribution system. ( )

**06. Overflow.** Overflow pipes of any storage structure or facility must discharge to daylight in a way that will preclude the possibility of backflow to the reservoir and, where practical, be provided with an expanded metal screen installed within the pipe that will exclude rodents and deter vandalism. The overflow pipe must be of sufficient diameter to permit waste of water in excess of the filling rate and be designed to mitigate blockage or freezing (see Subsection 544.11). The overflow must discharge over a drainage inlet structure or a splash plate and, when practical, discharge at an elevation between twelve (12) and twenty-four (24) inches above the receiving surface. ( )

a. When an internal overflow pipe is used on above-ground tanks, it must be located in the access tube. ( )

b. The overflow for ground-level, partially buried, or below-ground storage structures or facilities

must have a vertical section of pipe at least two (2) pipe diameters in length and be screened with a twenty-four (24) mesh non-corrodible screen installed within the pipe when practical or an expanded metal screen installed within the pipe plus a weighted flapper valve or check unless otherwise approved by the Department. ( )

**07. Access.** Finished water storage structures must be designed with reasonably convenient access to the interior for cleaning and maintenance. At least two (2) manholes will be provided above the waterline at each water compartment where space permits, as determined by the Department. One (1) manhole may be allowed on smaller tanks on a case-by-case basis. ( )

**a.** The following access requirements apply to above-ground and ground-level storage structures. Each access manhole must be framed a minimum of four (4) inches above the surface of the roof at the opening. The actual height above the surface of the roof must be sufficient to prevent incidental contamination from snow accumulation, storm water runoff or accumulation, irrigation water, or other potential sources of contamination. ( )

**b.** The following access requirements apply to, partially buried or below-ground storage structures. Each access manhole must be elevated a minimum of twenty-four (24) inches above the surface of the roof or the ground level, whichever is higher. The actual height above the surface of the roof or the ground level must be sufficient to prevent incidental contamination from snow accumulation, storm water runoff or accumulation, irrigation water, or other potential sources of contamination. ( )

**c.** Each manhole must be fitted with a solid water tight cover designed to prevent the entrance of contaminants. Each cover may be hinged only on one (1) side and have a locking device. Unless otherwise approved by the Department based, each cover will have a framed opening with the lid extending down around the frame at least two (2) inches, and the frame will be at least four (4) inches high. ( )

**08. Vents.** Finished water storage structures must be vented. The overflow pipe may not be considered a vent. Open construction between the sidewall and roof is not permissible. Vents must: ( )

**a.** Prevent the entrance of surface water and rainwater and extend twelve (12) inches above the roof. ( )

**b.** Exclude birds and animals. ( )

**c.** Exclude insects and dust, as much as this function can be made compatible with effective venting and be designed to mitigate blockage or freezing (see Subsection 544.11). ( )

**d.** On ground-level, partially buried, or below-ground structures, open downward with the opening at least twenty-four (24) inches above the roof or the ground level and covered with twenty-four (24) mesh non-corrodible screen or similar non-corrodible screen. The screen is to be installed within the pipe at a location least susceptible to vandalism. ( )

**e.** On above-ground tanks and standpipes, open downward, and be fitted with twenty-four (24) mesh or similar non-corrodible screen. ( )

**09. Roof and Sidewall.** The roof and sidewalls of all water storage structures must be watertight with no openings except properly constructed vents, manholes, overflows, risers, drains, pump mountings, control ports, or piping for inflow and outflow. Particular attention is to be given to the sealing of roof structures which are not integral to the tank body. ( )

**a.** Any pipes running through the roof or sidewall of a metal storage structure must be welded, or properly gasketed. In concrete tanks, these pipes must be connected to standard wall castings which were poured in place during the forming of the concrete. ( )

**b.** Openings in the roof of a storage structure designed to accommodate control apparatus or pump columns must be curbed and sleeved with proper additional shielding to prevent contamination from surface or floor drainage. ( )

c. The roof of the storage structure must be sloped to facilitate drainage. Downspout pipes may not enter or pass through the reservoir. Parapets, or similar construction which tends to hold water and snow on the roof, will not be approved unless adequate waterproofing and drainage are provided. ( )

d. Reservoirs with pre-cast concrete roof structures must be made watertight with the use of a waterproof membrane or similar product. ( )

**10. Construction Materials.** Materials used in storage facility construction must meet the requirements for water contact surfaces set forth in Subsection 501.01. Porous materials such as wood or concrete block are not acceptable for use in storage construction. ( )

**11. Protection from Freezing.** Finished water storage structures and their appurtenances, especially the riser pipes, overflows, and vents, must be designed to prevent freezing. ( )

**12. Internal Catwalk.** Every catwalk over finished water in a storage structure must have a solid floor with sealed raised edges, designed to prevent contamination. ( )

**13. Silt Stops.** Removable silt stops must be provided to prevent sediment from entering the reservoir discharge pipe. ( )

**14. Grading.** The area surrounding a ground-level, partially buried, or below-ground structures must be graded in a manner that will prevent surface water from standing. ( )

**15. Coatings and Cathodic Protection.** Proper protection must be given to metal surfaces by paints or other protective coatings, by cathodic protective devices, or by both. ( )

**16. Disinfection.** Storage facilities must be disinfected in accordance with AWWA Standard C652, incorporated by reference into these rules at Subsection 002.01. Two (2) or more successive sets of samples, taken at twenty-four (24) hour intervals, must indicate microbiologically satisfactory water before the facility is placed into operation. ( )

**17. Abandonment.** All unused subsurface storage tanks must be removed and backfilled, or abandoned by extracting residual fluids and filling the structure with sand or fine gravel. ( )

**545. TREATMENT PLANT STORAGE FACILITIES.**

The design standards of Section 544 apply to treatment plant storage. ( )

**01. Filter Wash Water.** Filter wash water tanks must be sized, in conjunction with available pump units and finished water storage, to provide the backwash water required by Section 521. Consideration must be given to the backwashing of several filters in rapid succession. ( )

**02. Clearwell.** When finished water storage is used to provide disinfectant contact time special attention must be given to tank size and baffling. An overflow and vent must be provided. A minimum of two (2) clearwell compartments must be provided to allow for cleaning or maintenance. Clearwells constructed under filters may be exempt from the requirements set out in Subsection 544.02.d. when the design provides adequate protection from contamination. ( )

**03. Adjacent Storage.** Finished or treated water must not be stored or conveyed in a compartment adjacent to untreated or partially treated water when the two (2) compartments are separated by a single wall, unless approved by the Department. ( )

**04. Other Treatment Plant Storage Tanks.** Unless otherwise allowed by the Department, other treatment plant storage tanks/basins such as detention basins, backwash reclaim tanks, receiving basins, and pump wet-wells for finished water must be designed as finished water storage structures. In addition, these tanks/basins must be designed to allow for cleaning or maintenance through temporary tanks, standby pumping capabilities, or other means approved by the Department. ( )

**546. DISTRIBUTION SYSTEM STORAGE FACILITIES.**

**01. Design.** The applicable design standards of Section 544 apply to distribution system storage. ( )

**02. Isolation.** Finished water storage structures which provide pressure directly to the distribution system must be designed so they can be isolated from the distribution system and drained for cleaning or maintenance without causing a loss of pressure in the distribution system. This requirement may be met through available temporary tanks, redundant pumping capabilities, or other temporary means approved by the Department. If the finished water storage structure provides fire flow for the PWS, the PWS owner must provide the local fire authority advance notification of cleaning or maintenance events which isolate the structure from the distribution system and reduce available fire flow to less than the minimum required by the local fire authority. ( )

**03. Drain.** Drains must discharge to daylight in a way that will preclude the possibility of backflow to the reservoir and, where practical, be provided with an expanded metal screen installed within the pipe that will exclude rodents and deter vandalism. The drain will, when practical, discharge at an elevation between twelve (12) and twenty-four (24) inches above the receiving surface, and discharge over a drainage inlet structure or a splash plate. ( )

**04. Level Controls.** Adequate controls must be provided to maintain levels in distribution system storage structures. Level indicating devices must be provided at a central location. ( )

**547. HYDROPNEUMATIC TANK SYSTEMS.**

Hydropneumatic tanks may be used to regulate pump cycling and to absorb pressure surges (water hammer). Hydropneumatic tanks may not be used for storage for PWSs serving more than one-hundred-fifty (150) connections unless otherwise approved by the Department. ( )

**01. Design of Hydropneumatic Systems.** Tanks must: ( )

**a.** Be located above normal ground surface and be completely housed. ( )

**b.** Have bypass piping to permit operation of the PWS while the tank is being repaired or painted. Exterior surfaces and accessible interior surfaces are to be provided with protective coatings and shall be maintained in good condition. Supports beneath tanks must be structurally sound. ( )

**c.** Be sized to limit pump cycles to not more than six (6) per hour unless a pump manufacturer's warranty specifically supports more frequent cycling. The number of pump cycles may be increased in PWSs with multiple pumps if a means to automatically alternate pumps is provided. The Franklin Electric AIM manual, referenced in Subsection 002.02, Chapter 11 of the Washington State Department of Health Water System Design Manual, referenced in Subsection 002.02, or manufacturer's recommendations may be used as guidance in calculating the size of hydropneumatic tanks. ( )

**d.** Conform with the American Society of Mechanical Engineers (ASME) specifications code for unfired pressure vessels when they are of greater than one-hundred twenty (120) gallons volume. Tanks of less than one hundred twenty (120) gallons volume must meet the ASME code or be certified by a nationally recognized testing agency to be capable of withstanding twice the maximum allowable working pressure. ( )

**02. Requirements Specific to Conventional Hydropneumatic Tanks.** Conventional tanks are those with a direct air to water interface and require periodic air recharge to compensate for absorption of air into the water. ( )

**a.** Each tank must have an access manhole, a drain, and control equipment consisting of a pressure gauge, water sight glass, automatic or manual air blow-off, means for adding air that is filtered or otherwise protected from contamination, and pressure operated start-stop controls for the pumps. If tank size allows, the access manhole will be at least twenty-four (24) inches in diameter. ( )

**b.** The gross volume of tanks in PWSs served by variable speed pumps may be less than that required for PWSs served by constant speed pumps. Design volumes will be approved by the Department on a site-specific basis. ( )

**03. Requirements Specific to Bladder Tanks.** Bladder tanks have a membrane that separates air and water inside the tank. ( )

**a.** Bladder tanks must be pre-charged with air to a pressure of five (5) psi below the setting at which the pump turns on (the low operating pressure for the PWS). ( )

**b.** Each manifold assembly must have a pressure gauge and pressure operated start-stop controls for the pumps. ( )

**c.** The procedure for sizing bladder tanks is to determine the number of a selected size of tanks that are needed to provide pump protection. Reduced tank volume in PWSs served by variable speed pumps will be approved by the Department on a site-specific basis. ( )

**548. DISINFECTION OF FACILITIES PRIOR TO USE.**

Any supplier of water for a PWS must ensure that new construction or modifications to an existing PWS are flushed and disinfected in accordance with American Water Works Association (AWWA) Standards, incorporated by reference into these rules at Subsection 002.01, prior to being placed into service. ( )

**549. -- 551. (RESERVED)**

**552. OPERATING CRITERIA FOR PUBLIC WATER SYSTEMS.**

**01. Quantity and Pressure Requirements.** Design requirements regarding pressure analysis are found in Section 542.13. ( )

**a.** The minimum capacity of a PWS must be at least eight hundred (800) gallons per day per residence. ( )

**i.** The minimum capacity of eight hundred (800) gallons per day is the design maximum day demand rate exclusive of irrigation and fire flow requirements. ( )

**ii.** The minimum capacity of eight hundred (800) gallons per day is only acceptable if the PWS has equalization storage of finished water in sufficient quantity to compensate for the difference between a PWS's maximum pumping capacity and peak hour demand. ( )

**iii.** The design capacity of a PWS for material modifications may be less than eight hundred (800) gallons per day if the PWS owner provides information that demonstrates to the Department's satisfaction the maximum day demand for the PWS, exclusive of irrigation and fire flows, is less than eight hundred (800) gallons per day per residence. ( )

**b.** All PWS owners must meet the following pressure requirements: ( )

**i.** Be capable of providing sufficient water during maximum day demand conditions, including fire flow where provided, to maintain a minimum pressure of twenty (20) psi throughout the distribution system, at ground level, as measured at the service connection or along the property line adjacent to the consumer's premises. ( )

**ii.** If an initial investigation by the water supplier fails to discover the causes of inadequate or excessive pressure, the Department may require the water supplier to conduct a local pressure monitoring study to diagnose and correct pressure problems. Compliance with these requirements by PWSs that do not have a meter vault or other point of access at the service connection or along the property line adjacent to the consumer's premises where pressure in the distribution system can be reliably measured must be determined by measurements within the consumer's premises, or at another representative location acceptable to the Department. ( )

iii. Copies of pressure monitoring study reports required under Subsection 552.01.b.iii. detailing study results and any resulting corrective actions planned or performed by the PWS owner must be submitted to the Department in accordance with these rules. ( )

iv. The following PWSs or service areas of PWSs must maintain a minimum pressure of forty (40) psi throughout the distribution system, during peak hour demand conditions, excluding fire flow, measured at the service connection or along the property line adjacent to the consumer's premises. ( )

(1) Any PWS constructed or substantially modified after July 1, 1985. ( )

(2) Any new service areas. ( )

(3) Any PWS that is undergoing material modification where it is feasible to meet the pressure requirements as part of the material modification. ( )

v. Any newly constructed PWSs, or portions of existing systems that are materially modified after July 1, 2024, must keep static pressure within the distribution system below eighty (80) psi. Pressures above eighty (80) psi must be controlled by pressure reducing valve stations installed in the distribution main. In areas where failure of installed pressure reducing valve stations result in extremely high pressure, pressure relief valves may be required. The Department may approve the use of pressure reducing devices at individual service connections on a case-by-case basis, if it can be demonstrated that higher pressures in portions of the distribution system are required for efficient PWS operation. If PWS modification will cause pressure to routinely exceed eighty (80) psi, or if a check valve or an individual pressure reducing device is added to the service line, the PWS owner must notify affected customers. Notification may include reasons for the elevated pressure, problems or damage that elevated pressure can inflict on appliances or plumbing systems, and suggested procedures or mitigation efforts affected property owners may initiate to minimize problems or damage. ( )

vi. The Department may allow the installation of booster pump systems at individual service connections on a case-by-case basis. However, such an installation may only occur with the full knowledge and agreement of the PWS owner, including assurance by the PWS that the individual booster pump will cause no adverse effects on PWS operation. ( )

vii. For elevated storage tanks, pressure calculations during peak hour demand are based on the lowest water level after both operational storage and equalization storage have been exhausted. Pressure calculations during fire flow demands are based on the lowest water level after operational storage, equalization storage, and fire suppression storage have been exhausted. ( )

viii. For hydropneumatic tanks, pressure calculations are based on the lowest pressure of the pressure cycle and this requirement must be noted in the operation and maintenance manual. ( )

c. Any PWS designed to provide fire flows must ensure that such flows are compatible with the water demand of existing and planned fire-fighting equipment and fire fighting practices in the area served by the PWS. ( )

d. Irrigation Flows. ( )

i. Any PWS constructed after November 1, 1977, must be capable of providing water for uncontrolled, simultaneous foreseeable irrigation demand, which includes all acreage that the PWS is designed to irrigate. ( )

(1) The Department must concur with assumptions regarding the acreage to be irrigated. In general, an assumption that no outside watering will occur is considered unsound and is unlikely to be approved. ( )

(2) An assumption of minimal outside watering, as in recreational subdivisions, may be acceptable if design flows are adequate for maintenance of "green zones" for protection against wildland fire. ( )



- ii. The Department may modify the requirement of Subsection 552.01.d.i. if: ( )
  - (1) A separate irrigation system is provided; or ( )
  - (2) The supplier of water can regulate the rate of irrigation through its police powers, and the PWS is designed to accommodate a regulated rate of irrigation flow. The Department may require the PWS to submit a legal opinion addressing the enforceability of such police powers. ( )

iii. If a separate non-potable irrigation system is provided for the consumers, all mains, hydrants and appurtenances must be easily identified as non-potable. The Department must concur with a plan to ensure that each new potable water service is not cross-connected with the irrigation system. ( )

**02. Groundwater.** ( )

a. PWSs supplied by groundwater, must treat water within the PWS by disinfection if the groundwater source is not protected from contamination. ( )

b. The Department may require disinfection for any existing PWS supplied by groundwater if the PWS has repeated E.coli MCL exceedances, and if the PWS does not appear adequately protected from contamination. Adequate protection will be determined based upon at least the following factors: ( )

- i. Location of possible sources of contamination; ( )
- ii. Size of the well lot; ( )
- iii. Depth of the source of water; ( )
- iv. Bacteriological quality of the aquifer; ( )
- v. Geological characteristics of the area; and ( )
- vi. Adequacy of development of the source. ( )

**03. Operating Criteria.** The operating criteria for PWSs that provide filtration are as follows: ( )

a. A project specific operation and maintenance manual must be provided as required in Subsection 501.12. See definition of Operation and Maintenance Manual in Section 003 for the typical contents of an operation and maintenance manual and the included operations plan. For the operations plan in the operation and maintenance manual, additional guidance for several types of filtration systems can be found in the Department's SWTR Compliance Guidance referenced in Subsection 002.02. ( )

b. The PWS must conduct monitoring specified by the Department before serving water to the public in order to protect the health of consumers served by the PWS. ( )

c. New treatment facilities must be operated in accordance with Subsection 552.03.a., and the PWS must conduct monitoring specified by the Department for a trial period specified by the Department before serving water to the public in order to protect the health of consumers served by the PWS. ( )

**04. Disinfection.** PWSs that regularly disinfect their water using chlorine are subject to the provisions of Section 320. PWSs using surface water or groundwater under the direct influence of surface water, are subject to the disinfection requirements of Sections 300 and 518. PWSs using chlorine, ozone, chlorine dioxide, or other disinfecting agents for the purposes of disinfection must meet the facility and design standards of Sections 530 and 531. PWSs using ultraviolet light for the purposes of disinfection must meet the facility and design standards of Section 529. ( )

a. PWSs using only ground water that add a disinfectant for the purpose of disinfection, as defined in Section 003, are subject to the following requirements: ( )

i. The PWS must demonstrate that it is routinely achieving four (4) logs (ninety-nine point ninety-nine percent) (99.99%) inactivation/removal of viruses. The required effective contact time must be approved by the Department. This condition must be attainable even when the design capacity coincides with anticipated maximum disinfectant demands. ( )

ii. A detectable disinfectant residual must be maintained throughout the distribution system. PWSs disinfecting through ultraviolet light will need to maintain a supplemental disinfectant capable of maintaining a detectable disinfectant residual. ( )

iii. Analysis for disinfectant residual must be conducted at a location at or prior to the first service connection at least daily and records of these analyses are to be kept by the supplier of water for at least one (1) year. A report of all daily chlorine residual measurements for each calendar month must be submitted to the Department no later than the tenth day of the following month. The frequency of measuring disinfectant residuals must be sufficient to detect variations in demand or changes in water flow. ( )

iv. The Department may, in its discretion, require a treatment rate higher than that specified in Subsection 552.04.a.i. ( )

b. PWSs using only groundwater that add disinfectant for the purpose of maintaining a disinfectant residual in the distribution system, when the source(s) is not at risk of microbial contamination, are subject to analysis for disinfectant residual made at a frequency that is sufficient to detect variations in demand or changes in water flow. ( )

c. PWSs using only groundwater that add chlorine for other purposes, such as oxidation of metals or taste and odor control, when the source(s) is known to be free of microbial contamination, must ensure that chlorine residual entering the distribution system after treatment is less than four (4.0) mg/L. The requirements in Subsection 552.04.b.ii. also apply if the PWS maintains a chlorine residual in the distribution system. ( )

**05. Fluoridation.** ( )

a. Commercial sodium fluoride, sodium silico fluoride and hydrofluosilicic acid which conform to the applicable American Water Works Association (AWWA) Standards, incorporated by reference into these rules at Subsection 002.01, are acceptable. Use of other chemicals must be specifically approved by the Department. ( )

b. Fluoride compounds are to be stored in covered or unopened shipping containers. ( )

c. Provisions must be made to minimize the quantity of fluoride dust. Empty bags, drums, or barrels are to be disposed of in a manner that will minimize exposure to fluoride dusts. ( )

d. Daily records of flow and amounts of fluoride added must be kept. An analysis for fluoride in finished water must be made at least weekly. Records of these analyses are to be kept by the supplier of water for five (5) years. ( )

**06. Cross Connection Control Program - Community Water Systems.** The water purveyor is responsible through its cross connection control program to take reasonable and prudent measures to protect the PWS against contamination and pollution from cross connections through premises isolation, internal or in-plant isolation, fixture protection, or some combination of premises isolation, internal isolation, and fixture protection. Pursuant to Section 543, all suppliers of water for community PWSs must implement a cross connection control program to prevent the entrance to the PWS of materials known to be toxic or hazardous. The water purveyor is responsible to enforce the PWS's cross connection control program. The program will at a minimum include: ( )

a. An inspection program to locate cross connections and determine required suitable protection. For new connections, PWS owners must verify suitable protection was installed prior to providing water service. ( )

b. Required installation and operation of adequate backflow prevention assemblies. Appropriate and adequate backflow prevention assembly types for various facilities, fixtures, equipment, and uses of water must be

selected from the Uniform Plumbing Code, the AWWA Recommended Practice for Backflow Prevention and Cross Connection Control (M14), the USC Foundation Manual of Cross Connection Control, or other sources deemed acceptable by the Department. The assemblies must meet the requirements of Section 543 and comply with local ordinances. ( )

**c.** Annual inspections and testing of all installed backflow prevention assemblies by a tester licensed by a licensing authority recognized by the Department. Testing must be done in accordance with the test procedures published by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research. See the USC Foundation Manual of Cross-Connection Control referenced in Subsection 002.02. ( )

**d.** Discontinuance of service to any structure, facility, or premises where suitable backflow protection has not been provided for a cross connection. ( )

**e.** Assemblies that cannot pass annual tests or those found to be defective are to be repaired, replaced, or isolated within ten (10) business days. If the failed assembly cannot be repaired, replaced, or isolated within ten (10) business days, water service to the failed assembly must be discontinued. ( )

**07. Cross Connection Control - Non-Community Water Systems.** All suppliers of water for non-community water systems must ensure that cross connections do not exist or are isolated from the potable water system by an approved backflow prevention assembly. Backflow prevention assemblies must be inspected and tested annually for functionality by an Idaho licensed tester, as specified in Subsections 552.06.c. and 552.06.e. ( )

**08. Start-up Procedures For Seasonal Systems Subject To Subsections 100.01.a., c., and d.** ( )

**a.** All seasonal PWS owners must demonstrate completion of a Department approved start-up procedure, including start-up sampling, prior to serving water to the public. The PWS owner must submit information on a Department provided or approved form that includes a statement certifying that the PWS owner or operator followed proper start-up procedures. The form must be submitted to the Department within 30 (thirty) days following the PWS's start-up date. Start-up sampling must include total coliform samples submitted to a certified laboratory demonstrating the absence of total coliform within thirty (30) days prior to serving water to the public. ( )

**b.** The Department may exempt any seasonal PWS from Subsection 552.08.a. if the entire distribution system remains pressurized during the entire period that the PWS is not operating, except that the PWSs that monitor less frequently than monthly must still monitor during the vulnerable period designated by the Department. The Department may exempt a seasonal PWS from Subsection 552.08.a. if the owner or operator of the PWS meets all of the following conditions: ( )

- i.** Requests an exemption in writing to the Department for approval; ( )
- ii.** Demonstrates a clean compliance history as defined in Section 003 for a minimum of five (5) years; ( )
- iii.** Has no uncorrected significant deficiencies from the most recent sanitary survey; and ( )
- iv.** Total coliform samples submitted to a certified laboratory within 30 (thirty) days prior to serving water to the public demonstrate the absence of total coliform. ( )

**553. CLASSIFICATION OF WATER SYSTEMS.**

**01. System Classification Required.** The Department will classify community, non-transient non-community, and surface water PWSs based on indicators of potential health risks. ( )

**02. Classification Criteria.** PWSs are classified under a system that uses the following criteria: ( )

**a.** Complexity, size, and type of source water for treatment facilities. ( )

- b. Complexity and size of distribution systems. ( )
- c. Other criteria deemed necessary to completely classify PWSs. ( )
- d. The Department will develop guidelines for applying the criteria set forth in Section 553. ( )

**03. Classification Review.** The Department will review PWS classifications on a minimum five (5) year frequency. ( )

**554. LICENSED OPERATOR REQUIREMENTS.**

**01. Licensed Operator Required.** Owners of all community, non-transient non-community, and surface water or groundwater sources directly influenced by surface water must place the direct supervision of their PWS under the responsible charge of a properly licensed operator at all times. When the responsible operator is not available, the PWS owner must designate a substitute responsible operator. ( )

**02. Responsible Charge Operator License Requirement.** An operator in responsible charge of a PWS must hold a valid Idaho license equal to or greater than the classification of the PWS where the responsible charge operator is in charge as defined in Section 003. ( )

**03. Water Operator License Requirement.** All operating personnel at PWSs subject to these requirements making process control/ system integrity decisions about water quality or quantity that can affect public health must hold a valid Idaho license. ( )

**04. Water Operator License Upgrade Allowance.** A twelve (12) month period will be provided to meet increased drinking water distribution system operator licensure requirements when a higher licensure level is required based on a population increase if the following requirements are met: ( )

- a. The licensure increase is triggered solely by a population increase; and ( )
- b. The responsible charge operator of the PWS at the time the distribution licensure requirement increases remains the responsible charge operator throughout the twelve (12) month time frame. ( )

**555. -- 559. (RESERVED)**

**560. CONTRACTING FOR SERVICES.**

PWS owners who contract with persons to provide responsible charge operators and substitute responsible charge operators need to submit proof of such contract to the Department prior to the contracted person performing any services at the PWS. ( )

**561. -- 562. (RESERVED)**

**563. ADVISORY GROUP.**

Ongoing stakeholder involvement will be provided through the existing drinking water advisory committee at the Department. ( )

**564. -- 999. (RESERVED)**

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*Italicized text indicates changes between the text of the proposed rule as adopted in the pending rule.*

## 58.01.08 – IDAHO RULES FOR PUBLIC DRINKING WATER SYSTEMS

### 000. LEGAL AUTHORITY.

The Idaho Legislature has given the Idaho Board of Environmental Quality the authority to promulgate rules governing quality and safety of drinking water, pursuant to Title 37, Chapter 21 and Title 39, Chapter 1, Title 39, Idaho Code. (3-24-22)( )

### 001. ~~TITLE AND SCOPE.~~

**01. ~~Title.~~** These rules are titled IDAPA 58.01.08, “Idaho Rules for Public Drinking Water Systems.” (3-24-22)

**02. ~~Scope.~~** 40 CFR 141.3 is incorporated by reference. The purpose of these rules is to control and regulate the design, construction, operation, maintenance, and quality control of public drinking water systems to provide a degree of assurance that such systems are protected from contamination and maintained free from contaminants which may injure the health of the consumer. (3-24-22)( )

### 002. INCORPORATION BY REFERENCE AND AVAILABILITY OF REFERENCED MATERIALS.

**01. Incorporation by Reference.** ~~The following documents are incorporated by reference into these rules.~~ (3-24-22)( )

**a.** 40 CFR Part 141, revised as of July 1, ~~2015~~ 2023 (excluding annual monitoring provisions in 40 CFR 141.854(a)(4),(d),(e),(f) and (h), and the Aircraft Drinking Water Rule in ~~Subsection Subpart X~~); and 40 CFR Part 143, revised as of July 1, ~~2014~~ 2023. ~~Any reference in these rules to requirements, procedures, or specific forms contained in any section or subsection of 40 CFR Parts 141 and 143 shall constitute the full adoption by reference of that section or subsection, including any notes and appendices therein, unless expressly provided otherwise in these rules.~~ (3-24-22)( )

**b.** American Water Works Association (AWWA) Standards, effective December ~~2009~~ 2022, available for a fee from the AWWA, ~~6666 West Quincy Avenue, Denver, Colorado 80235, Telephone (800) 926-7337, http://apps.awwa.org/ebusmain/OnlineStore.aspx~~ https://www.awwa.org/Publications/Standards/Standards-List or available to be viewed through the Department’s state office. (3-24-22)( )

**02. Availability of Specific Referenced Material.** Copies of specific documents referenced within these rules are available at the following locations: ( )

**a.** ~~All federal regulations: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, Telephone (202)783-3238; U.S. Government Bookstore, Room 194, Federal Bldg., 915 Second Ave., Seattle, WA 98174, (206) 553-4270; or Online at http://www.gpoaccess.gov/cefr/index.html.~~ (3-24-22)

**b.** ~~All documents incorporated by reference are available for review at the Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255, (208) 373-0502.~~ (3-24-22)

**ea.** Recommended Standards for Water Works – Policies for the Review and Approval of Plans and Specifications for Public Water Supplies: a report of the Water Supply Committee of the Great Lakes -- Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, most current edition, published by Health Education Services, P.O. Box 7126, Albany, New York 12224, Telephone (518) 439-7286 https://

[/www.health.state.mn.us/communities/environment/water/tenstates/standards.html](http://www.health.state.mn.us/communities/environment/water/tenstates/standards.html). (3-24-22)( )

**db.** Manual of Individual and Non-Public Water Supply Systems (EPA 570/9-91-004), published by the U.S. Environmental Protection Agency, ~~available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C.20402, Telephone (202) 782-3238~~ <https://nepis.epa.gov>. (3-24-22)( )

**e.** ~~U.S. Department of Commerce, National Bureau of Standards Handbook, No. 69, "Maximum Permissible Concentrations of Radionuclides in Air and in Water for Occupational Exposure" as amended in 1963, NCRP Publications, P.O. Box 20175, Washington, D.C. 20014.~~ (3-24-22)

**f.** Rules of the Idaho Water Resources Board are available at <http://www.adminrules.idaho.gov/rules/37/37index.htm>, or the Idaho Department of Water Resources, Idaho Water Center, 322 E. Front St., P.O. Box 83720, Boise, Idaho 83720-0098, Telephone (208) 287-4800. (3-24-22)

**g.** ~~ANSI/NSF Standard 44-2002e—2004, Residential Cation Exchange Water Softeners, available from the National Sanitation Foundation, 789 N. Dixboro Road, Ann Arbor, Michigan 48105, Telephone (734) 769-8010.~~ (3-24-22)

**hc.** ~~ANSI/NSF/ANSI Standard 53-2002e—2003~~2020, Drinking Water Treatment Units -- Health Effects, available from the National Sanitation Foundation, ~~789 N. Dixboro Road, Ann Arbor, Michigan 48105, Telephone (734) 769-8010~~ <https://www.techstreet.com/nsf/> (or) [https://www.techstreet.com/nsf/standards/nsf-ansi-53-2020?product\\_id=2212861](https://www.techstreet.com/nsf/standards/nsf-ansi-53-2020?product_id=2212861). (3-24-22)( )

**id.** ~~ANSI/NSF/ANSI Standard 55-2002—2002~~2020, Ultraviolet Microbiological Water Treatment Systems, available from the National Sanitation Foundation, ~~789 N. Dixboro Road, Ann Arbor, Michigan 48105, Telephone (734) 769-8010~~ <https://www.techstreet.com/nsf/> (or) [https://www.techstreet.com/nsf/standards/nsf-ansi-55-2020?product\\_id=2229644](https://www.techstreet.com/nsf/standards/nsf-ansi-55-2020?product_id=2229644). (3-24-22)( )

**je.** ~~ANSI/NSF/ANSI Standard 58-2003—2004~~2020, Reverse Osmosis Drinking Water Treatment Systems, available from the National Sanitation Foundation, ~~789 N. Dixboro Road, Ann Arbor, Michigan 48105, Telephone (734) 769-8010~~ <https://www.techstreet.com/nsf/> (or) [https://www.techstreet.com/nsf/standards/nsf-ansi-58-2020?product\\_id=2206515](https://www.techstreet.com/nsf/standards/nsf-ansi-58-2020?product_id=2206515). (3-24-22)( )

**kf.** ~~ANSI/NSF/ANSI/CAN Standard 60-2000a—2000~~2021, Drinking Water Treatment Chemicals -- Health Effects, available from the National Sanitation Foundation, ~~789 N. Dixboro Road, Ann Arbor, Michigan 48105, Telephone (734) 769-8010~~ <https://www.techstreet.com/nsf/> (or) [https://www.techstreet.com/nsf/standards/nsf-ansi-can-60-2021?product\\_id=2239369](https://www.techstreet.com/nsf/standards/nsf-ansi-can-60-2021?product_id=2239369). (3-24-22)( )

**lg.** ~~ANSI/NSF Standard 61-2000a—2000~~2021, Drinking Water System Components -- Health Effects, available from the National Sanitation Foundation, ~~789 N. Dixboro Road, Ann Arbor, Michigan 48105, Telephone (734) 769-8010~~ <https://www.techstreet.com/nsf/> (or) [https://www.techstreet.com/nsf/standards/nsf-ansi-can-61-2021?product\\_id=2240016](https://www.techstreet.com/nsf/standards/nsf-ansi-can-61-2021?product_id=2240016). (3-24-22)( )

**m.** ~~American Water Works Association (AWWA) Standards, available from the AWWA, 6666 West Quincey Avenue, Denver, Colorado 80235, (800) 926-7337, www.awwa.org.~~ (3-24-22)

**n.** ~~Cross-Connection Control Manual, available from Pacific Northwest Section of the American Water Works Association, P.O. Box 19581, Portland, OR, 97280-0581, Telephone (503) 246-5845.~~ (3-24-22)

**oh.** Manual of Cross-Connection Control, Current Edition, Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California, ~~KAP-200 University Park MC-2531, Los Angeles, CA 90089-2531, (866)545-6340, www.usc.edu/dept/fccchr/.~~ (3-24-22)( )

**pi.** ~~Manual on of design for~~ Slow Sand Filtration (1991), published by AWWA Research Foundation ~~6666 West Quincey Avenue, Denver, CO 80235, (800)926-7337, www.awwa.org~~ <https://www.directtextbook.com/isbn/0898675510>. (3-24-22)( )

~~g.j.~~ Slow Sand Filtration (1991), published by the American Society of Civil Engineers American Society of Civil Engineers, ~~1801 Alexander Bell Drive, Reston, VA 20191, (800)548-2723, www.asce.org~~ <https://www.amazon.com/Slow-Sand-Filtration-Gary-Logsdon/dp/0872628477>. (3-24-22)( )

~~h.k.~~ Slow Sand Filtration and Diatomaceous Earth Filtration for Small Water Systems, DOH Pub #331-204 (4/03), Washington State Department of Health, Division of Environmental Health, Office of Drinking Water, ~~PO Box 47828, Olympia WA 98504-7828, (360)236-3100 or (800)521-0323, http://www.doh.wa.gov/chp/dw/Programs/water\_sys\_design.htm~~ <https://www.scribd.com/document/163696548/331-204-pdf>. (3-24-22)( )

~~l.~~ **Recommended Operations and Optimization Goals, Slow Sand Filtration, DOH Pub #331-601 (6/21)**, Washington State Department of Health, Division of Environmental Health, Office of Drinking Water, <https://www.doh.wa.gov/Portals/1/Documents/Pubs/331-601.pdf>. ( )

~~h.m.~~ Water System Design Manual, DOH Pub #331-123 (Rev. ~~8/01~~6-20), Washington State Department of Health, Division of Environmental Health, Office of Drinking Water, ~~PO Box 47828, Olympia WA 98504-7828, (360)236-3100 or (800)521-0323, http://www.doh.wa.gov/chp/dw/Programs/water\_sys\_design.htm~~ <https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemDesignandPlanning/SystemDesign>. (3-24-22)( )

~~h.t.~~ **Submersible Motors: Application, Installation, Maintenance** (Franklin Electric AIM manual), Franklin Electric, Bluffton, Indiana 46714, (800)348-2420, <http://www.franklin-electric.com/aim-manual.aspx>. (3-24-22)

~~h.un.~~ Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources (March 1991 Edition), U.S. Environmental Protection Agency, <http://water.epa.gov/lawsregs/rulesregs/sdwa/swtr/upload/guidsws.pdf>. ( )

~~h.v.o.~~ Standard Methods for the Examination of Water and Wastewater, a joint publication of the American Public Health Association, the Water Environment Federation, and the American Water Works Association, ~~6666 West Quincey Avenue, Denver, CO 80235, 800-926-7337, www.standardmethods.org~~. (3-24-22)( )

~~h.w.~~ F480-02 Standard Specification for Thermoplastic Well Casing Pipe and Couplings Made in Standard Dimension ratios (SDR), SCH 40 and SCH 80, American Society for Testing and Materials (ASTM Standard F480-02). (3-24-22)

~~h.p.~~ "Idaho Standards for Public Works Construction," Local Highway Technical Assistance Council, 3330 Grace Street, Boise, ID 83605, (208)344-0565 <https://lhtac.org/resources/ispwc>. (3-24-22)( )

~~h.y.g.~~ Memorandum of Understanding between the Idaho Department of Environmental Quality and the Idaho Division of Building Safety Plumbing Bureau, Idaho Department of Environmental Quality, 1410 North Hilton, Boise, Idaho 83706, [www.deq.idaho.gov](http://www.deq.idaho.gov). ( )

~~h.z.~~ Idaho General Safety and Health Standards (IGSHS), available from the Idaho Division of Building Safety, 1090 E. Watertower St., Meridian, Idaho 83642, (208)334-3950, <http://dbs.idaho.gov/>. (3-24-22)

~~h.a.a.r.~~ Implementation Guidance for the Long Term 2 Enhanced Surface Water Treatment Rule, Idaho Department of Environmental Quality, ~~1410 North Hilton, Boise, Idaho 83706, www.deq.idaho.gov~~ <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/6040>. (3-24-22)( )

~~h.b.b.s.~~ Implementation Guidance for the Stage 2 Disinfectants and Disinfection Byproducts Rule, Idaho Department of Environmental Quality, ~~1410 North Hilton, Boise, Idaho 83706, www.deq.idaho.gov~~ <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/4790>. (3-24-22)( )

~~h.e.e.t.~~ Implementation Guidance for the **Drinking Water Program-Ground Water Rule**, Idaho Department of Environmental Quality, ~~1410 North Hilton, Boise, Idaho 83706, www.deq.idaho.gov~~ <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/4778>. (3-24-22)( )

~~ddu.~~ AWWA Recommended Practice for Backflow Prevention and Cross-Connection Control (M14), ~~current edition~~ available from the AWWA, ~~6666 West Quincey Avenue, Denver, Colorado 80235, Telephone (800) 926-7337~~ <https://engage.awwa.org/PersonifyEbusiness/Store/Product-Details/productId/46494412>. (3-24-22)(    )

~~eev.~~ Membrane Filtration Guidance Manual (EPA 815-R-06-009) published by the U.S. Environmental Protection Agency, ~~available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, Telephone (202) 782-3238,~~ [http://www.epa.gov/ogwdw/disinfection/lt2/pdfs/guide\\_lt2\\_membranefiltration\\_final.pdf](http://www.epa.gov/ogwdw/disinfection/lt2/pdfs/guide_lt2_membranefiltration_final.pdf) [https://sswm.info/sites/default/files/reference\\_attachments/EPA%202005%20Membrane%20Filtration%20Guidance%20Manual.pdf](https://sswm.info/sites/default/files/reference_attachments/EPA%202005%20Membrane%20Filtration%20Guidance%20Manual.pdf). (3-24-22)(    )

~~ffw.~~ Ultraviolet Disinfection Guidance Manual for the Final Long Term 2 Enhanced Surface water Treatment Rule (EPA 815-R-06-007) published by the U.S. Environmental Protection Agency, ~~available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, Telephone (202) 782-3238,~~ [www.epa.gov/safewater/disinfection/lt2/pdfs/guide\\_lt2\\_uvguidance.pdf](http://www.epa.gov/safewater/disinfection/lt2/pdfs/guide_lt2_uvguidance.pdf) <https://www.epa.gov/dwreginfo/long-term-2-enhanced-surface-water-treatment-rule-documents>. (3-24-22)(    )

~~ggx.~~ Improving Clearwell Design for CT Compliance, Report #90756, available from the Water Research Foundation, ~~http://waterrf.org/ProjectsReports/PublicReportLibrary/RFR90756\_2000\_271.pdf~~ <https://www.waterrf.org/research/projects/improving-clearwell-design-ct-compliance>. (3-24-22)(    )

~~hhv.~~ Surface Water Treatment Rule Compliance Guidance, dated January 10, 1996, Idaho Department of Environmental Quality, ~~www.deq.idaho.gov~~ <https://www.deq.idaho.gov/public-information/laws-guidance-and-orders/guidance/>. (3-24-22)(    )

~~iiz.~~ Uniform Plumbing Code, available ~~at~~ through the Idaho Division of Building Safety, 1090 E. Watertower St., Meridian, Idaho 83642; and at the Division of Building Safety, ~~4250 Ironwood Dr., Ste. 220, Coeur d'Alene, Idaho 83814,~~ <http://dbs.idaho.gov>. (3-24-22)(    )

~~aa.~~ Optimizing Water Treatment Plant Performance Using the Composite Correction Program (EPA/625/6-91/027) published by the U.S. Environmental Protection Agency. [https://cfpub.epa.gov/si/si\\_public\\_record\\_report.cfm?Lab=NRMRL&direntryid=23902](https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NRMRL&direntryid=23902). (    )

**03. Precedence.** In the event of conflict or inconsistency between the language in these rules and that found in any document incorporated by reference, these rules ~~shall~~ prevail. (3-24-22)(    )

### **003. DEFINITIONS.**

The definitions set forth in 40 CFR 141.2 are ~~herein~~ incorporated by reference, ~~except for the definition of the terms “action level,” “disinfection,” “noncommunity water system,” and “person.”~~ The terms “board,” “director,” “department,” and “person” have the meaning provided in Section 39-103, Idaho Code. The term “watersheds” has the meaning provided in Section 39-3602, Idaho Code. The terms “distribution system,” “license,” “responsible charge,” and “responsible charge operator” have the meaning provided in Section 54-2403, Idaho Code. The term “public utility” has the meaning provided in Section 61-129, Idaho Code. The term “pesticide” has the meaning provided in Section 22-3401, Idaho Code. (3-24-22)(    )

~~01. Action Level.~~ The concentration of lead or copper in water that determines, in some cases, whether a water system must install corrosion control treatment, monitor source water, replace lead service lines, or undertake a public education program. (3-24-22)

~~02. Administrator.~~ The Administrator of the United States Environmental Protection Agency. (3-24-22)

~~03. Annual Samples.~~ Samples that are required once per calendar year. (3-24-22)

~~04. Annular Opening.~~ As used in well construction, this term refers to the nominal inside diameter of the borehole minus the outside diameter of the casing divided by two (2). (3-24-22)



**051.** **Aquifer.** A geological formation of permeable saturated material, such as rock, sand, gravel, etc., capable of yielding an economic quantity of water to wells and springs. ( )

~~06. **Average Day Demand.** The volume of water used by a system on an average day based on a one (1) year period. See also the definition of Water Demand in these rules. (3-24-22)~~

**072.** **Backflow.** The reverse from normal flow direction in a plumbing system or water system caused by back pressure or back siphonage. ( )

~~08. **Bag Filters.** Pressure driven separation devices that remove particulate matter larger than one (1) micrometer using an engineered porous filtration media. They are typically constructed of a non rigid, fabric filtration media housed in a pressure vessel in which the direction of flow is from the inside of the bag to the outside. (3-24-22)~~

~~09. **Bank Filtration.** A water treatment process that uses a well to recover surface water that has naturally infiltrated into ground water through a river bed or bank(s). Infiltration is typically enhanced by the hydraulic gradient imposed by a nearby pumping water supply or other well(s). (3-24-22)~~

~~10. **Board.** The Idaho Board of Environmental Quality. (3-24-22)~~

**1103.** **Capacity.** The capabilities required of a public drinking water system (**PWS**) in order to achieve and maintain compliance with these rules and the requirements of the federal Safe Drinking Water Act (**SDWA**). It is divided into three (3) main elements: (3-24-22)( )

a. Technical capacity means the ~~system~~ **PWS** has the physical infrastructure to consistently meet drinking water quality standards and treatment requirements and is able to meet the requirements of routine and emergency operations. It further means the ability of ~~system~~ **PWS** personnel to adequately operate and maintain the ~~system~~ **PWS** and to otherwise implement technical knowledge. Training of operator(s) is required, as appropriate, for the system size and complexity. (3-24-22)( )

b. Financial capacity means the financial resources of the ~~water system~~ **PWS**, including an appropriate budget; rate structure; cash reserves sufficient for current operation and maintenance, future needs and emergency situations; and adequate fiscal controls. (3-24-22)( )

c. Managerial capacity means that the management structure of the ~~water system~~ **PWS** embodies the aspects of ~~water~~ system operations, including, but not limited to; (3-24-22)( )

- i. Short and long range planning; ( )
- ii. Personnel management; ( )
- iii. Fiduciary responsibility; ( )
- iv. Emergency response; ( )
- v. Customer responsiveness; ( )
- vi. Source water protection; ( )
- vii. Administrative functions such as billing and consumer awareness; and ( )
- viii. Ability to meet the intent of the federal ~~Safe Drinking Water Act~~ **SDWA**. (3-24-22)( )

~~12. **Cartridge Filters.** Pressure driven separation devices that remove particulate matter larger than one (1) micrometer using an engineered porous filtration media. They are typically constructed as rigid or semi-rigid, self supporting filter elements housed in pressure vessels in which flow is from the outside of the cartridge to the inside. (3-24-22)~~

~~13. **Clean Compliance History.** For the purposes of the Revised Total Coliform Rule in Subsection 100.01, clean compliance history means a record of no maximum contaminant level violations under Subsection 050.05, no monitoring violations under Subsection 100.01, and no coliform treatment technique trigger exceedances or treatment technique violations under Subsection 100.01. (3-24-22)~~

~~14. **Combined Distribution System.** The interconnected distribution system consisting of the distribution systems of wholesale systems and of the consecutive systems that receive finished water. (3-24-22)~~

~~15. **Community Water System.** A public water system which serves at least fifteen (15) service connections used by year round residents or regularly serves at least twenty five (25) year round residents. See also the definition of a Public Drinking Water System in these rules. (3-24-22)~~

~~1604. **Components of Finished Water Storage.** Storage is available to serve the system if the storage structure or facility is elevated sufficiently or is equipped with sufficient booster pumping capability to pressurize the system. Components of finished water storage are further defined as: ( )~~

~~a. **Dead Storage.** is Sstorage that is either not available for use in the system or can provide only substandard flows and pressures. (3-24-22)( )~~

~~b. **Effective Storage.** Effective storage is all storage other than dead storage and is made up of the additive components described in Paragraphs c. through f. of this Subsection. (3-24-22)( )~~

~~c. **Operational Storage.** Operational storage supplies water when, under normal conditions, the sources are off. This component is the larger of; (3-24-22)( )~~

~~i. The volume required to prevent excess pump cycling and ensure that the following volume components are full and ready for use when needed; or ( )~~

~~ii. The volume needed to compensate for the sensitivity of the water level sensors. ( )~~

~~d. **Equalization Storage.** is Sstorage of finished water in sufficient quantity to compensate for the difference between a water system's maximum pumping capacity and peak hour demand. (3-24-22)( )~~

~~e. **Fire Suppression Storage.** is Tthe water needed to support fire flow in those systems that provide it. (3-24-22)( )~~

~~f. **Standby Storage.** Standby storage provides a measure of reliability or safety factor ~~should~~ if sources fail or when unusual conditions impose higher than anticipated demands. Normally used for emergency operation, if standby power is not provided, to provide water for eight (8) hours of operation at average day demand. (3-24-22)( )~~

~~1705. **Composite Correction Program (CCP).** A systematic approach to identifying opportunities for improving the performance of water treatment and implementing changes that will capitalize on these opportunities. The CCP consists of two (2) elements: ( )~~

~~a. **Comprehensive Performance Evaluation (CPE).** ~~A thorough review and analysis of a treatment plant's performance based capabilities and associated administrative, operation, and maintenance practices. It is conducted to identify factors that may be adversely impacting a plant's capability to achieve compliance and emphasizes approaches that can be implemented without significant capital improvements. The CPE must consist of at least the following components: assessment of plant performance; evaluation of major unit processes; identification and prioritization of performance limiting factors; assessment of the applicability of comprehensive technical assistance; and preparation of a CPE report.~~ As defined in 40 CFR 141.2. (3-24-22)( )~~

~~b. **Comprehensive Technical Assistance (CTA).** is Tthe implementation phase that is carried out if the CPE results indicate improved performance potential. During the CTA phase, the ~~system~~ PWS must identify and systematically address plant-specific factors. The CTA consists of follow-up to the CPE results, implementation of~~

process control priority setting techniques, and maintaining long term involvement to systematically train staff and administrators. (3-24-22)( )

- ~~18. Compositing of Samples. The mixing of up to five (5) samples by the laboratory. (3-24-22)~~
- ~~1906. Confining Layer. A nearly impermeable subsurface stratum which is located adjacent to one (1) or more aquifers and does not yield a significant quantity of water to a well. ( )~~
- ~~20. Confirmation Sample. A sample of water taken from the same point in the system as the original sample and at a time as soon as possible after the original sample was taken. (3-24-22)~~
- ~~21. Connection. Each structure, facility, or premises which is connected to a water system, and which is or could be used for domestic purposes, is considered a single connection. A single family residence is considered to be a premises. Multi family dwellings and apartment, condominium, and office complexes are considered single connections unless individual units are billed separately for water by the water system, in which case each such unit shall be considered a single connection. (3-24-22)~~
- ~~22. Consecutive System. A public water system that receives some or all of its finished water from one (1) or more wholesale systems. Delivery may be through a direct connection or through the distribution system of one (1) or more consecutive systems. (3-24-22)~~
- ~~2307. Consumer. Any person served by a public water system PWS. (3-24-22)( )~~
- ~~2408. Consumer Confidence Report (CCR). An annual report that community water systems must deliver to their customers. The reports must contain information on the quality of the water delivered by the systems PWS and characterize the risks (if any) from exposure to contaminants detected in the drinking water in an accurate and understandable manner. (3-24-22)( )~~
- ~~25. Contaminant. Any physical, chemical, biological, or radiological substance or matter in water. (3-24-22)~~
- ~~2609. Cross Connection. Any actual or potential connection or piping arrangement between a public or a consumer's potable water system and any other source or system through which it is possible to introduce into any part of the potable water system used water, water from any source other than an approved public water system, industrial fluid, gas or substance other than the intended potable water with which the system is supplied. Cross connections include bypass arrangements, jumper connections, removable sections, swivel or change over devices and other temporary or permanent devices which, or because of which "backflow" can or may occur. An actual or potential connection or piping arrangement between a drinking water system and another source that could introduce contamination into the potable water system through backflow, backsiphoning, or backpressure. (3-24-22)( )~~
- ~~2710. Dead End Main. A distribution main of any diameter and length that does not loop back into the distribution system. ( )~~
- ~~28. Dead Storage. Storage that is either not available for use in the system or can provide only substandard flows and pressures. See also the definition of Components of Finished Water Storage in these rules. (3-24-22)~~
- ~~29. Department. The Idaho Department of Environmental Quality. (3-24-22)~~
- ~~30. Director. The Director of the Department of Environmental Quality or his designee. (3-24-22)~~
- ~~3411. Direct Integrity Test (DIT). A physical test applied to a microfiltration or ultrafiltration membrane unit in order to identify integrity breaches. ( )~~
- ~~32. Disinfection. Introduction of chlorine, other agents, or processes that are approved by the Department (such as ultraviolet light) in sufficient concentration, dosage, or application, and for the time required to kill or inactivate pathogenic and indicator organisms. (3-24-22)~~

~~33. **Disinfection Profile.** A summary of daily *Giardia lamblia* inactivation through the drinking water treatment plant. The procedure for developing a disinfection profile is contained in 40 CFR 141.172 and 40 CFR 141.530-141.536. (3-24-22)~~

~~34. **Distribution System.** Any combination of pipes, tanks, pumps, and other equipment which delivers water from the source(s), treatment facility(ies), or a combination of source(s) and treatment facility(ies) to the consumer. Chlorination may be considered as a function of a distribution system. (3-24-22)~~

~~35. **Drinking Water.** Means “water for human consumption.” (3-24-22)~~

~~3612. **Drinking Water System.** All mains, pipes, and structures through which water is obtained and distributed, including wells and well structures, intakes and cribs, pumping stations, treatment plants, reservoirs, storage tanks and appurtenances, collectively or severally, actually used or intended for use for the purpose of furnishing water for drinking or general domestic use. ( )~~

~~37. **Dual Sample Set.** A set of two (2) samples collected at the same time and same location, with one (1) sample analyzed for TTHM and the other sample analyzed for HAA5. Dual sample sets are collected for the purposes of conducting an Initial Distribution System Evaluation (40 CFR Part 141, Subpart U) and for determining compliance with the TTHM and HAA5 MCLs under the Stage 2 Disinfection Byproducts Requirements (40 CFR Part 141, Subpart V). (3-24-22)~~

~~3813. **Effective Contact Time.** For the purpose of these rules, effective contact time means the time in minutes that it takes for water to move from the point of completely mixed chemical application to the point where residual concentration is measured. It is the “T” in contact time (CT) calculations and is either “demonstrated” or “calculated.” It is the contact time sufficient to achieve the inactivation of target pathogens under the expected range of raw water pH and temperature variation and must be demonstrated through tracer studies or other evaluations or calculations acceptable to the Department. “Improving Clearwell Design for CT Compliance,” referenced in Subsection 002.02, contains information that may be used as guidance for these calculations. ( )~~

~~39. **Effective Storage.** Effective storage is all storage other than dead storage and is made up of the additive components described in Paragraphs e. through f. of the definition of Components of Finished Water Storage in these rules. (3-24-22)~~

~~40. **Enhanced Coagulation.** The addition of sufficient coagulant for improved removal of disinfection byproduct precursors by conventional filtration treatment. Conventional filtration treatment is defined in 40 CFR 141.2. (3-24-22)~~

~~41. **Enhanced Softening.** The improved removal of disinfection byproduct precursors by precipitative softening. (3-24-22)~~

~~42. **Equalization Storage.** Storage of finished water in sufficient quantity to compensate for the difference between a water system’s maximum pumping capacity and peak hour demand. See also the definition of Components of Finished Water Storage in these rules. (3-24-22)~~

~~4314. **Equivalent Dwelling Unit (EDU).** A unit of measure that standardizes all land use types (housing, retail, office, etc.) to the level of demand created by a single-family detached housing unit within a water system. The demand for one (1) equivalent dwelling unit is equivalent to the amount of water provided to the average single-family detached housing unit within a water system. For example, a business designed to use three (3) times as much water as an average single-family detached housing unit would will have a demand of three (3) equivalent dwelling units. (3-24-22)( )~~

~~4415. **Exemption.** A temporary deferment of compliance with a maximum contaminant level or treatment technique requirement which may be granted only if the system PWS demonstrates to the satisfaction of the Department that the system PWS cannot comply due to compelling factors and the deferment does not cause an unreasonable risk to public health. (3-24-22)( )~~

~~4516.~~ **Facility Plan.** The facility plan for a ~~public drinking water system~~ **PWS** describes the overall system, including sources of water, treatment processes and facilities, pumping stations and distribution piping, finished water storage, and waste disposal. It is a comprehensive planning document for infrastructure and includes a plan for the future of the system/facility, including upgrades and additions. It is usually updated on a regular basis due to anticipated or unanticipated growth patterns, regulatory requirements, or other infrastructure needs. A facility plan is sometimes referred to as a master plan or facilities planning study. In general, a facility plan is an overall system-wide plan as opposed to a project specific plan. (3-24-22)( )

~~46.~~ **Facility Standards and Design Standards.** Facility standards and design standards are described in Sections 500 through 552 of these rules. Facility and design standards found in Sections 500 through 552 of these rules must be followed in the planning, design, construction, and review of public drinking water facilities. (3-24-22)

~~47.~~ **Fee Assessment.** A charge assessed on public drinking water systems based on a rate structure calculated by system size. (3-24-22)

~~48.~~ **Filter Profile.** A graphical representation of individual filter performance, based on continuous turbidity measurements or total particle counts versus time for an entire filter run, from startup to backwash inclusively, that includes an assessment of filter performance while another filter is being backwashed. (3-24-22)

~~4917.~~ **Filtrate.** As the term relates to microfiltration and ultrafiltration, the product water or the portion of the feed stream that has passed through the membrane. ( )

~~50.~~ **Finished Water.** Water that is introduced into the distribution system of a public water system and is intended for distribution and consumption without further treatment, except as necessary to maintain water quality in the distribution system (e.g., booster disinfection, addition of corrosion control chemicals). (3-24-22)

~~518.~~ **Finished Water Storage Structures or Facilities.** Finished water storage structures or facilities are defined as: ( )

a. Above-ground storage structure or facility: ~~is Aa~~ finished water storage structure or facility with a bottom elevation above normal ground surface. (3-24-22)( )

b. Ground-level storage structure or facility: ~~is Aa~~ finished water storage structure or facility with a bottom elevation at normal ground surface. (3-24-22)( )

c. Partially buried storage structure or facility: ~~is Aa~~ finished water storage structure or facility with a bottom elevation below normal ground surface and any portion of the structure or facility above normal ground surface. (3-24-22)( )

d. Below-ground storage structure or facility: ~~is Aa~~ finished water storage structure or facility with a bottom elevation and top elevation below normal ground surface. (3-24-22)( )

~~5219.~~ **Fire Flow Capacity.** The water system capacity, in addition to maximum day demand, that is available for fire fighting purposes within the water system or distribution system pressure zone. Adequacy of the water system fire flow capacity is determined by the local fire authority or through a hydraulic analysis performed by a licensed professional engineer to establish required fire flows in accordance with the International Fire Code as adopted by the State Fire Marshal. ( )

~~5320.~~ **Fire Suppression Storage.** The water needed to support fire flow in those systems that provide it. See also the definition of Components of Finished Water Storage in these rules. ( )

~~5421.~~ **Fixture Protection.** The practice of installing backflow prevention assemblies or devices to isolate one (1) or more cross connections within a customer's facility. ( )

~~55.~~ **Flowing Stream.** As used in the Long Term 2 Enhanced Surface Water Treatment Rule (40 CFR Part 141, Subpart W), this term means a course of running water flowing in a definite channel. (3-24-22)

~~5622.~~ **Flux.** The throughput of a pressure-driven membrane filtration process expressed as flow per unit of membrane area, usually in gallons per square foot per day or liters per hour per square meter. ( )

~~57.~~ **Ground Water System.** A public water system which is supplied exclusively by a ground water source or sources. (3-24-22)

~~58.~~ **Ground Water Under the Direct Influence of Surface Water (GWUDI).** Any water beneath the surface of the ground with significant occurrence of insects or other macroorganisms, algae, or large diameter pathogens such as *Giardia lamblia* or *Cryptosporidium*, or significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH which closely correlate to climatological or surface water conditions. Direct influence shall be determined by the Department for individual sources. The determination of direct influence may be based on site specific measurements of water quality, documentation of well construction characteristics and geology with field evaluation, a combination of water quality and documentation, or other information required by the Department. (3-24-22)

~~59.~~ **Halooacetic Acids (Five) (HAA5).** The sum of the concentrations in milligrams per liter of the haloacetic acid compounds (monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid) rounded to two (2) significant figures after addition. (3-24-22)

~~6023.~~ **Health Hazards.** Any condition, operation, or practice in a PWS which creates, or may has the potential to create, an acute or immediate danger to the consumer's health. Health hazards may consist of, but are not limited to, design, construction, operational, structural, collection, storage, distribution, monitoring, treatment or water quality elements of a public water system. See also the definition of Significant Deficiency, which refers to a health hazard identified during a sanitary survey. (3-24-22)( )

~~6124.~~ **Indirect Integrity Monitoring.** Monitoring some aspect of filtrate water quality that is indicative of the removal of particulate matter. ( )

~~6225.~~ **Inorganic.** Generally refers to compounds that do not contain carbon and hydrogen. ( )

~~6326.~~ **Internal or In-Plant Isolation.** The practice of installing backflow prevention assemblies to protect an area within a water customer's structure, facility, or premises from contaminating another part of the structure, facility, or premises. ( )

~~64.~~ **Lake/Reservoir.** As used in the Long Term 2 Enhanced Surface Water Treatment Rule (40 CFR Part 141, Subpart W), this term means a natural or man-made basin or hollow on the Earth's surface in which water collects or is stored that may or may not have a current or single direction of flow. (3-24-22)

~~65.~~ **Level 1 Assessment.** A Level 1 Assessment is an evaluation to identify the possible presence of sanitary defects, defects in distribution system coliform monitoring practices, and (when possible) the likely reason that the system triggered the assessment. It is conducted by the system operator or owner. Minimum elements include review and identification of atypical events that could affect distributed water quality or indicate that distributed water quality was impaired; changes in distribution system maintenance and operation that could affect distributed water quality (including water storage); source and treatment considerations that bear on distributed water quality, where appropriate (e.g., whether a ground water system is disinfected); existing water quality monitoring data; and inadequacies in sample sites, sampling protocol, and sample processing. The system must conduct the assessment consistent with any Department directives that tailor specific assessment elements with respect to the size and type of the system and the size, type, and characteristics of the distribution system. (3-24-22)

~~66.~~ **Level 2 Assessment.** A Level 2 Assessment is an evaluation to identify the possible presence of sanitary defects, defects in distribution system coliform monitoring practices, and (when possible) the likely reason that the system triggered the assessment. A Level 2 assessment provides a more detailed examination of the system (including the system's monitoring and operational practices) than does a Level 1 assessment through the use of more comprehensive investigation and review of available information, additional internal and external resources, and other relevant practices. It is conducted by an individual approved by the Department in accordance with Subsection 305.03, which may include the system operator. Minimum elements include review and identification of atypical events that could affect distributed water quality or indicate that distributed water quality was impaired; changes in



~~distribution system maintenance and operation that could affect distributed water quality (including water storage); source and treatment considerations that bear on distributed water quality, where appropriate (e.g., whether a ground water system is disinfected); existing water quality monitoring data; and inadequacies in sample sites, sampling protocol, and sample processing.~~ (3-24-22)

~~67. License. A physical document issued by the Idaho Division of Occupational and Professional Licenses certifying that an individual has met the appropriate qualifications and has been granted the authority to practice in Idaho under the provisions of Chapter 24, Title 54, Idaho Code.~~ (3-24-22)

~~68. Locational Running Annual Average (LRAA). The average of sample analytical results for samples taken at a particular monitoring location during the previous four (4) calendar quarters, as set forth in the Stage 2 Disinfection Byproducts Requirements (40 CFR Part 141, Subpart V).~~ (3-24-22)

27. Like-Kind Replacement. Repair or replacement of a system component that is identical in capacity, exhibits equivalent design, operational, and material parameters, and does not result in an increase in system capacity or alter existing methods or processes. ( )

~~69~~28. Log. Logarithm to the base ten (10). In the context of these rules, it is used in the determination of removal or inactivation efficiencies. It is expressed as the logarithm to the base ten (10) or “log” of the concentration of the feed or raw water minus the log of the concentration in the filtrate or product water. For example, if the incoming feed or raw water concentration is one hundred (100), and the outgoing filtrate or product water concentration is ten (10), a 10-fold reduction was attained; or 1-log removal. 1-log removal also equates to ninety percent (90%) removal, as ninety (90) of the original feed concentration counts had been removed, leaving ten (10) in the filtrate. Similarly, 2-log equates to ninety-nine percent (99%) removal. ( )

~~70~~29. Log Removal Value (LRV). LRV is a measure of filtration removal efficiency for a target organism, particulate, or surrogate expressed as Logarithm to the base ten (10). ( )

~~71~~30. Material Deviation. A change from the design plans that significantly alters the type or location of facilities, requires engineering judgment to design, or impacts the public safety or welfare system components. (3-24-22)( )

~~72~~31. Material Modification. ~~Those m~~Modifications of an existing ~~public water system PWS~~ that are ~~intended to~~ increase system capacity or alter the methods or processes employed. ~~Any project that adds source water to a system, increases the pumping capacity of a system, increases the potential population served by the system or the number of service connections within the system, adds new or alters existing drinking water system components, or affects the water demand of the system is considered to be increasing system capacity or altering the methods or processes employed. Maintenance and repair performed on the system and the replacement of valves, pumps, or other similar items with new items of the same size and type are not considered a material modification. Increasing system capacity occurs by adding a new water source to a PWS, increasing the pumping and hydraulic capacity of the PWS, increasing potable water demand, or increasing the number of service connections. Altering methods or processes employed occurs by adding new, or altering existing, system components to satisfy increasing potable water demand, or changing engineering design intent of potable water delivery or treatment. Maintenance as outlined in the approved operation and maintenance manual, or maintenance that does not meet the criteria of a material modification described in this definition, is not a material modification. Like-kind replacement is not considered a material modification.~~ (3-24-22)( )

~~73. Maximum Contaminant Level (MCL).~~ The maximum permissible level of a contaminant in water which is delivered to any user of a public water system. (3-24-22)

~~74. Maximum Day Demand.~~ The average rate of consumption for the twenty four (24) hour period in which total consumption is the largest for the design year. See also the definition of Water Demand in these rules. (3-24-22)

~~75~~32. Maximum Pumping Capacity. The pumping capacity with the largest source or pump out of service. ( )

~~76. **Maximum Residual Disinfectant Level (MRDL).** A level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. For chlorine and chloramines, a public water system is in compliance with the MRDL, when the running annual average of monthly averages of samples taken in the distribution system, computed quarterly, is less than or equal to the MRDL. For chlorine dioxide, a public water system is in compliance with the MRDL when daily samples are taken at the entrance to the distribution system and no two (2) consecutive daily samples exceed the MRDL. MRDLs are enforceable in the same manner as maximum contaminant levels under Section 1412 of the Safe Drinking Water Act. There is convincing evidence that addition of a disinfectant is necessary for control of waterborne microbial contaminants. Notwithstanding the MRDLs listed in 40 CFR 141.65, operators may increase residual disinfectant levels of chlorine or chloramines (but not chlorine dioxide) in the distribution system to a level and for a time necessary to protect public health to address specific microbiological contamination problems caused by circumstances such as distribution line breaks, storm runoff events, source water contamination, or cross-connections.~~ (3-24-22)

~~77. **Maximum Residual Disinfectant Level Goal (MRDLG).** The maximum level of a disinfectant added for water treatment at which no known or anticipated adverse effect on the health of persons would occur, and which allows an adequate margin of safety. MRDLGs are nonenforceable health goals and do not reflect the benefit of the addition of the chemical for control of waterborne microbial contaminants.~~ (3-24-22)

~~78. **Membrane Filtration.** A pressure or vacuum driven separation process in which particulate matter larger than one (1) micrometer ( $\mu\text{m}$ ) is rejected by an engineered barrier, primarily through a size exclusion mechanism. This definition includes the common membrane technologies of microfiltration, ultrafiltration, nanofiltration, and reverse osmosis.~~ (3-24-22)

~~79~~<sup>33</sup>. **Membrane Unit.** A group of treatment systems or membrane modules that usually share common control and valving so that the group can be isolated for testing or cleaning. ( )

~~80. **Method Detection Limit (MDL).** The lowest concentration which can be determined to be greater than zero with ninety nine percent (99%) confidence, for a particular analytical method.~~ (3-24-22)

~~81~~<sup>34</sup>. **Microfiltration (MF).** A low-pressure membrane filtration process with pore diameter normally in the range of 0.1 to 0.5  $\mu\text{m}$ . (3-24-22)( )

~~82~~<sup>35</sup>. **Module.** As the term relates to membrane filtration, it is the smallest component of a membrane unit in which a specific membrane surface area is housed. The component is typically equipped with a feedwater inlet, a filtrate outlet, and concentrate or backwash outlet structure. ( )

~~83~~<sup>36</sup>. **Nanofiltration (NF).** A membrane filtration process that removes dissolved constituents from water. Nanofiltration is similar to reverse osmosis but allows a higher percentage of certain ions to pass through the membrane. These systems typically operate under higher pressure than microfiltration and ultrafiltration. ( )

~~84~~<sup>37</sup> **New System.** Any water system that meets, for the first time, the definition of a public water system provided in Section 1401 of the federal Safe Drinking Water Act (42 U.S.C. Section 300f). This includes PWS, which includes systems that are entirely new construction and or previously unregulated systems that are expanding increased either the population served or connections. (3-24-22)( )

~~85. **Noncommunity Water System.** A public water system that is not a community water system. A non-community water system is either a transient noncommunity water system or a non-transient noncommunity water system. See also the definition of a Public Drinking Water System in these rules.~~ (3-24-22)

~~86~~<sup>38</sup>. **Non-Potable Fluids or Gases.** Any fluids or gases that do not meet the definition of potable water. This definition also includes any gases that are heavier than air such as propane. (3-24-22)( )

~~87~~<sup>39</sup>. **Non-Potable Mains.** Pipelines that collect, deliver, or otherwise convey non-potable fluids. ( )

~~88~~<sup>40</sup>. **Non-Potable Services or Lines.** Pipelines that collect, deliver, or otherwise convey non-potable



fluids to or from a non-potable main. These pipelines connect individual facilities to the non-potable main. This term also refers to pipelines that convey non-potable fluids from a pressurized irrigation system, reclaimed wastewater system, and other non-potable systems to individual consumers. ( )

~~89. **Nontransient Noncommunity Water System.** A public water system that is not a community water system and that regularly serves at least twenty-five (25) of the same persons over six (6) months per year. See also the definition of a Public Drinking Water System in these rules. (3-24-22)~~

~~90. **Operating Shift.** That Any period of time during which ~~water system operator decisions that affect public health are necessary for proper operation of the system~~ a licensed operator must be present, or available, for proper operation or oversight of the PWS. (3-24-22)( )~~

~~91. **Operational Storage.** Operational storage supplies water when, under normal conditions, the sources are off. This component is the larger of the volume required to prevent excess pump cycling and ensure that the following volume components are full and ready for use when needed or the volume needed to compensate for the sensitivity of the water level sensors. See also the definition of Components of Finished Water Storage in these rules. ( )~~

~~92. **Operation and Maintenance Manual.** An operation and maintenance manual A comprehensive document that provides procedures for the operations and maintenance of the PWS. The manual typically covers three main subjects: a water system specific operations plan (see definition of Operations Plan); maintenance information and checklists; and manufacturer's product information (including trouble shooting information, a parts list and parts order form, special tools, spare parts list, etc.). An operation and maintenance manual may cover every aspect of the water system or any part of the water system, including but not limited to the following: treatment, pump stations, storage reservoirs, distribution system, pressure reducing valve stations, etc. (3-24-22)( )~~

~~93. **Operations Plan.** The operations plan is part of an operation and maintenance manual. Depending on which facilities of the ~~water system~~ PWS are being addressed, the operations plan may cover many types of information including but not limited to the following: daily, weekly, monthly, and yearly operating instructions; information specific to a particular type of treatment; location of valves and other key distribution system features; pertinent telephone and address contact information including the responsible charge ~~water system~~ PWS operator and ~~water system~~ PWS owner; operator safety procedures; alarm system; emergency procedures; trouble-shooting advice; water quality testing; depressurization events; customer service; and response to customer complaints. (3-24-22)( )~~

~~94. **Owner/Purveyor of Water/Supplier of Water.** The person, company, corporation, association, or other organizational entity which holds legal title to the ~~public water system~~ PWS, who provides, or intends to provide, drinking water to the customers, and who is ultimately responsible for the ~~public water system~~ PWS operation. (3-24-22)( )~~

~~95. **Peak Hour Demand.** The highest hourly flow, ~~excluding fire flow, that a water system or distribution system pressure zone is likely to experience in the design year. See also the definition of Water Demand in these rules.~~ (3-24-22)~~

~~96. **Person.** A human being, municipality, or other governmental or political subdivision or other public agency, or public or private corporation, any partnership, firm, association, or other organization, any receiver, trustee, assignee, agent or other legal representative of the foregoing or other legal entity. (3-24-22)~~

~~97. **Pesticides.** Substances which meet the criteria for regulation pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, and any regulations adopted pursuant to FIFRA. For example, pesticides include, but are not limited to insecticides, fungicides, rodenticides, herbicides, and algacides. (3-24-22)~~

~~98. **Plant Design Capacity.** The maximum design flow through treatment units. The minimum plant design capacity ~~could~~ may be equal to peak hour demand but ~~could~~ may also be equal to the maximum day demand if equalization storage is provided. (3-24-22)( )~~

~~99. **Plant.** A physical facility where drinking water ~~or wastewater~~ is treated or processed.~~

(3-24-22)( )

~~100. Point of Use (POU) Treatment Device.~~ A treatment device applied to a single tap used for the purpose of reducing contaminants in drinking water at that one tap. (3-24-22)

~~10148. Point of Use (POU) Treatment System.~~ A collection of POU treatment devices. ( )

~~10249. Potable Mains.~~ Pipelines that deliver potable water to multiple service connections. ( )

~~10350. Potable Services.~~ Pipelines that convey potable water from a service connection to the potable water main to individual consumers. (3-24-22)( )

~~10451. Potable Water.~~ Water for human consumption. ~~See the definition of Water for Human Consumption in Section 003. Also referred to as Water for Human Consumption or Drinking Water.~~ (3-24-22)( )

~~10552. Preliminary Engineering Report (PER).~~ The preliminary engineering report for a public drinking water system facility is a PER report that addresses specific portions of the system PWS or facility for which material modifications are being designed. Material Modifications may include, but are not limited to, significant changes to existing processes or facilities, system PWS expansion, addition of treatment, or installation of other processes and facilities. This report addresses specific purpose and scope, design requirements, alternative solutions, costs, operation and maintenance requirements, and other requirements as described in Section 503. Preliminary engineering reports are generally project specific as opposed to an overall system-wide plan, such as a facility plan. (3-24-22)( )

~~10653. Premises Isolation or Containment.~~ The practice of separating the customer's structure, facility, or premises from the purveyor's system PWS by means of a backflow prevention assembly installed on the service line before any distribution takes place. (3-24-22)( )

~~107. Presedimentation.~~ A preliminary treatment process used to remove gravel, sand, and other particulate material from the source water through settling before the water enters the primary clarification and filtration processes in a treatment plant. (3-24-22)

~~10854. Protected Water Source.~~ For the purposes of the Revised Total Coliform Rule (40 CFR Part 141, Subpart Y), a protected water source is a ground-water well that is not susceptible to contamination on the basis of well construction, hydrologic data, or contamination history. (3-24-22)( )

~~10955. Public Notice.~~ The notification ~~of public water system to PWS~~ consumers of information pertaining to that water system PWS including information regarding water quality or compliance status of the water system PWS. (3-24-22)( )

~~11056. Public Drinking Water System (PWS).~~ A system for the provision to the public of water for human consumption through pipes or, after August 5, 1998, other constructed conveyances, if such system has at least fifteen (15) service connections, regardless of the number of water sources or configuration of the distribution system, or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year. Such term includes: any collection, treatment, storage, and distribution facilities under the control of the operator of such system and used primarily in connection with such system; and any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Such term does not include any "special irrigation district." A public water system is either a "community water system" or a "noncommunity water system" as further defined as: (3-24-22)( )

a. Community water system. A public water system PWS which serves at least fifteen (15) service connections used by year-round residents or regularly serves at least twenty-five (25) year-round residents. (3-24-22)( )

b. Non-community water system. A public water system PWS that is not a community water system. A non-community water system is either a transient non-community water system or a non-transient non-community water system. (3-24-22)( )

c. Non-transient non-community water system. A ~~public water system~~ **PWS** that is not a community water system and that regularly serves at least twenty-five (25) of the same persons over six (6) months per year. (3-24-22)( )

d. Transient non-community ~~public~~ water system. A non-community water system which does not regularly serve at least twenty-five (25) of the same persons over six (6) months per year. (3-24-22)( )

~~115~~**57. Public Water System (PWS)/Water System/System.** Means “public drinking water system.” (3-24-22)( )

~~112~~**58. Pump House.** A structure containing important water system components, such as a well, hydropneumatic tank, booster pump, pump controls, flow meter, well discharge line, or a treatment unit. Pump houses are often called well houses in common usage, even though in modern construction these structures may not contain either a well or a pump. These terms are used interchangeably in national standards and trade publications. ( )

~~113~~**59. Qualified Licensed Professional Engineer (QLPE).** A professional engineer licensed by the state of Idaho; qualified by education or experience in the specific technical fields involved in these rules; and retained or employed by a city, county, quasi-municipal corporation, or regulated public utility for the purposes of plan and specification review. ( )

~~114~~**60. Quasi-Municipal Corporation.** A public entity, other than community government, created or authorized by the legislature to aid the state in, or to take charge of, some public or state work for the general welfare. For the purpose of these rules, this term refers to drinking water districts. ( )

~~115~~**61. Raw Water.** Raw water is any ground-water, spring water, or surface water utilized as source water prior to treatment for the purpose of producing potable water. (3-24-22)( )

~~116~~**62. Redundancy.** The installation of duplicate components or backup systems that are designed to maintain minimum pressure and capacity of the ~~system should~~ **PWS if** any component fails or **is** otherwise ~~be~~ out of service for maintenance or repair. (3-24-22)( )

~~117. Regulated Public Utility.~~ For the purpose of these rules, any public water system that falls under the jurisdiction of the Idaho Public Utilities Commission and is subject to the rules thereof. (3-24-22)

~~118~~**63. Reverse Osmosis (RO).** A membrane filtration process that removes dissolved constituents from water. Reverse osmosis is similar to nanofiltration but allows a lower percentage of certain ions to pass through the membrane. These systems typically operate under higher pressure than microfiltration and ultrafiltration. ( )

~~119. Repeat Compliance Period.~~ Any subsequent compliance period after the initial compliance period. (3-24-22)

~~120~~**64. Resolution.** As the term relates to membrane treatment, it is the size of the smallest integrity breach that contributes to a response from a direct integrity test when testing low pressure membranes. ( )

~~121. Responsible Charge (RC).~~ Responsible Charge means active, daily on-site or on-call responsibility for the performance of operations or active, on going, on site, or on call direction of employees and assistants. (3-24-22)

~~122. Responsible Charge Operator.~~ An operator of a public drinking water system, designated by the system owner, who holds a valid license at a class equal to or greater than the drinking water system classification, who is in responsible charge of the public drinking water system. (3-24-22)

~~123~~**65. Reviewing Authority.** For those projects requiring preconstruction approval by the Department, the Department is the reviewing authority. For those projects allowing for preconstruction approval by others, pursuant to Subsection 504.03.b. ~~of these rules~~, the qualified Idaho licensed professional engineer (QLPE) is also the reviewing authority. (3-24-22)( )

- ~~124~~66. **Sampling Point.** The location in a *public water system* PWS from which a sample is drawn. (3-24-22)(    )
- ~~125~~. **Sanitary Defect.** A defect that could provide a pathway of entry for microbial contamination into the distribution system or that is indicative of a failure or imminent failure in a barrier that is already in place. Examples of sanitary defects include but are not limited to: cross connections, inadequate distribution system pressures, inadequate or missing sanitary seal, improperly screened storage tank vents, inadequate protection from contamination during flooding, history of treatment failures, deterioration of system components, and water main leaks or breaks. (3-24-22)
- ~~126~~. **Sanitary Survey.** An onsite review of the water source, facilities, equipment, operation and maintenance of a public water system for the purpose of evaluating the adequacy of such source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water. The sanitary survey will include, but is not limited to the following elements: (3-24-22)
- ~~a.~~ Source; (3-24-22)
  - ~~b.~~ Treatment; (3-24-22)
  - ~~c.~~ Distribution system; (3-24-22)
  - ~~d.~~ Finished water storage; (3-24-22)
  - ~~e.~~ Pumps, pump facilities, and controls; (3-24-22)
  - ~~f.~~ Monitoring and reporting and data verification; (3-24-22)
  - ~~g.~~ System management and operation; and (3-24-22)
  - ~~h.~~ Operator compliance with state requirements. (3-24-22)
- ~~127~~. **SDWIS State.** An acronym that stands for “Safe Drinking Water Information System State Version.” It is a software package developed under contract to the U.S. Environmental Protection Agency and used by a majority of U.S. states to collect, maintain, and report data about regulated public water systems. (3-24-22)
- ~~128~~. **Seasonal System.** A noncommunity water system that is not operated as a public water system on a year round basis and starts up and shuts down at the beginning and end of each operating season. (3-24-22)
- ~~129~~67. **Sensitivity.** As the term relates to membrane treatment, it is the maximum log removal value (LRV) for a specific resolution that can be reliably verified by the direct integrity test associated with a given low pressure membrane filtration system. (    )
68. **Service Connection.** Each structure, facility, or premises which is connected to a PWS water source, and which is or may be used for domestic purposes. (    )
- ~~130~~69. **Sewage.** The wWater-carried human ~~or animal~~ wastes from residences, buildings, and industrial establishments ~~or~~ and other places, together with ~~such~~ ground-water infiltration and surface water as may be present. (3-24-22)(    )
- ~~131~~70. **Significant Deficiency.** ~~As identified during a sanitary survey, a~~ Any defect in a system’s PWS’s design, operation, maintenance, or administration, as well as any failure or malfunction of any system component, that the Department or its agent determines to cause, or have potential to cause, ~~risk to health or safety, or that could affect the reliable delivery of safe drinking water. See also the definition of Health Hazards~~ the introduction of contamination into the water delivered to consumers. (3-24-22)(    )
- ~~132~~71. **Simple Water Main Extension.** New or replacement water main(s) that require plan and

specification review by a qualified licensed professional engineer (QLPE) or by the Department per these rules and that is connected to existing water main facilities and does not require the addition of system components designed to control quantity or pressure, including, but not limited to, booster stations, new sources, pressure reducing valve stations, or reservoirs; and continues to provide the pressure and quantity requirements of Subsection 552.01. ( )

~~133. **Special Irrigation District.** An irrigation district in existence prior to May 18, 1994 that provides primarily agricultural service through a piped water system with only incidental residential or similar use where the system or the residential or similar users of the system comply with the exclusion provisions in Section 1401(4)(B)(i)(II) or (III) of the Safe Drinking Water Act. (3-24-22)~~

~~13472. **Spring.** A source of water which flows from a laterally percolating water table's intersection with the surface or from a geological fault that allows the flow of water from an artesian aquifer. ( )~~

~~13573. **Standby Storage.** Standby storage provides a measure of reliability or safety factor ~~should if~~ sources fail or when unusual conditions impose higher than anticipated demands. See also the definition of Components of Finished Water Storage in these rules. (3-24-22)( )~~

~~13674. **Substantially Modified.** The Department ~~shall~~ considers a ~~public water system~~ PWS to be substantially modified when, as the result of one (1) or more ~~projects~~ material modifications to the PWS, there is a combined increase of twenty-five percent (25%) ~~or more above the system's existing configuration in any one or combination of the following:~~ in the population served or number of service connections, the total length of transmission and distribution water mains, the total source capacity, and or the peak or average water demand for the PWS. Material modifications completed after May 8, 2009, are the only modifications counted towards the twenty-five (25%) increase. Like-kind replacement of components will not be counted toward a combined increase of twenty-five percent (25%) calculation. Removal of existing system components will not be used to reduce the combined increase of twenty-five percent (25%) calculation. (3-24-22)( )~~

~~13775. **Substitute Responsible Charge Operator.** An operator of a ~~public drinking water system~~ PWS who holds a valid license at a class equal to or greater than the drinking water system classification, designated by the ~~system~~ PWS owner to replace and to perform the duties of the responsible charge operator when the responsible charge operator is not available or accessible. (3-24-22)( )~~

~~13876. **Surface Water System.** A ~~public water system~~ PWS which is supplied by one (1) or more surface water sources or ground-water sources under the direct influence of surface water. Also called subpart H systems in applicable sections of 40 CFR Part 141. (3-24-22)( )~~

~~139. **Total Organic Carbon (TOC).** Total organic carbon in mg/l measured using heat, oxygen, ultraviolet irradiation, chemical oxidants, or combinations of these oxidants that convert organic carbon to carbon dioxide, rounded to two (2) significant figures. (3-24-22)~~

~~140. **Total Trihalomethanes (TTHM).** The sum of the concentration in milligrams per liter of the trihalomethane compounds (trichloromethane [chloroform], dibromochloromethane, bromodichloromethane and tribromomethane [bromoform]), rounded to two (2) significant figures. (3-24-22)~~

~~141. **Transient Noncommunity Public Water System.** A noncommunity water system which does not regularly serve at least twenty five (25) of the same persons over six (6) months per year. See also the definition of a Public Drinking Water System in these rules. (3-24-22)~~

~~14277. **Treatment Facility.** Any place(s) where a ~~public drinking water system or nontransient noncommunity water system~~ PWS alters the physical or chemical characteristics of the drinking water. Chlorination may be considered as a function of a distribution system. (3-24-22)( )~~

~~14378. **Turbidity.** A ~~m~~Measure of the interference of light passage through water, or visual depth restriction ~~due to~~ from the presence of suspended matter such as clay, silt, nonliving organic particulates, plankton, and other microscopic organisms. Operationally, turbidity measurements are expressions of certain light-scattering and absorbing properties of a water sample. Turbidity is measured by the ~~N~~nephelometric method. (3-24-22)( )~~

~~144~~**79.** **Ultrafiltration (UF).** A low pressure membrane filtration process with pore diameter normally in the range of five thousandths to one tenth micrometer (0.005 to 0.1  $\mu\text{m}$ ). ( )

~~145.~~ **Ultraviolet (UV) Light Technology.** A physical disinfection process that has proven effective against common pathogens in drinking water. (3-24-22)

~~146~~**80.** **UV Transmittance (UVT).** A measure of the fraction of incident light transmitted through a material (e.g., water sample or quartz). The UVT is usually reported for a wavelength of two hundred fifty-four (254) nm and a pathlength of one (1) cm. It is often represented as a percentage. ( )

~~147~~**81.** **Unregulated Contaminant.** Any substance that may affect the quality of water but for which a maximum contaminant level or treatment technique has not been established. ( )

~~148~~**82.** **Use Assessment.** For the purpose of obtaining a waiver from certain monitoring requirements, a use assessment is an evaluation as to whether synthetic organic contaminants are being or have been used, manufactured, transported, stored, or disposed of in the watershed for surface water or the zone of influence for ground-water. (3-24-22)( )

~~149~~**83.** **Variance.** A temporary deferment of compliance with a maximum contaminant level or treatment technique requirement which may be granted only when the ~~system~~ **PWS** demonstrates to the satisfaction of the Department that the raw water characteristics prevent compliance with the MCL or requirement after installation of the best available technology or treatment technique and the deferment does not cause an unreasonable risk to public health. (3-24-22)( )

~~150.~~ **Very Small Public Drinking Water System.** A Community or Nontransient Noncommunity Public Water System that serves five hundred (500) persons or less and has no treatment other than disinfection or has only treatment which does not require any chemical treatment, process adjustment, backwashing or media regeneration by an operator (e.g. calcium carbonate filters, granular activated carbon filters, cartridge filters, ion exchangers). (3-24-22)

~~151.~~**84** **Volatile Organic Chemicals (VOCs).** VOCs are lightweight organic compounds that vaporize or evaporate easily. ( )

~~152~~**85.** **Vulnerability Assessment.** *A Related to monitoring waiver decisions, a* determination of the risk of future contamination of a public drinking water supply. (3-24-22)( )

~~153~~**86.** **Waiver.** ( )

a. ~~For the purposes of these rules, e~~Except for Sections 500 through 552, “waiver” means the Department approval of a temporary reduction in sampling requirements for a particular contaminant. (3-24-22)( )

b. For purposes of Sections 500 through 552, “waiver” means ~~a the~~ dismissal or modification of any requirement of compliance. (3-24-22)( )

c. For the purposes of Section 010, “waiver” means the deferral of a fee assessment for a ~~public drinking water system~~ **PWS**. (3-24-22)( )

~~154.~~**87** **Wastewater.** ~~Any e~~Combination of liquid or water and pollutants from activities and processes occurring in dwellings, commercial buildings, industrial plants, institutions and other establishments, together with any ground-water, surface water, and storm water that may be present; liquid or water that is chemically, biologically, physically or rationally identifiable as containing blackwater, gray water or commercial or industrial pollutants; and sewage. ~~See IDAPA 58.01.16, “Wastewater Rules,” for additional information.~~ (3-24-22)( )

~~155.~~ **Water for Human Consumption.** Water that is used by humans for drinking, bathing for purposes of personal hygiene (including hand washing), showering, cooking, dishwashing, and maintaining oral hygiene. In



~~common usage, the terms “culinary water,” “drinking water,” and “potable water” are frequently used as synonyms.~~  
(3-24-22)

~~15688. Water Demand.~~ The volume of water requested by ~~system PWS~~ users to satisfy their needs. Water demand can be further categorized as: (3-24-22)( )

~~a. Average day demand.~~ ~~T is~~ the volume of water used by a ~~system PWS~~ on an average day based on a one (1) year period. (3-24-22)( )

~~b. Maximum day demand.~~ ~~T is~~ the average rate of consumption for the twenty-four (24) hour period in which total consumption is the largest for the design year. (3-24-22)( )

~~c. Peak hour demand.~~ ~~T is~~ the highest hourly flow, excluding fire flow, that a ~~water system PWS~~ or distribution system pressure zone is likely to experience in the design year. (3-24-22)( )

~~15789. Water Main.~~ A pipe within a ~~public water system PWS~~ which is under the control of the ~~system PWS~~ operator and conveys water to two (2) or more service connections or conveys water to a fire hydrant. The collection of water mains within a given water supply is called the distribution system. (3-24-22)( )

~~158. Watershed.~~ The land area from which water flows into a stream or other body of water which drains the area. (3-24-22)

~~159. Wholesale System.~~ A public water system that treats source water as necessary to produce finished water and then delivers some or all of that finished water to another public water system. Delivery may be through a direct connection or through the distribution system of one (1) or more consecutive systems. (3-24-22)

~~004. COVERAGE.~~  
40 CFR 141.3 is herein incorporated by reference. (3-24-22)

~~0054. GENERAL PROVISIONS FOR WAIVERS, VARIANCES, AND EXEMPTIONS.~~  
40 CFR 141.4 is herein incorporated by reference. (3-24-22)( )

~~01. Monitoring Waivers.~~ ~~40 CFR 141.23(b) 141.23(c), 141.24(f), 141.24(h) are incorporated by reference.~~ ( )

~~a. Waivers from sampling requirements in Subsections 100.03, 100.04, 200.01, and 503.03.e.v. may be available to all PWSs for all contaminants except nitrate, nitrite, and disinfection byproducts and are based upon a vulnerability assessment, use assessment, the analytical results of previous sampling, or some combination of vulnerability assessment, use assessment, and analytical results.~~ ( )

~~b. If a PWS elects to request a waiver from monitoring, it must do so in writing at least sixty (60) days prior to the required monitoring deadline date.~~ ( )

~~c. Waiver determinations are to be made by the Department on a contaminant specific basis and must be in writing.~~ ( )

~~d. PWSs which do not receive waivers must sample at the required, monitoring frequencies~~ ( )

~~02. Facility, Design Standard, and Operating Criteria Waivers.~~ (3-24-22)

~~a. The Department may waive any requirement of Sections 500 through 552 that is not explicitly imposed by Idaho Statute, if it can be shown to the Department’s satisfaction of the Department that the requirement is not necessary for the protection of public health, protection from contamination, and satisfactory operation and maintenance of a public water system PWS.~~ (3-24-22)( )

~~b. The Department may at its discretion waive the requirements outlined in Section 010.~~ (3-24-22)

~~e. Waiver of monitoring requirements is addressed in Subsection 100.07. (3-24-22)~~

**023. Variances. ( )**

~~a. General Variances. A general variance may be granted by the Department if a public water system PWS owner submits an application a written request and demonstrates to the satisfaction of the Department that the following minimum requirements as required by of 42 USC Section 1415(a) (The Safe Drinking Water Act SDWA) are met. These include but are not limited to: (3-24-22)( )~~

~~i. The system has installed the best available technology, treatment techniques, or other means to comply with the maximum contaminant level; and (3-24-22)~~

~~ii. Alternative sources of water are not reasonably available to the system. (3-24-22)~~

~~iii. For provisions of a national primary drinking water regulation which requires the use of a specific treatment technique with respect to a contaminant, the system must demonstrate that the technique is not necessary to protect the health of the system's customers. (3-24-22)~~

~~b. Small System Variances. A small system variance for a maximum contaminant level or treatment technique may be granted by the Department if a public water system PWS owner submits an application a written request and demonstrates to the satisfaction of the Department that the following minimum requirements as required by of 42 USC Section 1415(e) (SDWA) are met. These include, but are not limited to: (3-24-22)( )~~

~~i. The system serves three thousand three hundred (3,300) or fewer persons; (3-24-22)~~

~~ii. If the system serves more than three thousand three hundred (3,300) persons but fewer than ten thousand (10,000) persons, the application shall be approved by the U.S. Environmental Protection Agency; (3-24-22)~~

~~iii. The U.S. Environmental Protection Agency has identified a variance technology that is applicable to the size and source water quality conditions of the public water system; (3-24-22)~~

~~iv. The system installs, operates and maintains such treatment technology, treatment technique, or other means; and (3-24-22)~~

~~v. The system cannot afford to comply with a national primary drinking water regulation in accordance with affordability criteria established by the Department, including compliance through treatment, alternative source of water supply, restructuring or consolidation. (3-24-22)~~

**034. Exemptions.** An exemption may be granted by the Department if a public water system PWS owner submits an application a written request and demonstrates to the satisfaction of the Department that the following minimum requirements as required by of 42 USC Section 1416(a) (SDWA) are met. These include but are not limited to: (3-24-22)( )

~~a. The system is unable to comply with a maximum contaminant level or treatment technique due to compelling factors, which may include economic factors; (3-24-22)~~

~~b. The system was in operation by the effective date of such contaminant level or treatment technique and no reasonable source of water is available to the system; or (3-24-22)~~

~~c. If the system was not in operation by the effective date of such contaminant level or treatment technique, then no reasonable alternative source of water is available to the system; and (3-24-22)~~

~~d. The granting of an exemption will not result in an unreasonable risk to health; (3-24-22)~~

~~e. Management or restructuring changes cannot reasonably be made to comply with the contaminant level or treatment technique to improve the quality of the drinking water; (3-24-22)~~



~~f.~~ The system cannot meet the standard without capital improvements which cannot be completed prior to the date established pursuant to 42 USC Section 1412b(10); (3-24-22)

~~g.~~ If the system needs financial assistance, the system has entered into an agreement to obtain such financial assistance; or (3-24-22)

~~h.~~ The system has entered into an enforceable agreement to become a part of a regional public water system and is taking all practical steps to meet the standard. (3-24-22)

~~04.5.~~ **Conditions.** A waiver, exemption, or variance may be granted upon any conditions that the Department, ~~in its discretion,~~ determines are appropriate and in accordance with these rules. Failure by the ~~public water system~~ PWS owner to comply with any condition voids the waiver, variance, or exemption. (3-24-22)( )

~~05.6~~ **Public Hearing.** The Department ~~shall~~ will provide public notice and an opportunity for public hearing in the area served by the ~~public water system~~ PWS before any exemption or variance under Section 005 is granted by the Department. At the conclusion of the hearing, the Department ~~shall~~ will record the findings and issue a decision approving, denying, modifying, or conditioning the ~~application~~ request. (3-24-22)( )

~~06.~~ **Exceptions.** Any person aggrieved by the Department's decision on a request for a waiver, variance or exemption may file a petition for a contested case with the Board. Such petitions shall be filed with the Board, as prescribed in, IDAPA 58.01.23, "Contested Case Rules and Rules for Protection and Disclosure of Records." (3-24-22)

~~07.~~ **Surface Water Variances.** Variances from the requirements of Sections 300 through 303 are not allowed. (3-24-22)

~~08.~~ **Surface Water Exemptions.** Exemptions from 40 CFR 141.72(a)(3) and 40 CFR 141.72(b)(2) are not allowed. (3-24-22)

~~006.~~ **SITING REQUIREMENTS.** 40 CFR 141.5 is herein incorporated by reference. (3-24-22)

~~007.5.~~ **DISAPPROVAL DESIGNATION.** The Department ~~or its agent~~ may assign a disapproved designation to a ~~public water system~~ PWS when: (3-24-22)( )

~~01.~~ **Defects.** There are design or construction defects, ~~or some combination of design and construction defects~~ significant deficiencies, or health hazards; or (3-24-22)( )

~~02.~~ **Operating Procedures.** Operating procedures constitute a health hazard; ~~or~~ (3-24-22)( )

~~03.~~ **Quality.** ~~Physical,~~ Violations of chemical, microbiological, or radiological ~~quality does not meet the requirements~~ maximum contaminant levels or action levels of these rules; ~~or~~ (3-24-22)( )

~~04.~~ **Monitoring.** ~~The required~~ Violations of monitoring requirements as specified in these rules ~~has not been conducted;~~ ~~or~~ (3-24-22)( )

~~05.~~ **Unapproved Source.** An unapproved source of drinking water is used or the ~~system~~ PWS is interconnected with a disapproved water system; ~~or~~ (3-24-22)( )

~~06.~~ **Non-Payment of Annual Fee Assessment.** The annual drinking water system fee assessment is not paid as set forth in Section 010. ( )

~~07.~~ **Public Notification.** The Department ~~may require the owner of a water system that has been given a disapproval designation to notify the public. The manner, content, and timing of this notification will be determined by the Department. This requirement is in addition to any public notification requirements set forth in Section 150~~

~~that may also apply to the disapproved system.~~ (3-24-22)

**0086. HEALTH HAZARDS.**

**01. Prohibited.** ~~No PWS will:~~ (3-24-22)( )

**a.** ~~No public water system, or portion of a public water system, shall constitute a health hazard, as determined by the Department and defined in Section 003 of these rules.~~ (3-24-22)( )

**b.** ~~No public water system, or portion of a public water system, shall create a condition which prevents, or may prevent, the detection of a health hazard, as determined by the Department.~~ (3-24-22)( )

**02. Schedule.** Health hazards and conditions which prevent, or may prevent, the detection of a health hazard must be mitigated as required ~~by the Department,~~ and terminated within a time schedule established, by the Department. (3-24-22)( )

**03. Standards.** ~~Design and construction revisions necessary to correct a health hazard or conditions which prevent, or may prevent, the detection of a health hazard, must be reviewed and approved by the Department, and comply with Sections 501 through 552, unless otherwise specified by the Department.~~ (3-24-22)

**009. MONITORING.**

~~The Department may, in its discretion, alter the monitoring or sampling requirements for any contaminant otherwise specified in these rules if the Department determines that such alteration is necessary to adequately assess the level of such contamination.~~ (3-24-22)

**0107. FEE SCHEDULE FOR PUBLIC DRINKING WATER SYSTEMS.**

All ~~owners of regulated public drinking water systems shall~~ PWSs must pay an annual drinking water system fee. The fee ~~shall will~~ be assessed ~~to regulated public drinking water systems~~ as provided in this section. The Department may waive the requirements of this section at its discretion. (3-24-22)( )

**01. Effective Date.** Annual fees ~~shall will~~ be paid for each fee year. Fee years beginning on October 1, 1993, and continuing for each succeeding year of each calendar year. (3-24-22)( )

**02. Fee Schedule.** (3-24-22)

**a.** Owners of community and Non-transient non-community ~~public drinking water systems~~ PWSs must shall pay an annual fee according to the following fee schedule:

Number of Connections	Fee
1 to 20	\$100
21 to 184	\$5 per connection, not to exceed a total of \$735 per <del>system.</del> <u>PWS</u>
185 to 3,663	\$4 per connection, not to exceed a total of \$10,988 per <del>system.</del> <u>PWS</u>
3,664 or more	\$3 per connection

(3-24-22)( )

**b.** The annual fee for transient ~~public drinking water systems~~ PWSs is twenty-five dollars (\$25). (3-24-22)( )

**c.** New ~~public drinking water systems~~ PWSs formed after October 1 will not pay a fee until the following October. (3-24-22)( )

03. Fee Assessment. ( )

a. An annual fee assessment will be generated for each community and non-transient non-community ~~public drinking water system listed in the Department's Safe Drinking Water Information System (SDWIS)~~ PWS using the number of connections the Department has on record. (3-24-22)( )

b. Community and non-transient non-community ~~public drinking water systems~~ PWSs will be notified each year of the official number of connections listed in SDWIS. ~~Systems~~ PWSs will have at least one (1) month to notify the Department if the number of connections ~~listed in SDWIS is~~ provided are not in agreement with the ~~system's PWS's~~ records. (3-24-22)( )

e. ~~The official number of connections listed in SDWIS following each yearly update, as required in Subsection 010.03.b., will be used to calculate the annual fee for community and nontransient noncommunity public drinking water systems for the next fee year of October 1 through September 30.~~ (3-24-22)

04. **Billing.** An annual fee ~~shall~~ statement will be assessed and a statement will be mailed or delivered electronically to all ~~community, nontransient noncommunity, and transient public drinking water systems listed in SDWIS by PWS owners on record with~~ the Department ~~on or before~~ by September 1 of each year and will include acceptable payment methods. (3-24-22)( )

05. Payment. ( )

a. ~~Payment of the annual fee shall~~ Annual fee payment will be due on October 1, unless it is a Saturday, a Sunday, or a legal holiday, in which event the payment ~~shall~~ will be due on the successive business day. ~~Fees paid by check or money order shall be made payable to the Idaho Department of Environmental Quality and sent to 1410 North Hilton Street, Boise, ID 83706-1255.~~ (3-24-22)( )

b. If a ~~public water system~~ PWS consists of two hundred fifty (250) connections or more, the ~~system~~ PWS may request to divide its annual fee payment into equal monthly or quarterly installments by submitting a request to the Department ~~on the proper request form provided with the initial billing statement.~~ (3-24-22)( )

ei. The Department will notify ~~applicable systems, in writing,~~ PWSs of approval or denial of a requested monthly or quarterly installment plan within ten (10) business days of ~~the Department~~ receiving ~~such a the~~ request. (3-24-22)( )

eii. If a ~~public water system~~ PWS has been approved to pay monthly installments then each installment ~~shall~~ will be due by the first day of each month, unless it is a Saturday, a Sunday, or a legal holiday, in which event the installment ~~shall~~ will be due on the successive business day. (3-24-22)( )

eiii. If a ~~public water system~~ PWS has been approved to pay quarterly installments then each installment ~~shall~~ will be due by the first day of the month of each quarter (October 1, January 1, April 1, and July 1), unless it is a Saturday, a Sunday, or a legal holiday, in which event the installment ~~shall~~ will be due on the ~~first~~ successive business day. (3-24-22)( )

06. **Delinquent Unpaid Fees.** A ~~public water system~~ PWS owner will be delinquent in payment if its annual fee assessment has not been received by ~~the Department by~~ November 1; or if having ~~first~~ opted to pay monthly or quarterly installments, its monthly or quarterly installment has not been received ~~by the Department~~ by the last day of the month in which the monthly or quarterly payment is due. (3-24-22)( )

07. Suspension of Services and Disapproval Designation. ( )

a. For any ~~system~~ PWS owner delinquent in payment of fee assessed under Subsections 010.02-~~and 010.06~~, in excess of ninety (90) days, technical ~~services~~ assistance provided by the Department may be suspended except for ~~the following~~ review and processing of: (3-24-22)( )

i. ~~Issuance of m~~ Monitoring waivers; (3-24-22)( )

- ii. ~~Review and processing of e~~Engineering reports; and (3-24-22)(    )
- iii. ~~Review of p~~Plans and specifications for design and construction as set forth in Sections ~~501~~ 500 through 552. (3-24-22)(    )
- b. For any ~~system~~ PWS owner delinquent in payment of fee assessed under Subsections 010.02 and ~~010.06~~, in excess of one hundred and eighty (180) days, the Department ~~may disapprove the PWS pursuant to Subsection 007.06 and~~ may suspend all technical ~~services~~ assistance provided ~~by the Department~~ including ~~any of the following~~ review and processing of:
  - i. ~~Review and processing of e~~Engineering reports; (3-24-22)(    )
  - ii. ~~Review of p~~Plans and specifications for design and construction as set forth in Sections ~~501~~ 500 through 552; ~~or~~ (3-24-22)(    )
  - iii. ~~Renewal of m~~Monitoring waivers; ~~or~~ (3-24-22)
  - iv. ~~Granting of new monitoring waivers.~~ (3-24-22)
- e. For any system delinquent in payment of fee assessed under Subsections 010.02 and 010.06, in excess of one hundred and eighty (180) days, the Department may disapprove the public water system pursuant to ~~Subsection 007.06.~~ (3-24-22)

**08. Reinstatement of Suspended Services and Approval Status.** For any ~~public water system~~ PWS owner for which ~~delinquency of fee payment, pursuant to Subsection 010.07, has resulted in the~~ suspension of technical ~~services~~ assistance, ~~the disapproval of a public water system, or both~~ has occurred, ~~continuation~~ reinstatement of technical ~~services~~ assistance, ~~reinstatement of public water system approval, or both,~~ will occur upon payment of delinquent annual fee assessments. (3-24-22)(    )

~~09. Enforcement Action.~~ Nothing in Section 010 waives the Department's right to undertake an enforcement action at any time, including seeking penalties, as provided in Section 39-108, Idaho Code. (3-24-22)

**10-09 Responsibility to Comply.** Subsection 010.07 ~~shall~~ in no way relieves any ~~system~~ PWS from its obligation to comply with ~~all applicable state and federal drinking water statutes, rules, regulations, or orders~~ these rules. (3-24-22)(    )

**011-08. CONTINUITY OF SERVICE.**

**01. Transfer of Ownership.** No owner ~~shall~~ may transfer ~~system~~ PWS ownership without providing written notice to the Department and all customers. Notification ~~shall~~ must include a schedule for transferring responsibilities and identification of the new owner. (3-24-22)(    )

**02. Maintenance of Standards.** The ~~system~~ current PWS owner transferring ownership ~~shall~~ must ensure that all ~~health related standards~~ these rules are met during transfer and ~~shall~~ will ensure that water rights, operation and maintenance manuals, and all other pertinent ~~rights and~~ documentation ~~is~~ are transferred to the new owner. (3-24-22)(    )

**012. WRITTEN INTERPRETATIONS.**

The Department of Environmental Quality may have written statements in the form of guidance and policy documents that pertain to the interpretation of the rules of this chapter. Such written statements may be inspected and copies obtained at the Department of Environmental Quality, 1410 North Hilton, Boise, Idaho 83706-1255. (3-24-22)

**013. USE OF GUIDANCE.**

Guidance documents referenced in these rules are to be used to assist both designers and reviewers in determining a reasonable way to achieve compliance with the rules. Nothing in these rules makes the use of a particular guidance or guidance document mandatory. If the plans and specifications comply with applicable facility and design standards as

~~set out in these rules, Section 39-118, Idaho Code, requires that the Department not substitute its judgment for that of the design engineer concerning the manner of compliance. If the design engineer needs assistance as to how to comply with a particular rule, the design engineer may use the referenced guidance documents for that assistance. However, the design engineer may also use other guidance or provide documentation to substantiate his or her own professional judgment.~~ (3-24-22)

**01409. ADMINISTRATIVE PROVISIONS.**

Persons may be entitled to appeal agency actions authorized under these rules pursuant to IDAPA 58.01.23, “Contested Case Rules and Rules for Protection and Disclosure of Records.” ( )

**0150. CONFIDENTIALITY OF RECORDS.**

Information obtained by the Department under these rules is subject to public disclosure pursuant to the provisions of Chapter 1, Title 74, Idaho Code. Information submitted under a trade secret claim may be entitled to confidential treatment by the Department as provided in Section 74-114.107, Idaho Code, and IDAPA 58.01.21, “Rules Governing the Protection and Disclosure of Records in the Possession of the Department of Environmental Quality,” and IDAPA 58.01.23, “Contested Case Rules and Rules for Protection and Disclosure of Records.” (3-24-22)( )

~~**016. OFFICE HOURS — MAILING ADDRESS AND STREET ADDRESS.**~~

~~The state office of the Department of Environmental Quality and the office of the Board of Environmental Quality are located at 1410 N. Hilton, Boise, Idaho 83706-1255, telephone number (208) 373-0502. The office hours are 8 a.m. to 5 p.m. Monday through Friday.~~ (3-24-22)

~~**0171. -- 049. (RESERVED)**~~

**050. MAXIMUM CONTAMINANT LEVELS AND MAXIMUM RESIDUAL DISINFECTANT LEVELS.**

- 01. Maximum Contaminant Levels for Inorganic Contaminants.** (3-24-22)
  - ~~a. 40 CFR 141.11 is herein and 141.62 are~~ incorporated by reference. (3-24-22)( )
  - ~~b. 40 CFR 141.62 is herein incorporated by reference.~~ (3-24-22)
  - ~~c. The maximum contaminant level for cyanide is two tenths milligram per liter (0.2 mg/l).~~ (3-24-22)
- 02. Maximum Contaminant Levels for Organic Contaminants.** 40 CFR 141.61 is ~~herein~~ incorporated by reference, ~~except that the best available technology (BAT) treatment listed in 40 CFR 141.61(b) shall be changed to reflect that packed tower aeration will not be listed for toxaphene but will be listed for toluene.~~ (3-24-22)( )
- 03. Maximum Contaminant Levels for Turbidity.** 40 CFR 141.13 is ~~herein~~ incorporated by reference. (3-24-22)( )
- 04. Maximum Contaminant Levels for Radionuclides.** 40 CFR 141.66 is ~~herein~~ incorporated by reference. (3-24-22)( )
- 05. Maximum Contaminant Levels for Microbiological Contaminants.** 40 CFR 141.63 is ~~herein~~ incorporated by reference. (3-24-22)( )
- 06. Maximum Contaminant Levels for Disinfection Byproducts.** 40 CFR 141.64 is ~~herein~~ incorporated by reference. (3-24-22)( )
- 07. Maximum Residual Disinfectant Levels.** 40 CFR 141.65 is ~~herein~~ incorporated by reference. (3-24-22)( )
- ~~**08. Effective Dates.** Effective date information provided in 40 CFR 141.6 and 40 CFR 141.60 is applicable.~~ (3-24-22)

051. -- 099. (RESERVED)

**100. MONITORING AND ANALYTICAL REQUIREMENTS.**

~~40 CFR Part 141, Subpart C, is incorporated by reference.~~ ( )

**01. Total Coliform Sampling and Analytical Requirements.** The Total Coliform Rule, 40 CFR 141.21, is ~~herein~~ incorporated by reference. The Revised Total Coliform Rule, 40 CFR Part 141, Subpart Y, is ~~herein~~ incorporated by reference, excluding the annual monitoring provisions in 40 CFR 141.854 (a)(4), (d), (e), (f) and (h). (3-24-22) ( )

~~**a.** Routine monitoring requirements for public water systems serving more than one thousand (1,000) people. 40 CFR 141.857 is herein incorporated by reference.~~ (3-24-22)

~~**b.** Routine monitoring requirements for community water systems serving one thousand (1,000) or fewer people using only ground water. 40 CFR 141.855 is herein incorporated by reference.~~ (3-24-22)

~~**c.** Routine monitoring requirements for subpart H public water system serving one thousand (1,000) or fewer people. 40 CFR 141.856 is herein incorporated by reference.~~ (3-24-22)

~~**d.** Routine monitoring requirements for non-community water system serving one thousand (1,000) or fewer people using only ground water. 40 CFR 141.854 is herein incorporated by reference, excluding the annual monitoring provisions in 40 CFR 141.854 (a)(4), (d), (e), (f), and (h).~~ (3-24-22)

**02. Turbidity Sampling and Analytical Requirements.** 40 CFR 141.22 is ~~herein~~ incorporated by reference. (3-24-22) ( )

**03. Inorganic Chemical Sampling and Analytical Requirements.** 40 CFR 141.23 is ~~herein~~ incorporated by reference. (3-24-22) ( )

**04. Organic Chemicals, Sampling and Analytical Requirements.** 40 CFR 141.24 is ~~herein~~ incorporated by reference. (3-24-22) ( )

**05. Analytical Methods for Radioactivity.** 40 CFR 141.25 is ~~herein~~ incorporated by reference. (3-24-22) ( )

**06. Monitoring Frequency and Compliance Requirements for Radioactivity in Community Water Systems.** 40 CFR 141.26 is ~~herein~~ incorporated by reference. (3-24-22) ( )

~~**07. Monitoring Waivers.** 40 CFR 141.23(b), 141.23(e), 141.24(f), 141.24(h) are herein incorporated by reference.~~ (3-24-22)

~~**a.** Waivers from sampling requirements in Subsections 100.03, 100.04, 200.01, and 503.03.e.v. may be available to all systems for all contaminants except nitrate, nitrite, and disinfection byproducts and are based upon a vulnerability assessment, use assessment, the analytical results of previous sampling, or some combination of vulnerability assessment, use assessment, and analytical results.~~ (3-24-22)

~~**b.** There are two (2) general types of monitoring waivers:~~ (3-24-22)

~~**i.** Waivers based exclusively upon previous analytical data~~ (3-24-22)

~~**ii.** Waivers based on a use or vulnerability assessment.~~ (3-24-22)

~~**e.** Waivers are to be made by the Department on a contaminant specific basis and must be in writing.~~ (3-24-22)

~~**d.** Vulnerability assessments may be conducted by the Department, the water system, or a third party organization. The Department shall approve or disapprove all vulnerability assessments in writing.~~ (3-24-22)

~~e.~~ Water systems which do not receive waivers shall sample at the required initial and repeat monitoring frequencies. (3-24-22)

~~f.~~ If a system elects to request a waiver from monitoring, it shall do so in writing at least sixty (60) days prior to the required monitoring deadline date. (3-24-22)

~~08.~~ **Initial Monitoring Schedule.** In addition to the requirements specified in 40 CFR 141.23, 40 CFR 141.24, and 40 CFR 141.40, initial monitoring must be completed according to the following schedule unless otherwise specified by the Department: (3-24-22)

~~a.~~ Public water systems serving more than one hundred (100) people must conduct initial monitoring before January 1, 1995 except that: (3-24-22)

~~i.~~ Initial monitoring for nitrate and nitrite must be completed before January 1, 1994 for all surface water sources serving transient noncommunity public water systems and for all ground water sources serving any public water system. (3-24-22)

~~ii.~~ Initial monitoring for nitrate and nitrite must be completed before April 1, 1993 for all surface water sources serving community or nontransient noncommunity public water systems. (3-24-22)

~~iii.~~ Initial monitoring required under 40 CFR 141.23(e) must be completed before January 1, 1994 for all surface water sources serving community or nontransient noncommunity public water systems. (3-24-22)

~~b.~~ Public water systems serving one hundred (100) or less people must conduct initial monitoring before January 1, 1996 except that: (3-24-22)

~~i.~~ Initial monitoring for nitrate and nitrite must be completed before January 1, 1994 for all surface water sources serving transient noncommunity public water systems and for all ground water sources serving a public water system. (3-24-22)

~~ii.~~ Initial monitoring for nitrate and nitrite must be completed before April 1, 1993 for all surface water sources serving community or nontransient noncommunity public water systems. (3-24-22)

~~iii.~~ Initial monitoring required under 40 CFR 141.23(e) must be completed before January 1, 1994 for all surface water sources serving community or nontransient noncommunity public water systems. (3-24-22)

~~09.~~ **Alternate Analytical Techniques.** 40 CFR 141.27 is ~~herein~~ incorporated by reference. (3-24-22)( )

~~10.~~ **Approved Laboratories.** 40 CFR 141.28 and ~~40 CFR~~ 141.852(b) are ~~herein~~ incorporated by reference. All analyses conducted pursuant to these rules, except those listed below, ~~shall~~ **must** be performed in laboratories certified or granted reciprocity by the Idaho Department of Health and Welfare, Bureau of Laboratories, as provided in IDAPA 16.02.13, "Rules Governing Certification of Idaho Water Quality Laboratories." The following analyses may be performed by any person acceptable to the Department ~~of Environmental Quality:~~ (3-24-22)( )

a. pH; ( )

b. Turbidity (Nephelometric method only); ( )

c. Daily analysis for fluoride; ( )

d. Temperature; ( )

e. Disinfectant residuals, except ozone, ~~which shall~~ **will** be analyzed using the Indigo Method or an acceptable automated method pursuant to Subsection 300.05.d.; (3-24-22)( )



- f. Alkalinity; ( )
- g. Calcium; ( )
- h. Conductivity; ( )
- i. Silica; and ( )
- j. Orthophosphate. ( )
11. **Monitoring of Consecutive Water Systems.** 40 CFR 141.29 is ~~herein~~ incorporated by reference. (3-24-22)( )
12. **Disinfection Residuals, Disinfection Byproducts, and Disinfection Byproduct Precursors.** 40 CFR Part 141, Subpart L, is ~~herein~~ incorporated by reference. (3-24-22)( )
13. **Monitoring.** The department may alter the monitoring requirements specified in these rules if the department determines that such alteration is necessary to adequately assess the level of contamination. ( )
14. **Special Monitoring for Sodium.** 40 CFR 141.41 is incorporated by reference. ( )
15. **Special Monitoring for Corrosivity Characteristics.** 40 CFR 141.42 is incorporated by reference. ( )
101. -- 149. (RESERVED)
150. **REPORTING, PUBLIC NOTIFICATION, RECORDKEEPING.**
01. **Reporting Requirements.** 40 CFR 141.31 is ~~herein~~ incorporated by reference. (3-24-22)( )
02. **Public Notification of Drinking Water Violations.** 40 CFR Part 141, Subpart Q is ~~herein~~ incorporated by reference. (3-24-22)( )
03. **Record Maintenance.** 40 CFR 141.33 is ~~herein~~ incorporated by reference. (3-24-22)( )
04. **Reporting for Unregulated Contaminant Monitoring Results.** 40 CFR 141.35 is ~~herein~~ incorporated by reference. (3-24-22)( )
05. **Reporting and Record Keeping Requirements for the Interim Enhanced Surface Water Treatment Rule.** 40 CFR 141.175 is ~~herein~~ incorporated by reference. (3-24-22)( )
06. **Reporting and Record Keeping Requirements for the Disinfectants and Disinfectant Byproducts Rule.** 40 CFR 141.134 is ~~herein~~ incorporated by reference. (3-24-22)( )
07. **Reporting and Record Keeping Requirements for the Revised Total Coliform Rule.** 40 CFR 141.861 is ~~herein~~ incorporated by reference. (3-24-22)( )
08. **Public Notification.** The Department may require the owner of a PWS that has been disapproved to notify the public. The manner, content, and timing of this notification will be determined by the Department. This is in addition to any provisions set forth in Section 150 that may also apply. ( )
09. **Public Notification for Low System Pressure.** ( )
- a. During unplanned or emergency situations, when water pressure within the system is known to have fallen below twenty (20) psi, the water supplier must notify the Department, provide public notice to the affected customers within twenty-four (24) hours, and disinfect or flush the system as appropriate. When sampling and corrective procedures have been conducted and after determination by the Department that the water is safe, the



water supplier may re-notify the affected customers that the water is safe for consumption. The water supplier must notify the affected customers if the water is not safe for consumption. ( )

b. During planned maintenance or repair situations, when water pressure within the system is expected to fall below twenty (20) psi, the water supplier must provide public notice to the affected customers prior to the planned maintenance or repair activity and notify customers that the water is safe for consumption. ( )

151. CONSUMER CONFIDENCE REPORTS. 40 CFR Part 141, Subpart O is ~~herein~~ incorporated by reference. (3-24-22)( )

152. -- 199~~249~~. (Reserved)

~~200. SPECIAL REGULATIONS.~~

~~01. Monitoring Requirements for Unregulated Contaminants. 40 CFR 141.40 is herein incorporated by reference. (3-24-22)~~

~~02. Special Monitoring for Sodium. 40 CFR 141.41 is herein incorporated by reference. (3-24-22)~~

~~03. Special Monitoring for Corrosively Characteristics. 40 CFR 141.42 is herein incorporated by reference. (3-24-22)~~

~~04. Prohibition on Use of Lead Pipes, Solder, and Flux. 40 CFR 141.43 is herein incorporated by reference. (3-24-22)~~

~~201. -- 249. (RESERVED)~~

250. MAXIMUM CONTAMINANT LEVEL GOALS AND MAXIMUM RESIDUAL DISINFECTION LEVEL GOALS.

01. Maximum Contaminant Level Goals for Organic Contaminants. 40 CFR 141.50 is ~~herein~~ incorporated by reference. (3-24-22)( )

02. Maximum Contaminant Level Goals for Inorganic Contaminants. 40 CFR 141.51 is ~~herein~~ incorporated by reference. (3-24-22)( )

03. Maximum Contaminant Level Goals for Microbiological Contaminants. 40 CFR 141.52 is ~~herein~~ incorporated by reference. (3-24-22)( )

04. Maximum Contaminant Level Goals for Disinfection Byproducts. 40 CFR 141.53 is ~~herein~~ incorporated by reference. (3-24-22)( )

05. Maximum Residual Disinfectant Level Goals for Disinfectants. 40 CFR 141.54 is ~~herein~~ incorporated by reference. (3-24-22)( )

06. Maximum Contaminant Level Goals for Radionuclides. 40 CFR 141.55 is ~~herein~~ incorporated by reference. (3-24-22)( )

251. -- 299. (RESERVED)

300. FILTRATION AND DISINFECTION.

01. General Requirements. 40 CFR 141.70 is ~~herein~~ incorporated by reference. ~~Each public water system using a surface water source or ground water source directly influenced by surface water shall be operated by personnel, as specified in Sections 553 and 554, who have met state requirements for licensing of water system operators.~~ (3-24-22)( )

**02. Filtration.** 40 CFR 141.73 is ~~herein~~ incorporated by reference. (3-24-22)( )

~~a. Each system which provides filtration treatment shall submit engineering evaluations, other documentation, or some combination of engineering evaluations and other documentation as required by the Department to demonstrate ongoing compliance with these rules. (3-24-22)~~

**ba.** The Department will establish filtration removal credit on a system-by-system basis. Unless otherwise ~~demonstrated to the satisfaction of~~ **allowed** the Department, the maximum log removal credit allowed for filtration is as follows:

Maximum Log Removal			
Filtration Type	Giardia lamblia	Viruses	Cryptosporidium
Conventional	2.5	2.0	2.5
Direct	2.0	1.0	2.0
Slow sand	2.0	2.0	2.0
Diatomaceous earth	2.0	1.0	2.0
Microfiltration	3.0	0.5	3.0
Ultrafiltration	3.5	2.0	3.5
Nanofiltration	4.0	3.0	4.0
Reverse Osmosis	4.0	3.0	4.0
Alternate technology	2.0	0	2.0

(3-24-22)( )

**eb.** Filtration removal credit ~~shall~~ **will** be granted for filtration treatment provided the ~~system~~ **PWS** is: (3-24-22)( )

- i. Operated in accordance with the Operations Plan specified in Subsection 552.03.a.; and ( )
- ii. The ~~system~~ **PWS** is in compliance with the turbidity performance criteria specified under 40 CFR 141.73; and (3-24-22)( )
- iii. Coagulant chemicals must be added and coagulation and flocculation unit process must be used at all times during which conventional and direct filtration treatment plants are in operation; and ( )
- iv. Slow sand filters are operated at rates not to exceed one-tenth (0.1) gallons per minute per square foot or as approved by the Department; and ( )
- v. Diatomaceous earth filters are operated at a rate not to exceed one point five (1.5) gallons per minute per square foot. ( )

**03. Criteria for Avoiding Filtration.** 40 CFR 141.71 is ~~herein~~ incorporated by reference. (3-24-22)( )

**04. Disinfection.** 40 CFR 141.72 is ~~herein~~ incorporated by reference. (3-24-22)( )

~~a. In addition to the disinfection requirements in 40 CFR 141.72, each system with a s~~Surface water sources or ground-water sources directly influenced by surface water ~~shall must~~ maintain a minimum of at least two-tenths (0.2) ~~parts per million of chlorine~~ **mg/l disinfectant residual** in the treated water ~~after an effective contact time of at least thirty (30) minutes~~ at peak hour demand before delivery to the first customer. ~~Effective contact time is~~

~~either demonstrated or calculated.~~

~~(3-24-22)(\_\_\_\_)~~

~~i. Demonstrated effective contact time is generally determined by tracer studies on a completed contact basin. Prior to conducting a tracer study, a testing plan shall be submitted to the Department for review and approval. The tracer chemical shall not be reactive with anything in the water or be consumed in the process.~~

~~(3-24-22)~~

~~ii. Calculated effective contact time for tank type contact basins is based on tank baffling and inlet/outlet configurations for the maximum hourly flow rate through that contact basin. Calculated effective contact time in a "pipeline type contact basin" (often called a pipeline contactor) is calculated by dividing the internal volume of the pipe by the maximum hourly flow rate through that pipeline contactor.~~

~~(3-24-22)~~

~~b. The Department may allow a system PWS to utilize automatic shut-off of water to the distribution system whenever total disinfectant residual is less than two-tenths (0.2) mg/l rather than provide redundant disinfection components and auxiliary power as required in 40 CFR 141.72(a)(2). An automatic water shut-off may be used if the system PWS demonstrates to the satisfaction of the Department that, at all times, a minimum of twenty (20) psi pressure and adequate fire flow can be maintained in the distribution system when water delivery is shut-off to the distribution system and, at all times, minimum Giardia lamblia and virus inactivation removal rates can be achieved prior to the first customer.~~

~~(3-24-22)(\_\_\_\_)~~

~~c. Each system PWS which is required to provide filtration must provide disinfection treatment such that filtration plus disinfection provide at least 3-Log or ninety-nine and nine tenths percent (99.9%) inactivation/removal of Giardia lamblia cysts and at least 4-Log or ninety-nine and ninety-nine hundredths percent (99.99%) inactivation/removal of viruses as specified in 40 CFR 141.72 and Section 300, and at least 2-Log or ninety-nine percent (99%) removal of Cryptosporidium as required by 40 CFR Part 141, Subpart P or Subpart T. However, in all cases the disinfection portion of the treatment train shall, must be designed to provide not less than five tenths (0.5) log Giardia lamblia inactivation, irrespective of the Giardia lamblia removal credit awarded to the filtration portion of the treatment train.~~

~~(3-24-22)(\_\_\_\_)~~

**05. Analytical and Monitoring Requirements.** 40 CFR 141.74 is ~~herein~~ incorporated by reference.

~~(3-24-22)(\_\_\_\_)~~

~~a. Each public water system which is required to provide disinfection shall monitor as follows:~~

~~(3-24-22)~~

~~i. Each day the system is in operation, the purveyor shall determine the total level of inactivation of Giardia lamblia cysts and viruses achieved through disinfection based on CT99.9 values provided in 40 CFR 141.74(b)(3) (Tables 1.1 through 1.6, 2.1 and 3.1).~~

~~(3-24-22)~~

~~ii. At least once per day, the system shall monitor the following parameters to determine the total inactivation ratio achieved through disinfection:~~

~~(3-24-22)~~

~~(1) Temperature of the disinfected water at each residual disinfectant concentration sampling point;~~

and

~~(3-24-22)~~

~~(2) If using chlorine, the pH of the disinfected water at each chlorine residual sampling point.~~

~~(3-24-22)~~

~~(3) The effective contact time, "T," must be determined each day during peak hour demand. Disinfectant contact time, "T," in pipelines used for Giardia lamblia and virus inactivation shall be calculated by dividing the internal volume of the pipe by the peak hour flow rate through that pipe. Effective contact time, "T," for all other system components used for Giardia lamblia and virus inactivation shall be determined by tracer studies or other evaluations or calculations acceptable to the Department.~~

~~(3-24-22)~~

~~(4) The residual disinfectant concentrations at each residual disinfectant sampling point at or before the first customer, must be determined each day during peak hour demand, or at other times approved by the Department.~~

~~(3-24-22)~~

~~iii. The purveyor may demonstrate to the Department, based on a Department approved on site disinfection challenge study protocol, that the system is achieving disinfection requirements specified in Subsection 300.04 utilizing CT99.9 values other than those specified in 40 CFR 141.74(b)(3) (Tables 2.1 and 3.1) for ozone, chlorine dioxide, and chloramine. (3-24-22)~~

~~iv.a. The ~~total~~ inactivation ratio shall be calculated as follows calculations: 40 CFR 141.74(b)(4)(i) and (ii) are incorporated by reference. (3-24-22)(    )~~

~~(1) If the system applies disinfectant at only one (1) point, the system shall determine the total inactivation ratio by either of the two (2) following methods: (3-24-22)~~

~~(a) One inactivation ratio (C<sub>Teale</sub>/CT<sub>99.9</sub>) is determined at/or before the first customer during peak hour demand; or (3-24-22)~~

~~(b) Sequential inactivation ratios are calculated between the point of disinfectant application and a point at or before the first customer during peak hour demand. The following method must be used to calculate the total inactivation ratio: (3-24-22)~~

~~(i) Step 1: Determine (C<sub>Teale</sub>/CT<sub>99.9</sub>) for each sequence. (3-24-22)~~

~~(ii) Step 2: Add the (C<sub>Teale</sub>/CT<sub>99.9</sub>) values for all sequences. The result is the total inactivation ratio. (3-24-22)~~

~~(2) If the system uses more than one point of disinfectant application at or before the first customer, the system must determine the CT value of each disinfection sequence immediately prior to the next point of disinfectant application during peak hour demand. The sum of the (C<sub>Teale</sub>/CT<sub>99.9</sub>) values from all sequences is the total inactivation ratio. (C<sub>Teale</sub>/CT<sub>99.9</sub>) must be determined by the methods described in 40 CFR 141.74(b)(4)(i)(B). (3-24-22)~~

~~v.b. Log removal credit for disinfection shall must be determined by multiplying the total inactivation ratio by three (3). (3-24-22)(    )~~

~~vi. The Department may reduce the CT monitoring requirements specified under Section 300, for any system which demonstrates that the required inactivation levels are consistently exceeded. Reduced CT monitoring shall be allowed only where the reduction in monitoring will not endanger the health of consumers served by the water system. (3-24-22)~~

~~b. Residual disinfectant concentrations for ozone must be measured using the Indigo Method, or automated methods may be used if approved by the Department as provided for in 40 CFR 141.74(a)(2). (3-24-22)~~

~~c. Unfiltered Subpart H systems. 40 CFR 141.857(c) is herein incorporated by reference. (3-24-22)(    )~~

~~d. As provided for in 40 CFR 141.74(b), the Department may specify interim monitoring requirements for unfiltered systems notified by the Department or U.S. Environmental Protection Agency that filtration treatment must be installed. Until filtration is installed, systems shall conduct monitoring for turbidity and disinfectant residuals as follows unless otherwise specified by the Department. Unfiltered PWSs must monitor as required in 40 CFR 141.74(b) upon notification by the Department that filtration treatment must be installed. (3-24-22)(    )~~

~~i. Disinfectant residual concentrations entering the distribution system shall be measured at the following minimum frequencies, and samples must be taken at evenly spaced intervals throughout the workday.~~

Minimum Frequencies	
Population	Samples/day
Less than 500	1
501-1000	2
1,001-2,500	3
Greater than 2501	4

(3-24-22)

- ii. Turbidity shall be measured at least once per day at the entry point to the distribution system.

(3-24-22)

~~iii.e.~~ During the period prior to filtration treatment installation, ~~F~~ the Department may, at its discretion, reduce the turbidity monitoring frequency for any non-community system which demonstrates to the satisfaction of the Department:

(3-24-22)(    )

~~(1)i.~~ A free chlorine residual of two-tenths (0.2) part per million is maintained throughout the distribution system;

(    )

~~(2)ii.~~ The water source is well protected;

(    )

~~(3)iii.~~ The total coliform E. coli MCL is not exceeded or a Level 1 or Level 2 Assessment has not been triggered in accordance with 40 CFR 141.859; and

(3-24-22)(    )

~~(4)iv.~~ No significant health risk is present.

(    )

~~e.~~ The Department may allow systems with surface water sources or ground water sources under the direct influence of surface water, to substitute continuous turbidity monitoring for grab sample monitoring as specified in 40 CFR 141.74(b)(2) and 40 CFR 141.74(c)(1) and Subsection 300.05. The Department may allow continuous turbidity monitoring provided the continuous turbidimeter is operated, maintained, standardized and calibrated per the manufacturer's recommendations. For purposes of determining compliance with turbidity performance criteria, discrete values must be recorded every four (4) hours water is supplied to the distribution system.

(3-24-22)

~~f.~~ The Department may allow systems using both a surface water source(s), or ground water source(s) under the direct influence of surface water, and one (1) or more ground water sources, to measure disinfectant residual at points other than the total coliform sampling points, as specified in 40 CFR 141.74(b)(6)(i) and 40 CFR 141.74(c)(3)(i) and Subsection 300.05. The Department may allow alternate sampling points provided the system submits an alternate monitoring plan to the Department for approval in advance of the monitoring requirement that demonstrates the alternative points are more representative of treated (disinfected) water quality within the distribution system. Heterotrophic bacteria, measured as heterotrophic plate count (HPC) as specified in 40 CFR 141.74(a)(1), may be measured in lieu of residual disinfectant concentration as outlined in 40 CFR 141.74(b)(6)(i).

(3-24-22)

~~g.~~ The Department may allow a reduced turbidity monitoring frequency for systems using slow sand filtration or technology other than conventional, direct, or diatomaceous earth filtration, as specified in 40 CFR 141.74(c)(1) and Subsection 300.05. To be considered for a reduced turbidity monitoring frequency, a system must submit a written request to the Department in advance of the monitoring requirement.

(3-24-22)

**06. Reporting and Recordkeeping Requirements.** 40 CFR 141.75 is ~~herein~~ incorporated by reference.

(3-24-22)(    )

a. As provided in 40 CFR 141.75(a) and Section 300, the Department may establish interim reporting requirements for ~~systems~~ PWSs notified by the Department or U.S. Environmental Protection Agency that filtration treatment must be installed as specified in 40 CFR 141.75(a) and as referred to in Subsection 300.06. Until filtration treatment is installed, ~~systems~~ PWSs required to install filtration treatment ~~shall~~ must report as follows: (3-24-22)( )

i. The purveyor ~~shall~~ will immediately report to the Department via telephone or other equally rapid means, but no later than the end of the next business day, the following information: (3-24-22)( )

- (1) The occurrence of a waterborne disease outbreak potentially attributable to that ~~water system~~ PWS; (3-24-22)( )
- (2) Any turbidity measurement which exceeds five (5) NTU; and ( )
- (3) Any result indicating that the disinfectant residual concentration entering the distribution system is below two-tenths (0.2) mg/l free chlorine. ( )

ii. The purveyor ~~shall~~ will report to the Department within ten (10) days after the end of each month the ~~system~~ PWS serves water to the public the following monitoring information using a Department-approved form: (3-24-22)( )

- (1) Turbidity monitoring information; and ( )
- (2) Disinfectant residual concentrations entering the distribution system. ( )

iii. Personnel qualified under Subsection 300.01 ~~shall~~ will complete and sign the monthly report forms submitted to the Department as required in Subsection 300.06. (3-24-22)( )

b. In addition to the reporting requirements in 40 CFR 141.75(b) pertaining to ~~systems~~ PWSs with filtration treatment, each ~~public water system~~ PWS which provides filtration treatment must report the level of Giardia lamblia and virus inactivation/removal achieved each day by filtration and disinfection. (3-24-22)( )

**07. Recycle Provisions.** 40 CFR 141.76 is ~~herein~~ incorporated by reference. (3-24-22)( )

a. The Department ~~shall~~ will evaluate recycling records kept by ~~water systems~~ PWSs pursuant to 40 CFR 141.76 during sanitary surveys, comprehensive performance evaluations, or other inspections. (3-24-22)( )

b. The Department may require a ~~system~~ PWS to modify recycling practices if it can be shown that these practices adversely affect the ability of the ~~system~~ PWS to meet surface water treatment requirements. ( )

**301. ENHANCED FILTRATION AND DISINFECTION - SYSTEMS SERVING TEN THOUSAND OR MORE PEOPLE.**

This Section incorporates, 40 CFR Part 141, Subpart P, ~~of the National Primary Drinking Water Regulations~~, known as the Interim Enhanced Surface Water Treatment Rule. (3-24-22)( )

**01. General Requirements.** 40 CFR 141.170 is ~~herein~~ incorporated by reference. (3-24-22)( )

**02. Criteria for Avoiding Filtration.** 40 CFR 141.171 is ~~herein~~ incorporated by reference. (3-24-22)( )

**03. Disinfection Profiling and Benchmarking.** 40 CFR 141.172 is ~~herein~~ incorporated by reference. (3-24-22)( )

**04. Filtration.** 40 CFR 141.173 is ~~herein~~ incorporated by reference. (3-24-22)( )

**05. Filtration Sampling Requirements.** 40 CFR 141.174 is ~~herein~~ incorporated by reference. (3-24-22)( )

**302. SANITARY SURVEYS. ~~FOR SYSTEMS USING SURFACE WATER OR GROUND WATER UNDER THE DIRECT INFLUENCE OF SURFACE WATER.~~**

The Department ~~shall~~ conduct a sanitary survey of all ~~public water systems which use surface water or ground water under the direct influence of surface water~~ PWSs. Sanitary surveys will include, but are not limited to, the following elements: source; treatment; distribution system; finished water storage; pump, pump facilities, and controls; monitoring and reporting and data verification; PWS management and operation; and operator compliance with state requirements. For those PWSs using groundwater, 40 CFR Part 141, Subpart S, is incorporated by reference.

(3-24-22)( )

**01. Frequency.** For non-community ~~water systems~~ PWSs, a sanitary survey ~~shall~~ **must** be conducted every five (5) years. For community ~~water systems~~ PWSs, a sanitary survey ~~shall~~ **will** be conducted every three (3) years, except ~~that a community water system that has been determined to have outstanding performance, according to criteria established by the Department, may have a sanitary survey conducted every five (5) years~~ as provided below.

(3-24-22)( )

**a.** Community systems using surface water or groundwater under the direct influence of surface water that have been determined to have outstanding performance, according to criteria established by the Department, may have a sanitary survey conducted every five (5) years. ( )

**b.** Community systems using groundwater may have a sanitary survey conducted every five (5) years if the PWS provides at least a four (4)-log treatment of viruses (using inactivation, removal, or a Department-approved combination of 4-log inactivation and removal) before or at the first customer for all of its groundwater sources. ( )

**c.** Community systems using groundwater may have a sanitary survey conducted every five (5) years if they have an outstanding performance record, as determined by the Department and documented in previous sanitary surveys, and have no history of Revised Total Coliform Rule MCL or monitoring violations under Subsection 100.01 since the last sanitary survey. ( )

**02. Report.** A ~~The Department will provided a~~ report describing the results of the sanitary survey ~~will be provided to the water system~~ PWS. (3-24-22)

**a.** As part of the sanitary survey report or as an independent action, the Department ~~shall~~ **will** provide written notice to the ~~water system~~ PWS describing any significant deficiency within thirty (30) days after the Department identifies the significant deficiency. The notice may specify corrective actions and deadlines for completion of corrective actions. (3-24-22)( )

**b.** The Department may, at its discretion, provide this written notice at the time of the sanitary survey. (3-24-22)

**03. Significant Deficiencies.** For each of the eight (8) elements of a sanitary survey of a groundwater system, the Department will consider the following deficiencies significant in all cases for the purposes of the notice required in Subsection 303.02. Decisions about the significance of other deficiencies identified during the sanitary survey will be at the Department's discretion, as indicated in the Department's sanitary survey protocol. ( )

**a.** Source: Lack of or improper sanitary well cap as specified in Subsection 511.06.b. ( )

**b.** Treatment: ( )

**i.** Chemical addition lacks emergency shut-off as specified in Subsection 531.02.b.ii. ( )

**ii.** Chemical addition is not flow proportioned where the rate of flow or chemical demand is not reasonably constant, as specified in Subsection 531.02.b.ii. ( )

**c.** Distribution system: A minimum system pressure of twenty (20) psi is not maintained throughout the distribution system as specified in Subsection 552.01.b. ( )



- d.** Finished water storage: Roof leaking, as specified in Subsections 544.09 and 544.09.c. ( )
- e.** Pumps, pump facilities, and controls: A pump house must be protected from contamination and unauthorized entry, as specified in Subsection 541.01. ( )
- f.** Monitoring, reporting, and data verification: Repeated failure to collect the required number and type of Revised Total Coliform Rule samples during the most recent two (2) year period, as specified in Subsection 100.01. ( )
- g.** PWS management and operation: History of frequent depressurization in the distribution system in violation of Subsection 552.01. ( )
- h.** Operator compliance with state licensing requirements: The PWS does not have a properly licensed responsible charge operator as required in Subsection 554.02. ( )

**034.** **Response Required.** ~~After notification from the Department of significant deficiencies,~~ the owner of a ~~public water system~~ PWS must respond in writing, describing how and on what schedule the ~~system~~ PWS will address all significant deficiencies, not later than forty-five (45) days ~~after receiving notification from the Department for PWSs using surface water or groundwater under the direct influence of surface water or thirty (30) days for PWSs only using groundwater.~~ (3-24-22)( )

**045.** **Consultation with the Department.** ~~Public water systems shall~~ PWS owners must consult with the Department prior to taking specific corrective actions in response to significant deficiencies identified during a sanitary survey, unless such corrective actions are specified in detail by the Department in its written notification under Subsection 302.02. (3-24-22)( )

**056.** **Violation.** Failure to address significant deficiencies identified in a sanitary survey ~~that are within the control of the public water system and its governing body shall constitute~~ is a violation of these rules. (3-24-22)( )

### **303. ~~SANITARY SURVEYS FOR PUBLIC WATER SYSTEMS USING GROUND WATER.~~**

The Department shall conduct a sanitary survey of all public water systems that use ground water. 40 CFR Part 141, Subpart S, is herein incorporated by reference. (3-24-22)

**01.** **Frequency.** For non-community water systems, a sanitary survey shall be conducted every five (5) years. For community water systems, a sanitary survey shall be conducted every three (3) years, except as provided below. (3-24-22)

**a.** A community water system may have a sanitary survey conducted every five (5) years if the system provides at least a four (4) log treatment of viruses (using inactivation, removal, or a Department approved combination of 4 log inactivation and removal) before or at the first customer for all of its ground water sources. (3-24-22)

**b.** A community water system may have a sanitary survey conducted every five (5) years if it has an outstanding performance record, as determined by the Department and documented in previous sanitary surveys, and has no history of Total Coliform Rule or Revised Total Coliform Rule MCL or monitoring violations under Subsection 100.01 since the last sanitary survey. (3-24-22)

**02.** **Report.** A report describing the results of the sanitary survey shall be provided to the water system. (3-24-22)

**a.** As part of the sanitary survey report or as an independent action, the Department shall provide written notice to the water system describing any significant deficiency within thirty (30) days after the Department identifies the significant deficiency. The notice may specify corrective actions and deadlines for completion of corrective actions. (3-24-22)

**b.** The Department may, at its discretion, provide this written notice at the time of the sanitary survey.



(3-24-22)

~~03. Significant Deficiencies. For each of the eight (8) elements of a sanitary survey of a ground water system, the following deficiencies shall in all cases be considered significant for the purposes of the notice required in Subsection 303.02. Decisions about the significance of other deficiencies identified during the sanitary survey shall be at the Department's discretion, as indicated in the Department's sanitary survey protocol.~~ (3-24-22)

~~a. Source: Lack of a sanitary well cap as specified in Subsection 511.06.b. (3-24-22)~~

~~b. Treatment: (3-24-22)~~

~~i. Chemical addition lacks emergency shut-off as specified in Subsection 531.02.b.ii. (3-24-22)~~

~~ii. Chemical addition is not flow proportioned where the rate of flow or chemical demand is not reasonably constant, as specified in Subsection 531.02.b.ii. (3-24-22)~~

~~542.09. e. Distribution system: No means for flushing dead end water mains, as specified in Subsection (3-24-22)~~

~~d. Finished water storage: Roof leaking, as specified in Subsections 544.09 and 544.09.e. (3-24-22)~~

~~e. Pumps, pump facilities, and controls: No accessible check valve between pump and shut-off valve, as specified in Subsection 511.04. (3-24-22)~~

~~f. Monitoring, reporting, and data verification: Repeated failure to collect the required number and type of Total Coliform Rule or the Revised Total Coliform Rule samples during the most recent two (2) year period, as specified in Subsection 100.01. (3-24-22)~~

~~g. System management and operation: History of frequent depressurization in the distribution system in violation of Subsection 552.01. (3-24-22)~~

~~h. Operator compliance with state licensing requirements: Responsible charge operator is not licensed as required in Subsection 554.02. (3-24-22)~~

~~04. Response Required. The owner of a public water system must respond in writing, describing how and on what schedule the system will address all significant deficiencies, not later than thirty (30) days after receiving notification from the Department. (3-24-22)~~

~~05. Consultation with the Department. Public water systems shall consult with the Department prior to taking specific corrective actions in response to significant deficiencies identified during a sanitary survey unless such corrective actions are specified in detail by the Department in its written notification under Subsection 303.02. (3-24-22)~~

~~06. Violation. Failure to address significant deficiencies identified in a sanitary survey that are within the control of the public water system and its governing body shall constitute a violation of these rules. (3-24-22)~~

#### 304. COMPOSITE CORRECTION PROGRAM (CCP).

40 CFR 141.563 is incorporated by reference. In accordance with 40 CFR 142.16(g)(1), the Department ~~may~~ has authority to require the owner of a public water system PWC to conduct a composite correction program, as defined in Section 003 ~~of these rules~~, for the purpose of identifying and correcting deficiencies in water treatment and distribution. Composite Correction Programs consist of a Comprehensive Performance Evaluation (CPE) and Comprehensive Technical Assistance (CTA). ~~Failure to implement any Department required performance improvement factors identified through the CCP constitutes a violation of these rules.~~ (3-24-22)(    )

01. Comprehensive Performance Evaluation (CPE). ~~If required, the CPE must be~~ The CPE is conducted to identify factors that may be adversely impacting a plant's capability to achieve compliance. It must emphasize approaches that can be implemented without significant capital improvements, ~~and must consist of at least~~

~~the following components: assessment of plant performance; evaluation of major unit processes; identification and prioritization of performance limiting factors; assessment of the applicability of comprehensive technical assistance; and preparation of a CPE report. The CPE assesses plant performance-based capabilities and associated administrative and operation and management practices.~~ (3-24-22)(\_\_\_\_)

~~02. Comprehensive Technical Assistance (CTA). During the CTA phase, the system must identify and systematically address plant-specific factors. The CTA consists of follow-up to the CPE results, implementation of process control priority setting techniques, and maintaining long-term involvement to systematically train staff and administrators.~~ (3-24-22)(\_\_\_\_)

**305. COLIFORM TREATMENT TECHNIQUE TRIGGERS AND ASSESSMENT REQUIREMENTS FOR PROTECTION AGAINST POTENTIAL FECAL CONTAMINATION.**

40 CFR 141.859, excluding 40 CFR 141.859(a)(2)(iii), is ~~herein~~ incorporated by reference. (3-24-22)(\_\_\_\_)

~~01. Treatment Technique Triggers. Systems owners and operators must ensure that assessments are conducted in accordance with Subsection 305.02 after exceeding treatment technique triggers in this subsection.~~ (3-24-22)

~~a. Level 1 treatment technique triggers: (3-24-22)~~

~~i. For systems taking forty (40) or more samples per month, the system exceeds five percent (5.0%) total coliform positive samples for the month. (3-24-22)~~

~~ii. For systems taking fewer than forty (40) samples per month, the system has two (2) or more total coliform positive samples in the same month. (3-24-22)~~

~~iii. The system owner or operator fails to take every required repeat sample after any single total coliform positive sample. (3-24-22)~~

~~b. Level 2 treatment technique triggers: (3-24-22)~~

~~i. An E.coli MCL violation, as specified in Subsection 050.05 and Subsection 100.01 of these rules; or (3-24-22)~~

~~ii. A second or any additional Level 1 triggers as defined in Subsection 305.01.a. within a rolling 12-month period, unless the Department has determined a likely reason that the samples that caused the first Level 1 treatment technique trigger were total coliform positive and has established that the system has corrected the problem. (3-24-22)~~

~~02. Requirements For Assessments. 40 CFR 141.859(b) is incorporated by reference. (3-24-22)(\_\_\_\_)~~

~~a. System owners and operators must ensure that Level 1 and 2 assessments are conducted in order to identify the possible presence of sanitary defects and defects in distribution system coliform monitoring practices. The Level 1 and 2 assessments must be conducted consistent with any Department directives that tailor specific assessment elements with respect to the size and type of the system PWS and the size, type, and characteristics of the distribution system. (3-24-22)(\_\_\_\_)~~

~~b. When conducting assessments, owners and operators must ensure that the assessor evaluates minimum elements that include review and identification of inadequacies in sample sites; sampling protocol; sample processing; atypical events that could affect distributed water quality or indicate that distributed water quality was impaired; changes in distribution system maintenance and operation that could affect distributed water quality (including water storage); source and treatment considerations that bear on distributed water quality, where appropriate (e.g., small ground water systems); and existing water quality monitoring data. The system owner or operator must ensure the assessments are consistent with the elements in the Department provided forms for Level 1 and Level 2 assessments. (3-24-22)~~

~~eb.~~ Level 1 Assessment. ~~A system owner or operator must conduct a Level 1 assessment if the system exceeds one of the treatment technique triggers in Subsection 305.01.a. as soon as practical after any trigger level is identified and submit a completed Level 1 assessment report or form to the Department within thirty (30) days after the system learns that it has exceeded a trigger. 40 CFR 141.859(b)(3) is incorporated by reference. (3-24-22)(\_\_\_\_)~~

~~i.~~ The completed assessment report or form must describe sanitary defects detected, corrective actions completed, and a proposed timetable for any corrective actions not already completed. The assessment report or form may also note that no sanitary defects were identified. (3-24-22)

~~ii.~~ If the Department reviews the completed Level 1 report or form and determines that the assessment is not sufficient (including any proposed timetable for any corrective actions not already completed), the Department will consult with the owner or operator of the system. If the Department requires revisions after consultation, the system owner or operator must submit a revised assessment report or form to the Department on an agreed-upon schedule not to exceed thirty (30) days from the date of consultation. (3-24-22)

~~iii.~~ Upon completion and submission of the assessment report or form by the system owner or operator, the Department will determine if the system has identified a likely cause for the Level 1 trigger and, if so, establish that the system has corrected the problem, or has included a schedule acceptable to the Department for correcting the problem. (3-24-22)

~~dc.~~ Level 2 Assessments. ~~A system owner or operator must ensure that a Level 2 assessment is conducted if the system exceeds one of the treatment technique triggers in Subsection 305.01.b. The owner or operator must comply with any expedited actions or additional action required by the Department in the case of an E.coli MCL violation. 40 CFR 141.859(b)(4) is incorporated by reference. (3-24-22)(\_\_\_\_)~~

~~i.~~ The system owner or operator must ensure that a Level 2 assessment is conducted by the Department or a party approved by the Department as described in Subsection 305.03 as soon as practical after any trigger in Subsection 305.01.b. and must submit a completed Level 2 assessment report or form to the Department within 30 (thirty) days after the system learns that it has exceeded a trigger if the assessment was conducted by a party other than the Department. (3-24-22)

~~ii.~~ The Department will schedule and conduct Level 2 assessments for an E.coli treatment technique trigger in ~~Subsection 305.01.b.i.~~ unless the Department approves another party to conduct the assessment as outlined in Subsection 305.0302. (3-24-22)(\_\_\_\_)

~~iii.~~ A second or any additional triggered Level 2 Assessment within a rolling twelve-month period must be conducted by a Department approved third party even if the ~~public water system~~ PWS owner has staff or management approved under Subsection 305.0302. (3-24-22)(\_\_\_\_)

~~iv.~~ The completed assessment report or form must describe sanitary defects detected, corrective actions completed, and a proposed timetable for any corrective actions not already completed. The assessment report or form may also note that no sanitary defects were identified. (3-24-22)

~~v.~~ If the Department reviews the completed Level 2 report or form and determines that the assessment is not sufficient (including any proposed timetable for any corrective actions not already completed), the Department will consult with the owner or operator of the system. If the Department requires revisions after consultation, the system owner or operator must submit a revised assessment report or form to the Department on an agreed-upon schedule not to exceed 30 (thirty) days from the date of consultation. (3-24-22)

~~vi.~~ Upon completion and submission of the assessment report or form by the system owner or operator, the Department will determine if the system has identified a likely cause for the Level 2 trigger and, if so, establish that the system has corrected the problem, or has included a schedule acceptable to Department for correcting the problem. (3-24-22)

~~e.~~ Corrective action. ~~Systems must correct sanitary defects found through either Level 1 or Level 2 assessments conducted under this section. For corrections not completed by the time of submission of the assessment report or form, the system must complete the corrective action(s) in compliance with a timetable approved by the~~

~~Department in consultation with the system. The system must notify the Department when each scheduled corrective action is completed.~~ (3-24-22)

~~f. Consultation. At any time during the assessment or corrective action phase, either the water system or the Department may request a consultation with the other party to determine the appropriate actions to be taken. The system may consult with the Department on all relevant information that may impact its ability to comply with a requirement of this Section, including the method of accomplishment, an appropriate timeframe, and other relevant information.~~ (3-24-22)

**032. Approved Parties for Level 2 Assessments.** The ~~system~~ PWS may conduct a Level 2 assessment if the ~~system~~ PWS has staff or management with the certification or qualifications outlined in this Subsection or if the ~~system~~ PWS hires parties that meet the qualifications in this Subsection. The following parties are approved by the Department to conduct Level 2 assessments: (3-24-22)( )

a. The Department or persons contracted with the Department who are trained to conduct sanitary surveys; ( )

b. Currently licensed operators in good standing that are licensed through the Idaho Division of Occupational and Professional Licenses with a drinking water classification of Distribution I through IV or Treatment I through IV and that are licensed at least to the classification level of the ~~public water system~~ PWS requiring the Level 2 assessment; or (3-24-22)( )

c. Licensed professional engineers licensed by the state of Idaho and qualified by education and experience in the specific technical fields involved in these rules. ( )

**306. -- 309. (RESERVED)**

**310. ENHANCED FILTRATION AND DISINFECTION - SYSTEMS SERVING FEWER THAN TEN THOUSAND PEOPLE.**

40 CFR 141, Subpart T, is ~~herein~~ incorporated by reference. (3-24-22)( )

**311. ENHANCED TREATMENT FOR CRYPTOSPORIDIUM -- LONG TERM 2 ENHANCED SURFACE WATER TREATMENT RULE.**

40 CFR Part 141, sSubpart W, is ~~herein~~ incorporated by reference. (3-24-22)( )

**01. Cryptosporidium Treatment Credit for Approved Watershed Control Program.** The Department ~~shall will~~ award 0.5 (zero point five) logs cryptosporidium removal credit to systems that have a Department approved Watershed Control Program. Requirements for a watershed control program are set forth in 40 CFR 141, Subpart W. Guidance on how to develop a watershed control program and obtain Department approval is provided in "Implementation Guidance for the Long Term 2 Enhanced Surface Water Treatment Rule," as referenced in Section 002. (3-24-22)( )

**02. Assessment of Significant Changes in the Watershed.** As part of the sanitary survey process set forth in Section 302, the Department, or an agent approved by the Department, ~~shall will~~ assess significant changes in the watershed of a surface water system that ~~have~~ occurred since the ~~system~~ PWS conducted source water monitoring. If changes in the watershed have the potential to significantly increase contamination of the source water with cryptosporidium, the Department ~~shall will~~ consult with the ~~water system~~ PWS owner on follow-up actions that may be required under 40 CFR 141, Subpart W, including, but not limited to, source water monitoring ~~and~~/or additional treatment requirements. "Implementation Guidance for the Long Term 2 Enhanced Surface Water Treatment Rule," as referenced in Section 002, provides a description of factors that will be considered by the Department when making an assessment of changes in the watershed. These factors include, but are not limited to the following: (3-24-22)( )

a. New ~~NPDES~~ IPDES permits or changes in existing ~~NPDES~~ IPDES permits that involve increased loading of contaminants. (3-24-22)( )

b. Changes in land use patterns. ( )

- c. Changes in agricultural cropping, chemical application, or irrigation practices. ( )
- d. Changes in other non-point discharge source activities (such as grazing, manure application, commercial or residential development). ( )
- e. Stream or riverbed modifications. ( )
- f. ~~NPDES~~IPDES permit violations at wastewater treatment plants ~~and~~ or confined animal feedlot operations. (3-24-22)( )
- g. Dramatic natural events such as floods, forest fires, earthquakes, and landslides that may transport or expose contaminants. ( )
- h. Prolonged drought conditions that may warrant special preparatory measures to minimize impacts from waste accumulations that are washed into source waters when precipitation returns. ( )
- i. ~~Status of the water system's emergency response plan.~~ (3-24-22)
- ji. Accidental or illegal waste discharges and spills. ( )

312. -- 319. (RESERVED)

**320. DISINFECTANT RESIDUALS, DISINFECTION BYPRODUCTS, AND DISINFECTION BYPRODUCT PRECURSORS.**

This Section incorporates 40 CFR Part 141, Subpart L, of the National Primary Drinking Water Regulations, known as the Disinfectants and Disinfection Byproducts Rule. ( )

- 01. **General Requirements.** 40 CFR 141.130 is ~~herein~~ incorporated by reference. (3-24-22)( )
- 02. **Analytical Requirements.** 40 CFR 141.131 is ~~herein~~ incorporated by reference. DPD colorimetric test kits may be used to measure residual disinfectant concentrations for chlorine, chloramines, and chlorine dioxide. (3-24-22)( )
- 03. **Monitoring Requirements.** 40 CFR 141.132 is ~~herein~~ incorporated by reference. (3-24-22)( )
- 04. **Compliance Requirements.** 40 CFR 141.133 is ~~herein~~ incorporated by reference. (3-24-22)( )
- 05. **Treatment Techniques for Control of Disinfection Byproduct (DBP) Precursors.** 40 CFR 141.135 is ~~herein~~ incorporated by reference. (3-24-22)( )

**321. INITIAL DISTRIBUTION SYSTEM EVALUATIONS.**

40 CFR Part 141, Subpart U, is ~~herein~~ incorporated by reference. "Implementation Guidance for the Stage 2 Disinfectants and Disinfection Byproducts Rule," as referenced in Section 002, provides assistance to ~~public water system~~ PWS owners and operators in understanding and achieving compliance with the requirements of 40 CFR 141, Subpart U. (3-24-22)( )

**322. STAGE 2 DISINFECTION BYPRODUCTS REQUIREMENTS.**

40 CFR Part 141, Subpart V, is ~~herein~~ incorporated by reference. "Implementation Guidance for the Stage 2 Disinfectants and Disinfection Byproducts Rule," as referenced in Section 002, provides assistance to public water system owners and operators in understanding and achieving compliance with the requirements of 40 CFR Part 141, Subpart V. ( )

**323. GROUND WATER RULE.**

40 CFR 141, Subpart S is ~~herein~~ incorporated by reference. "Implementation Guidance for the Drinking Water Program – Ground Water Rule," as referenced in Section 002, provides assistance to ~~public water system~~ PWS owners and operators in understanding and achieving compliance with the requirements of 40 CFR 141, Subpart S.

(3-24-22)( )

**01. Discontinuation of Treatment.** ~~Systems~~PWSs that wish to discontinue four (4)-log virus treatment at a ground-water source must meet the following criteria. Ground-water sources on which treatment has been discontinued ~~shall~~ will be subject to the triggered source water monitoring requirements of 40 CFR 141, Subpart S.

(3-24-22)( )

- a. Demonstration that any known source of contamination has been removed. ( )
- b. Demonstration that structural deficiencies of the well have been rehabilitated and no longer exist. ( )
- c. Provide evidence that the well is drawing from a protected or confined aquifer. ( )
- d. Submit results of one (1) year of monthly monitoring for a fecal indicator organism during which no positive results occurred. ( )

**02. Chlorine Purging Prior to Triggered Source Sampling.** 40 CFR 141.402(e) requires that ~~ground water~~ groundwater source samples be collected at a location prior to any treatment. Pursuant to this requirement, ~~systems~~ PWSs that add chlorine to a source, either in the well bore or near enough to the wellhead that chlorinated water ~~could~~ may backflow into the well, ~~shall~~ must ensure that all chlorine residual has been purged prior to taking a triggered source water sample. This ~~shall~~ must be accomplished by measuring chlorine residual in the source water until a reading of zero is obtained and be recorded in the space provided for chlorine residual on the sample submittal form.

(3-24-22)( )

324. -- 349. (RESERVED)

**350. CONTROL OF LEAD AND COPPER.**  
40 CFR 141 Subpart I is incorporated by reference.

( )

~~**01. General Requirements.** 40 CFR 141.80, revised as of July 1, 2008, is herein incorporated by reference.~~ (3-24-22)

~~**02. Applicability of Corrosion Control Treatment Steps to Small, Medium Size, and Large Water Systems.** 40 CFR 141.81, revised as of July 1, 2008, is herein incorporated by reference.~~ (3-24-22)

~~**03. Description of Corrosion Control Treatment Requirements.**~~ (3-24-22)

~~a. 40 CFR 141.82, revised as of July 1, 2008, is herein incorporated by reference.~~ (3-24-22)

~~b. The Department may modify its determination of the optimal corrosion control treatment or optimal water quality control parameters where it concludes that such changes are necessary to optimize corrosion control treatment as specified in 40 CFR 141.82(h) and as referred to in Subsection 350.03. The Department may also modify its determination of the optimal corrosion control treatment or water quality control parameters where it finds such changes will provide equivalent or improved treatment in a manner which is simpler or less costly to operate.~~ (3-24-22)

~~**04. Source Water Treatment Requirements.** 40 CFR 141.83, revised as of July 1, 2008, is herein incorporated by reference. The Department may modify its determination of optimal source treatment or maximum permissible lead and copper concentrations where it concludes that such changes are necessary as specified in 40 CFR 141.83(b)(6).~~ (3-24-22)

~~**05. Lead Service Line Replacement Requirements.** 40 CFR 141.84, revised as of July 1, 2008, is herein incorporated by reference.~~ (3-24-22)

~~**06. Public Education and Supplemental Monitoring Requirements.** 40 CFR 141.85, revised as of July 1, 2008, is herein incorporated by reference.~~ (3-24-22)

~~07. Monitoring Requirements for Lead and Copper in Tap Water. 40 CFR 141.86, revised as of July 1, 2008, is herein incorporated by reference. (3-24-22)~~

~~08. Monitoring Requirements for Water Quality Parameters. 40 CFR 141.87, revised as of July 1, 2008, is herein incorporated by reference. (3-24-22)~~

~~09. Monitoring Requirements for Lead and Copper in Source Water. 40 CFR 141.88, revised as of July 1, 2008, is herein incorporated by reference. (3-24-22)~~

~~10. Analytical Methods. 40 CFR 141.89, revised as of July 1, 2008, is herein incorporated by reference. (3-24-22)~~

~~11. Reporting Requirements. 40 CFR 141.90, revised as of July 1, 2008, is herein incorporated by reference. (3-24-22)~~

~~12. Recordkeeping Requirements. 40 CFR 141.91, revised as of July 1, 2008, is herein incorporated by reference. (3-24-22)~~

351. -- 399. (RESERVED)

400. SECONDARY MCLS.  
40 CFR 143, Subpart A, is incorporated by reference. ( )

~~01. Purpose. 40 CFR 143.1, revised as of July 1, 2003, is herein incorporated by reference. (3-24-22)~~

~~02. Definitions. 40 CFR 143.2, revised as of July 1, 2003, is herein incorporated by reference. (3-24-22)~~

~~03. Secondary Maximum Contaminant Levels. 40 CFR 143.3, revised as of July 1, 2003, is herein incorporated by reference. (3-24-22)~~

~~04. Monitoring. 40 CFR 143.4, revised as of July 1, 2010, is herein incorporated by reference. (3-24-22)~~

401. -- 449. (RESERVED)

450. USE OF NON-CENTRALIZED TREATMENT DEVICES.

01. Criteria and Procedures for Public Water Systems Using Point of Entry Devices. 40 CFR 141.100 is herein incorporated by reference. (3-24-22)( )

02. Point of Use (POU) Treatment Devices. ( )

a. A public water system PWS owner may use point of use (POU) treatment in order to achieve compliance comply with certain maximum contaminant levels (MCL) or treatment techniques, in accordance with Subsection 450.02.b., when the following conditions are met: (3-24-22)( )

i. A program for long-term operation, maintenance, and monitoring of the POU treatment system is approved by the Department, pursuant to Subsection 450.02.d 450.02.c. (3-24-22)( )

ii. The public water system PWS owner or a vendor of POU treatment devices under contract with the public water system PWS must shall own, control, and maintain the POU treatment system to ensure proper operation and maintenance and compliance with the MCL or treatment technique. (3-24-22)( )

iii. Each POU treatment device is equipped with a mechanical warning mechanism to ensure that customers are automatically notified of operational problems. (3-24-22)( )



iv. ~~The~~Each POU treatment device must be certified by an accredited American National Standards Institute (ANSI) certification body to meet applicable ANSI/National Sanitation Foundation (NSF) Standards.

~~(3-24-22)~~( )

~~b.v.~~ POU treatment devices ~~shall~~ will not be used to ~~achieve compliance~~ comply with ~~an~~ MCL or treatment technique requirement for a microbial contaminant or an indicator of a microbial contaminant. Community ~~water systems~~ PWSs may not use POU treatment devices to ~~achieve compliance~~ comply with a nitrate ~~or nitrite~~ MCL.

~~(3-24-22)~~( )

~~eb.~~ The Department will waive the plan and specification requirements of Section 504 relating to material modifications for the following systems only to the extent that the material modification ~~proposed~~ is limited to the installation or use of a POU treatment device(s):

~~(3-24-22)~~( )

i. Community ~~water systems~~ PWSs serving two hundred (200) or fewer service connections.

~~(3-24-22)~~( )

ii. Non-transient non-community ~~water systems~~ PWSs;

~~(3-24-22)~~( )

iii. Transient non-community ~~water systems~~ PWSs; or

~~(3-24-22)~~( )

iv. Community ~~water systems~~ PWSs serving more than two hundred (200) service connections if approved by the Department through the waiver process outlined in Subsection 005.01.a.02.

~~(3-24-22)~~( )

~~dc.~~ ~~A public water system must obtain written approval by the Department before installation of a POU treatment device for the purpose of achieving compliance with a MCL or treatment technique. The public water system shall~~ Prior to installation, the PWS owner must submit the following documentation for approval to the Department:

~~(3-24-22)~~( )

i. Water system information:

~~Information identifying the public water system name and number, total number of service connections, contaminant(s) to be treated, type of POU treatment device to be installed, manufacturer and model number of the POU treatment device, type and function of the mechanical warning mechanism (performance indicator) on the POU treatment device, certification verification for ANSI/NSF, installer qualifications, and a proposed date for installation of the POU treatment device(s).~~

~~(3-24-22)~~( )

(1) PWS name and identification number:

( )

(2) Total number of service connections:

( )

(3) Demonstration that all POU treatment devices are owned, controlled, and maintained by the PWS owner or by a vendor of POU treatment devices under contract with the PWS owner;

( )

(4) Documentation that a customer at each service connection has agreed to installation and use of a POU treatment device and has granted access for installation, maintenance, and sampling;

( )

(5) A statement of recognition that failure to maintain compliance with the MCL, or the failure to operate and maintain compliance with a POU treatment system as approved by the Department, may necessitate installation of centralized treatment; and

( )

(6) Documentation that the PWS is current with certified operator requirements pursuant to Section 554.

( )

ii. POU device information:

( )

(1) Type of POU treatment device;

( )



- (2) Manufacturer, model number, and manufacturer's specifications; ( )
- (3) Contaminant to be treated and documentation that the POU is certified and is of sufficient design and capacity for removal of the contaminant; ( )
- (4) Documentation that the PWS's water chemistry is compatible with the POU; ( )
- (5) Type and function of the mechanical warning (performance indicator); ( )
- (6) Certification verification for ANSI/NSF; ( )
- (7) Documentation describing how other drinking water dispensing units, such as hot water dispensers and refrigerators, soda machines, water fountains, and other similar units will be provided with treated water and how the water will be transported to that unit with non-reactive piping or tubing. Non-transient non-community and transient non-community PWSs must demonstrate that the POU treatment devices are located in areas adequate to protect public health and in sufficient quantity to serve the system's users; ( )
- (8) Installer qualifications; and ( )
- (9) Proposed date for completing installation(s). ( )
- iii. POU operation, maintenance, and sampling plan that includes documentation on how the PWS owner will: ( )
- (1) Address any non-compliance with Subsection 450.02.c.i.(4); ( )
- (2) Ensure real estate disclosures for the POU treatment systems; ( )
- (3) Deliver ongoing education and outreach to customers, including renters, regarding POU treatment and health effects of the contaminant(s) of concern; ( )
- (4) Address and perform on-going maintenance activities, including frequency of treatment media replacements and treatment device replacements, periodic verification that the mechanical warning device is functional, schedule of planned maintenance activities, a plan to address unscheduled maintenance problems, and a plan and method of waste disposal; and ( )
- (5) Collect samples from the location of all service connections and demonstrating that all POU treatment devices will be sampled for compliance with the treated contaminant(s) during every compliance period or other frequency designated by the Department. ( )
- ii. ~~The manufacturer's specifications for the POU treatment device including demonstration that the POU treatment device is suited for the water chemistry of the public water system and contaminant(s) of concern and is of sufficient design and capacity for the particular application.~~ (3-24-22)
- iii. ~~Information relating to how other drinking water dispensing units, such as instant hot water dispensers and refrigerator water and ice dispensers, whose primary function is to provide drinking water, will be provided with treated water. If water is transported from a POU treatment device to another drinking water dispensing unit, the conducting tube shall be of non-reactive material.~~ (3-24-22)
- iv. ~~For non-transient non-community water systems and transient non-community water systems, demonstration that the drinking water dispensing units are located in areas adequate to protect public health.~~ (3-24-22)
- v. ~~Demonstration that all POU treatment devices are owned, controlled, and maintained by the public water system or by a vendor of POU treatment devices under contract with the public water system.~~ (3-24-22)

~~vi. A sampling plan identifying the location of all service connections and demonstrating how the system will ensure that all POU treatment devices are sampled for compliance with the contaminant(s) being treated during every compliance period or at a frequency designated by the Department. (3-24-22)~~

~~vii. Documentation that a customer at each service connection has agreed to installation and use of a POU treatment device and has granted access for installation, maintenance, and sampling. (3-24-22)~~

~~viii. A plan that describes how the public water system will address any non-compliance with Subsection 450.02.d.vii. (3-24-22)~~

~~ix. A maintenance plan that demonstrates how on-going maintenance activities will be performed and on what frequency, including: frequency of treatment media replacements, frequency of POU treatment device replacements, periodic verification that the mechanical warning device is functional, schedule of planned maintenance activities, plan of how the system will address unscheduled maintenance problems, and a plan and method of waste disposal. (3-24-22)~~

~~x. Documentation that the system meets the current requirements for a certified operator pursuant to Section 554. (3-24-22)~~

~~xi. A plan for on-going education and outreach to the customers of the public water system, including rental customers, on POU treatment and health effects of the contaminant(s) of concern. (3-24-22)~~

~~xii. A plan for how the system will ensure real estate disclosures for the POU treatment system. (3-24-22)~~

~~xiii. A statement of recognition that failure to maintain compliance with the MCL, or the failure to operate and maintain compliance with a POU treatment system as approved by the Department, may necessitate installation of centralized treatment. (3-24-22)~~

~~**ed.** Within thirty (30) days of installing the approved POU treatment system, the public water system shall **PWS owner must:** (3-24-22)( )~~

~~**i.** Notify the Department in writing that the POU treatment system was installed as approved by the Department. (3-24-22)( )~~

~~**f.** Within thirty (30) days of installing the approved POU treatment system, the public water system shall **s**~~

~~**ii.** Submit samples from each POU treatment device to a certified laboratory for the contaminant(s) being treated by the POU treatment device. The samples shall be used to demonstrate initial compliance with the MCL. (3-24-22)( )~~

~~**gc.** The water system **PWS** owner or operator must maintain records for a POU treatment system. Records shall **must** be submitted to the Department at a frequency and in a format specified by the Department. Records to maintain shall include: (3-24-22)( )~~

~~i. Requirements of Subsection 450.02.**dc**; (3-24-22)( )~~

~~ii. All sampling performed on the POU treatment devices; ( )~~

~~iii. Maintenance logs and schedules; ( )~~

~~iv. Log of installed units; and ( )~~

~~v. Contracts, lease agreements, or other legal documents with vendors and consumers. ( )~~

~~**03. Use of Bottled Water.** 40 CFR 141.101 is **herein** incorporated by reference. (3-24-22)( )~~

451. TREATMENT TECHNIQUES.

~~40 CFR 141, Subpart K, is incorporated by reference.~~ (3-24-22)( )

~~01. General Requirements. 40 CFR 141.110 is herein incorporated by reference.~~ (3-24-22)

~~02. Treatment Techniques for Acrylamide and Epichlorohydrin. 40 CFR 141.111 is herein incorporated by reference.~~ (3-24-22)

452. -- 499. (RESERVED)

500. ~~FACILITY AND DESIGN STANDARDS: DEMONSTRATION OF TECHNICAL, FINANCIAL, AND MANAGERIAL CAPACITY OF PUBLIC DRINKING WATER SYSTEMS.~~

No person ~~shall~~ may proceed, or cause to proceed, with construction of a new ~~or substantially modified~~ community or non-transient, non-community ~~drinking water system PWS~~ until ~~it has been~~ they have demonstrated to the Department that the ~~water system PWS~~ will have adequate technical, financial, and managerial capacity, as defined in Section 003. ~~of these rules.~~ Existing community or non-transient, non-community PWSs incapable of demonstrating technical, financial, or managerial capacity as identified through operational problems, may be required to submit technical, financial, and managerial documentation to the Department for review and approval. With the exception of water sources, demonstration of capacity ~~shall~~ must be submitted to the Department prior to or concurrent with the submittal of plans and specifications, as required in Section 39-118, Idaho Code, and Subsection 504.03 ~~of these rules.~~ Plans and specifications for water sources may be submitted to the Department prior to demonstration of capacity for the ~~water system PWS.~~ The Department ~~shall~~ will issue its approval of the new ~~system PWS~~ capacity demonstration in writing. (3-24-22)( )

~~01. Technical Capacity. In order to meet this requirement, the public water system shall submit documentation to demonstrate~~ Demonstration of technical capacity must include the following: (3-24-22)( )

a. The ~~system PWS~~ meets the relevant design, construction, and operating requirements of these rules; (3-24-22)( )

b. The ~~system PWS~~ has an adequate and consistent source of water; (3-24-22)( )

c. A plan is in place to protect the water source and deal with emergencies; ( )

d. A plan exists for replacement or improvement of infrastructure as necessary; and ( )

e. The ~~system PWS~~ has trained personnel with an understanding of the technical and operational characteristics of the ~~system PWS.~~ (3-24-22)( )

~~02. Financial Capacity. A~~ Demonstration of financial capacity must include ~~but is not limited to~~ the following ~~information:~~ (3-24-22)( )

a. Documentation that organizational and financial arrangements are adequate to construct and operate the ~~public water system PWS~~ in accordance with these rules. This information can be provided by submitting estimated construction, operation, and maintenance costs, letters of credit, or other access to financial capital through public or private sources and, if available, a certified financial statement; (3-24-22)( )

b. Demonstration of revenue sufficiency, that includes but is not limited to billing and collection procedures; a proposed rate structure which demonstrates the availability of operating funds, revenues for depreciation and reserves, and the ability to accrue a capital replacement fund. A preliminary operating budget ~~shall~~ must be provided; and (3-24-22)( )

c. Adequate fiscal controls must be demonstrated. ( )

~~03. Managerial Capacity. In order to demonstrate adequate~~ Demonstration of managerial capacity, the ~~owner or operator of a new drinking water system shall submit at least~~ must include the following ~~information to the Department:~~ (3-24-22)( )

- a. Clear documentation of legal ownership and any plans that may exist for transfer of that ownership upon completion of construction or after a period of operation; ( )
- b. The name, address, and telephone number of the person who will be accountable for ensuring that the ~~water system~~ PWS is in compliance with these rules; (3-24-22)( )
- c. The name, address, and telephone number of the responsible charge operator; ( )
- d. A description of the manner in which the ~~water system~~ PWS will be managed. Information such as by-laws, restrictive covenants, articles of incorporation, or procedures and policy manuals which describe the management organizational structure ~~shall~~ must be provided; (3-24-22)( )
- e. A recommendation of staff qualifications, including training, experience, certification or licensing, and continuing education; ( )
- f. An explanation of how the ~~water system~~ PWS will establish and maintain effective communications and relationships between the ~~water system~~ PWS management, its customers, professional service providers, and any applicable regulatory agencies; and (3-24-22)( )
- g. Evidence of planning for future growth, equipment repair and maintenance, and long term replacement of system components. ( )

**04. Submittal Form.** ~~The Department shall provide a standard form to be used in preparing a new system capacity demonstration. The submittal form and general~~ The PWS owner may request guidance on how to prepare a ~~new system~~ capacity document ~~is provided in, "How to Demonstrate Financial, Technical, and Managerial Capacity in New Public Water Systems."~~ This document may be requested submittal from the Department, ~~and the guidance~~ is available on the DEQ department website at <http://www.deq.idaho.gov>. (3-24-22)( )

**05. Expanding Systems.** A ~~public water system~~ PWS which comes into existence as a result of growth in population or number of service connections within a previously unregulated system will be considered a new ~~system~~ PWS under these rules and is subject to all design, construction, and operating requirements herein. (3-24-22)( )

**06. Consolidation.** In demonstrating new ~~system~~ PWS capacity, the owner of the proposed new ~~system~~ PWS must investigate the feasibility of obtaining water service from an established ~~public water system~~ PWS. If such service is available, but the owner elects to proceed with an independent ~~system~~ PWS, the owner must explain why this choice is in the public interest in terms of environmental protection, affordability to water users, and protection of public health. (3-24-22)( )

**07. Exclusion.** New ~~public water systems~~ PWSs which are public utilities as defined in Sections 61-104 (Corporation), 61-124 (Water System), 61-125 (Water Corporation), and 61-129 (Public Utility), Idaho Code, must meet the regulatory requirements of the Idaho Public Utilities Commission (IPUC) in Chapter 1, Title 61, Idaho Code, Public Utilities Law, and IDAPA 31.01.01, "Rules of Procedure of the Idaho Public Utilities Commission." Such water systems will not be required to meet any requirements of this Section which are in conflict with the provisions and requirements of the IPUC. (3-24-22)( )

**501. ~~FACILITY AND DESIGN STANDARDS:~~ GENERAL DESIGN REQUIREMENTS FOR PUBLIC DRINKING WATER SYSTEMS.**

Unless otherwise specified by the Department, the design of new ~~drinking water systems~~ PWSs, or modifications to existing ~~public drinking water systems~~, shall be in conformance with PWSs must conform to the facility and design standards set forth in 40 CFR 141.5, and Sections ~~006 and~~ 500 through 552 ~~of these rules~~. The following general design requirements ~~shall~~ apply as applicable for the type of ~~water system~~ PWS and the treatment or other processes employed. (3-24-22)( )

**01. Materials Used in Construction.** Products that are used to construct ~~public drinking water systems~~ PWSs and have water contact surfaces ~~shall~~ must conform to applicable AWWA standards and be certified by an

accredited ANSI certification body to meet applicable ANSI/NSF standards, where products meeting such AWWA and ANSI/NSF standards exist, and must conform to 40 CFR 143 Subpart B. In the absence of such products, products meeting applicable product standards and acceptable to the ~~reviewing authority~~ Department may be selected. Corrosion control ~~shall~~ must be taken into account during all aspects of ~~public water system~~ PWS design. (3-24-22)( )

**02. Additives Used in Operation.** No chemical or other substance ~~shall~~ will be added to drinking water, nor ~~shall~~ will any process be utilized to treat drinking water, unless ~~specifically~~ approved by the Department. All chemicals ~~shall~~ must conform to applicable AWWA standards and be certified by an accredited ANSI certification body to meet ANSI/NSF Standard 60, referenced in Subsection 002.02. (3-24-22)( )

**03. Design Basis.** The ~~system~~ PWS, including the water source and treatment facilities, ~~shall~~ must be designed to provide either peak hour demand of the ~~system~~ PWS or maximum day demand plus equalization storage at the design year. (3-24-22)( )

**04. Design of Treatment Facilities.** Design of treatment facilities ~~shall~~ must address: (3-24-22)( )

- a. Functional aspects of facility layout and provisions for future facility expansion; ( )
- b. Provision for expansion of waste treatment and disposal facilities (see Section 540); ( )
- c. Roads constructed to provide year-round access by vehicles and equipment needed for repair and maintenance; ( )
- d. Site grading and drainage; and ( )

e. ~~Chemical Feed or Injection. Unless otherwise approved by the Department based on documentation provided by the design engineer, all chemical feed or injection systems must be designed to ensure complete mixing through rapid mix devices or other measures.~~ Chemical feed or injection systems must be designed to ensure complete mixing through rapid mix devices or other measures unless otherwise approved by the Department. (3-24-22)( )

f. ~~Redundancy.~~ Unless otherwise approved by the Department or as specified in other sections of these rules, to ensure that minimum quality, quantity, and pressure requirements ~~of these rules~~ are continuously met during maintenance, breakdowns, structural failures, emergencies, or other periods when components must be out of service, water system treatment, filtration, and disinfection components for all new or substantially modified community or non-transient, non-community ~~drinking water systems shall~~ PWSs must be designed with redundancy or other acceptable methods, such that plant design capacity can be maintained with any component out of service. Raw water intake structures are excluded from the general redundancy requirement but ~~shall~~ must be designed to ensure that plant design capacity will be maintained. (3-24-22)( )

**05. Design of Buildings.** The design of buildings that are a part of ~~public drinking water systems shall~~ PWSs must provide for: (3-24-22)( )

- a. Adequate ventilation, lighting, heating, and air conditioning; ( )
- b. Adequate drainage; ( )
- c. Dehumidification equipment, if necessary; ( )
- d. Accessibility of equipment for operation, servicing, and removal; ( )
- e. Flexibility and convenience of operation and safety of operators; and ( )
- f. Separate room(s) for chemical storage and feed equipment that may be required based on type of chemicals and associated hazards. ( )

06. **Electrical.** Main switch gear electrical controls ~~shall~~ **must** be located above grade, in areas not subject to flooding. All electrical work ~~shall~~ **must** conform to the requirements of the National Electrical Code or to relevant state/local codes. The National Electrical Code is available from the National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02169-7471, (617)770-3000, <http://www.nfpa.org>. (3-24-22)( )

07. **Reliability and Emergency Operation.** New community ~~water systems constructed after April 15, 2007~~ **PWSs** are required to have sufficient dedicated on-site standby power, with automatic switch-over capability, or standby storage so that water may be treated and supplied to pressurize the entire distribution system during power outages. During a power outage, the ~~water system shall~~ **PWS must** be able to meet the operating pressure requirements of Subsection 552.01.b. for a minimum of eight (8) hours at average day demand plus fire flow where provided. A minimum of eight (8) hours of fuel storage ~~shall~~ **must** be located on site unless an equivalent plan is authorized by the Department. Standby power provided in a ~~public drinking water system shall~~ **PWS may** be coordinated with the standby power that is provided in the wastewater collection and treatment system. (3-24-22)( )

a. The Department may require the installation of standby power or storage facilities in existing ~~systems~~ **PWSs** if the frequency and duration of power outages a ~~system~~ **PWS** experiences constitute a health hazard. (3-24-22)( )

b. Existing community ~~public water systems~~ **PWSs** that are substantially modified ~~after April 15, 2007~~ **shall must** meet the requirements of Subsection 501.07. in those portions of the ~~system~~ **PWS** affected by the modifications. (3-24-22)( )

c. New sources and booster pumps intended to increase ~~system~~ **PWS** capacity ~~shall~~ **must** be provided with standby power or equivalent unless, during a power outage, the ~~public water system~~ **PWS** or distribution system pressure zone can already meet the minimum operating capacity and pressure requirements in Subsection 501.07 for a minimum of eight (8) hours at average day demand plus fire flow where provided for each pressure zone. (3-24-22)( )

d. For both new and existing ~~public water systems~~ **PWSs**, the Department may reduce the requirements of Subsection 501.07 if the ~~system~~ **PWS** can demonstrate the capacity to adequately protect public health during a power outage. Any decision by the Department will be based on, but not limited to, the following considerations: (3-24-22)( )

i. An adequate emergency response and operation plan and the capacity to implement that plan. ( )

ii. The adequacy of the ~~system's~~ **PWS's** cross connection control program and the capacity to protect public health in the event of a system wide depressurization. (3-24-22)( )

iii. Demonstration of historical and projected reliability of the electrical power supplied to the ~~water~~ **system PWS**. (3-24-22)( )

iv. A strategy for providing information to the public during power outages, including instructions to stop irrigation, boil water, etc., until notified otherwise. ( )

v. The level of reliability acceptable to consumers. This can be accomplished with either a vote of the majority of consumers for privately owned and operated ~~systems~~ **PWSs** or a decision by the governing body for publicly governed ~~systems~~ **PWSs**. (3-24-22)( )

vi. Other considerations that may be pertinent, including connections to other ~~public water systems~~ **PWSs**, agreements to provide water in emergency situations, and the availability of dedicated portable auxiliary power. (3-24-22)( )

08. **On-Site Analysis and Testing Capabilities.** Each ~~public water system shall~~ **PWS must** have equipment and facilities for routine testing necessary to ensure proper operation. Equipment selection ~~shall~~ **must** be based on the characteristics of the raw water source and the complexity of the treatment process involved.



(3-24-22)( )

09. **Sample Taps.** Sample taps ~~shall~~ **must** be provided so that water samples can be obtained from each water source and from appropriate locations in each unit operation of treatment, and from the finished water. Taps ~~shall~~ **must** be consistent with sampling needs and shall not be of the petcock type. Taps owned by the ~~water system~~ **PWS** and used for obtaining samples for bacteriological analysis ~~shall~~ **must** be of the smooth-nosed type without interior or exterior threads, ~~shall~~ **will** not be of the mixing type, and ~~shall~~ **will** not have a screen, aerator, or other such appurtenance. (3-24-22)( )

10. **Facility Potable Water Supply.** The facility water supply service line and the plant finished water sample tap ~~shall~~ **must** be supplied from a source of finished water at a point where all chemicals have been thoroughly mixed, and the required disinfectant contact time, if applicable, has been achieved. There ~~shall~~ **may** be no cross connections between the facility water supply service line and any piping, troughs, tanks, or other treatment units containing wastewater, treatment chemicals, raw or partially treated water. (3-24-22)( )

11. **Meters.** All water supplies ~~shall~~ **must** have an acceptable means of measuring the flow from each source, the wash water, the recycled water, any blended water of different quality, and the finished water. (3-24-22)( )

12. **Operation and Maintenance Manual.** A new or updated operation and maintenance manual that addresses all ~~water system~~ **PWS** facilities ~~shall~~ **must** be submitted to the Department for review and approval prior to start-up of the new or materially modified ~~public water system~~ **PWS** unless the same system components are already covered in an existing operation and maintenance manual. For existing ~~systems~~ **PWSs** with continual operational problems as determined by the Department, the Department may require that an operation and maintenance manual be submitted to the Department for review and approval. The operator ~~shall~~ **will** ensure that the ~~system~~ **PWS** is operated in accordance with the approved operation and maintenance manual. (3-24-22)( )

13. **Start-Up Training.** Provisions ~~shall~~ **must** be made for operator instruction at the start-up of a new plant or pumping station. (3-24-22)( )

14. **Safety.** Consideration ~~shall~~ **must** be given to the protection of maintenance personnel and visitors from typical and foreseeable hazards in accordance with the engineering standards of care. The design ~~shall~~ **must** comply with all applicable safety codes and regulations that may include the Uniform Building Code, International Fire Code, National Fire Protection Association Standards, and state and federal OSHA standards. Items to be considered include, but are not limited to, noise arresters, noise protection, confined space entry, protective equipment and clothing, gas masks, safety showers and eye washes, handrails and guards, warning signs, smoke detectors, toxic gas detectors and fire extinguishers. (3-24-22)( )

15. **Security.** Appropriate design measures to help ensure the security of ~~water system~~ **PWS** facilities ~~shall~~ **must** be incorporated. Such measures, at a minimum, ~~shall~~ **will** include means to lock all exterior doorways, windows, gates and other entrances to source, treatment, pumping stations, and water storage facilities. (3-24-22)( )

16. **Other Regulations.** Consideration must be given to the design requirements of other federal, state, and local regulatory agencies for items such as safety requirements, special designs for the handicapped, plumbing and electrical codes, and construction in the flood plain. ( )

17. **Ground-Water Source Redundancy.** New community ~~water systems~~ **PWSs** served by ~~ground~~ **water** ~~shall~~ **groundwater must** have a minimum of two (2) sources if they are intended to serve more than twenty-five (25) connections or equivalent dwelling units (EDUs). Under normal operating conditions, with any source out of service, the remaining source(s) ~~shall~~ **must** be capable of providing either the peak hour demand of the ~~system~~ **PWS** or a minimum of the maximum day demand plus equalization storage. See Subsection 501.18 for general design and redundancy requirements concerning fire flow capacity. (3-24-22)( )

18. **Redundant Fire Flow Capacity.** ( )

a. ~~Public water systems~~ **PWSs** that provide fire flow ~~shall~~ **must** be designed to provide maximum day

demand plus fire flow. Fire flow requirements and system adequacy ~~shall will~~ be determined by the local fire authority or by a hydraulic analysis by a licensed professional engineer to establish required fire flows in accordance with the International Fire Code as adopted by the State Fire Marshal. Pumping systems supporting fire flow capacity must be designed so that maximum day demand plus fire flow may be provided with any pump out of service. (3-24-22)( )

b. The requirement for redundant pumping capacity specified in Subsection 501.18.a. may be reduced to the extent that fire suppression storage is provided in sufficient quantity to meet some or all of fire flow demands. Where fire suppression storage is not provided, the requirement for fire flow pumping redundancy may be reduced or eliminated if the following conditions are met: ( )

i. The local fire authority justifies that the fire flow capacity of the ~~system PWS~~ is acceptable and is compatible with the water demand of existing and planned fire-fighting equipment and fire-fighting practices in the area served by the ~~system PWS~~. (3-24-22)( )

ii. In a manner appropriate to the ~~system PWS~~ type and situation, notification is provided to customers that describes the design of the ~~system's PWS's~~ fire-fighting capability and explains how it differs from the requirements of Subsection 501.18.a. (3-24-22)( )

19. **Pilot Studies.** Unless otherwise approved by the Department ~~based on documentation provided by the design engineer~~, pilot studies are required for treatment processes other than chlorine disinfection or point of use installations. Pilot studies may be performed in the field using the proposed source water or in conjunction with bench scale testing in the lab using the proposed source water. The ~~system shall PWS must~~ obtain the Department's approval of a pilot study plan before the pilot study is implemented. A pilot study ~~shall will~~ be conducted for a period that ~~shall be is~~ determined by the design engineer and approved by the Department. A final pilot study report with results ~~shall must~~ be submitted to the Department for review and approval. Upon completion of the pilot study, final approval of equipment and treatment processes is subject to the applicable requirements of Sections 500 through 552. (3-24-22)( )

a. ~~Pilot Study Plan.~~ A pilot study plan ~~shall must~~ include the following and any other items required by the Department: (3-24-22)( )

i. ~~Introduction and Background.~~ The plan ~~shall discuss g~~ General information about the project including the existing system, the reason for conducting the pilot study, and anticipated results of a successful pilot study. (3-24-22)( )

ii. ~~Alternative Processes.~~ Provide a ~~brief~~ description of alternative processes that ~~could may~~ be used if the proposed process is shown to be ineffective from the study. (3-24-22)( )

iii. ~~Procedures and Methods.~~ The ~~procedures and methods section shall discuss~~ Discussion of how the pilot study will be conducted, the time frame of the study, source water quality, how source water may be altered to mimic various source water quality conditions, and the water quality parameters that are monitored and evaluated to determine if the treatment process was effective. (3-24-22)( )

b. ~~Pilot Study Report.~~ The pilot study report ~~shall must~~ include the following and any other items required by the Department: (3-24-22)( )

i. Introduction and Background. ( )

ii. ~~Results.~~ A discussion of the overall pilot study progress, including any issues or problems and a general discussion of results of the study and what the results indicate. This discussion ~~should will~~ determine parameters necessary for full scale implementation. (3-24-22)( )

iii. ~~Conclusions.~~ Conclusions and recommendation to proceed with the treatment process if the results of the study proved successful. (3-24-22)( )

c. Additional specific pilot study requirements in Sections 500 through 552 ~~shall must~~ be included in



pilot study plans and reports. (3-24-22)( )

d. ~~Engineer's Seal Required.~~ Pilot study plans and pilot study reports submitted to the Department ~~shall~~ **must** bear the imprint of an Idaho licensed professional engineer's seal that is both signed and dated by the engineer. (3-24-22)( )

**502. FACILITY AND DESIGN STANDARDS- FACILITY PLANS.**

See the definition of Facility Plan in Section 003. (3-24-22)( )

**01. Facility Plans Required.** ~~A The owner of all new public drinking water systems PWSs, and existing public drinking water systems PWSs undergoing material modification or expansion, are required to have a current facility plan that shall address~~ **es** all applicable issues specifically required in Sections 500 through 552 ~~of these rules including, but not limited to, hydraulic capacity, treatment capacity, standby power, redundancy, fire flows, project financing, and operation and maintenance considerations sufficiently to determine the effects of the project on the overall infrastructure.~~ Facility plans must address the entire potential service area of the project. Facility plans may not be required for simple water main extension projects as detailed in Subsections 502.01.a. and 502.01.b. (3-24-22)( )

a. ~~Department reviewed simple water main extension projects.~~ A facility plan is not required if the Department is provided documentation supporting the ability of the purveyor to provide service for the simple water main extension without adding system components designed to control quantity or pressure to the ~~system~~ **PWS** and while continuing to provide the pressure and quantity requirements of Subsection 552.01. Documentation may be in the form of: (3-24-22)( )

i. Hydraulic modeling; ( )

ii. Usage data and flow calculations; ( )

iii. Declining balance reports that demonstrate the ~~system~~ **PWS** has the capacity to supply the service area of the system served by the extension; or (3-24-22)( )

iv. Other documentation acceptable to the Department. ( )

b. ~~Qualified Licensed Professional Engineer (QLPE) reviewed Simple Water Main Extension Projects.~~ A Department-approved facility plan is not required to be in place prior to the **Qualified Licensed Professional Engineer (QLPE)** approving a simple water main extension pursuant to Subsection 504.03.b., provided that the service area of the system served by the extension is in compliance with the facility and design standards in Sections 500 through 552 ~~of these rules~~. If the Department has not approved a facility plan for the ~~system~~ **PWS** which includes the proposed simple water main extension, then the ~~system~~ **PWS** purveyor or the QLPE ~~shall~~ **must** provide with the transmittal letter documentation supporting the ability of the purveyor to provide service for the simple water main extension without adding system components designed to control quantity or pressure to the ~~system~~ **PWS** and while continuing to provide the pressure and quantity requirements of Subsection 552.01. The purveyor ~~shall~~ **must** provide this documentation to the QLPE as necessary. Documentation may be in the form of: (3-24-22)( )

i. Hydraulic modeling; ( )

ii. Usage data and flow calculations; ( )

iii. Declining balance reports that demonstrate the ~~system~~ **PWS** has the capacity to supply the service area of the system served by the extension; or (3-24-22)( )

iv. Other documentation acceptable to the Department. ( )

**02. Submittal to the Department.** When required, facility plans ~~shall~~ **must** be submitted to the Department for review and approval prior to the submission of plans and specifications for a project related to the facility plan ~~unless otherwise approved by the Department.~~ (3-24-22)( )

**03. Engineer's Seal Required.** Facility plans submitted to the Department ~~shall~~ must bear the imprint of an Idaho licensed professional engineer's seal that is both signed and dated by the engineer. (3-24-22)(    )

**04. Facility Plan Contents.** The facility plan ~~shall~~ must include basic information, criteria and assumptions, ~~and hydraulic capacity, treatment capacity, standby power, redundancy, fire flows, project financing, operation and maintenance considerations,~~ alternative solutions with preliminary layouts, and cost estimates as applicable. The facility plan is intended to address system wide growth, to identify system deficiencies, and to lay out a plan for system upgrades and expansion. If specific items listed in Subsections 502.04.a.i. through 502.04.a.viii. or Subsections 502.04.b.i. through 502.04.b.vii. are not applicable to a particular facility plan, then the submitting engineer must state this in the facility plan and state the reason why the requirement is not applicable. (3-24-22)(    )

**a. ~~New public water system facility plan.~~** The minimum requirements for a facility plan for a new ~~public water system~~ PWS are listed in Subsections 502.04.a.i. through 502.04.a.viii. ~~If specific items listed in Subsections 502.04.a.i. through 502.04.a.viii. are not applicable to a particular system, then the submitting engineer shall state this in the facility plan and state the reason why the requirement is not applicable. The facility plan must also include sufficient detail to support applicable requirements of Sections 501 through 552.~~ but it must include: (3-24-22)(    )

- i. ~~Location.~~ A general description and location of the ~~system~~ PWS. (3-24-22)(    )
- ii. ~~Population.~~ The estimated design population of the ~~system~~ PWS including the number of connections and the number of EDUs proposed. (3-24-22)(    )
- iii. ~~Sources of Water.~~ Adequacy, quality, and availability of sources of water for potable use and a description of the non-potable irrigation system. (3-24-22)(    )
- iv. ~~Treatment.~~ Identify and describe any anticipated treatment. (3-24-22)(    )
- v. ~~Water Quantity.~~ Design data covering water quantity for domestic, irrigation, fire fighting, commercial, or industrial water uses, including peak hour, maximum day, and average day demands. (3-24-22)(    )
- vi. ~~Storage.~~ Include the size and location of any anticipated storage structures. (3-24-22)(    )
- vii. ~~Operating Pressure.~~ Pressure ranges for all flow conditions prescribed by these rules. (3-24-22)(    )
- viii. ~~Sewage.~~ Describe the ~~sewage wastewater~~ collection system and sewage wastewater treatment works, with reference to their relationship to existing or proposed water works structures which may affect the operation of the water supply system, or which may affect the quality of the supply. (3-24-22)(    )

**b. ~~Existing public water system facility plan.~~** The minimum requirements for a facility plan for an existing ~~public water system~~ PWS must include Subsections 502.04.b.i. through 502.04.b.vii. as well as Subsections 502.04.a.i. through 502.04.a.viii. ~~If specific items listed in Subsections 502.04.b.i. through 502.04.b.vii. or Subsections 502.04.a.i. through 502.04.a.viii. are not applicable to a particular facility plan, then the submitting engineer shall state this in the facility plan and state the reason why the requirement is not applicable. The facility plan must also include sufficient detail to support applicable requirements of Sections 501 through 552.~~ (3-24-22)(    )

- i. ~~Hydraulic analysis.~~ A computer ized hydraulic analysis of the hydraulics model of the distribution system ~~if requested~~ based on flow demand and pressure requirements is required unless otherwise approved by the Department; any ~~analysis~~ hydraulic model of an existing distribution system ~~shall~~ must be properly calibrated. The type or sophistication of ~~analysis shall~~ hydraulic model will be dependent on the type of ~~system~~ PWS. (3-24-22)(    )
- ii. Identify and evaluate problems related to the ~~drinking water system~~ PWS. (3-24-22)(    )

- iii. Describe financing methods. ( )
- iv. Set forth anticipated charges for users. ( )
- v. Review organizational and staffing requirements. ( )
- vi. Offer a project(s) recommendation for client consideration. ( )
- vii. Outline official actions and procedures to implement the project. ( )

**c. Public Water System Facility Plan funded by the State Revolving Fund.** If the project is funded by the state revolving fund or a state grant, the facility plan must meet the requirements of Subsections 502.04.a. and 502.04.b., and other requirements that may also apply. See IDAPA 58.01.2012, “Rules for Administration of Wastewater and Drinking Water Loan Program Funds,” and IDAPA 58.01.22, “Rules for Administration of Planning Grants for Public Drinking Water and Wastewater Facilities.” (3-24-22)( )

**d. Facility Plan Guidance.** A checklist, which can be used as guidance, can be found on the DEQ Department website at <http://www.deq.idaho.gov>. The guidance document is for Department grant and loan projects, but may be used in part or in whole as a guide to assist in the development of any facility plan. (3-24-22)( )

**503. FACILITY AND DESIGN STANDARDS- PRELIMINARY ENGINEERING REPORTS.**

See the definition of Preliminary Engineering Report (PER) in Section 003. Preliminary engineering reports PERs are required for all new water systems PWSs or material modifications to existing water systems PWSs that require plan and specification review and approval pursuant to Subsection 504.03. The preliminary engineering PER must report shall be in conformance with the approved facility plan or shall must describe any modifications to the facility plan. Preliminary engineering reports PERs must be completed for all major water system PWS projects including, but not limited to, source, pump station, pressure control, storage, and treatment projects. Preliminary engineering reports PERs are not required for simple water main extensions that are approved in accordance with Subsections 502.01.a. or 502.01.b. (3-24-22)( )

**01. Submittal to Reviewing Authority.** Preliminary engineering reports shall PERs must be submitted to the Department for review and must be approved by the Department approval prior to the submission of plans and specifications. The Department may allow well construction plans and specifications to be submitted concurrently with a preliminary engineering report PER for these projects. (3-24-22)( )

**02. Seal Required.** Preliminary engineering reports PERs submitted to the Department shall must bear the imprint of an Idaho licensed professional engineer's seal that is both signed and dated by the engineer. The Department will accept the seal and signature of an Idaho licensed professional geologist on preliminary reports for well source, spring source, or infiltration gallery site reports, and for well construction. (3-24-22)( )

**03. Preliminary Engineering Report PER Contents.** The preliminary engineering report PER must include sufficient detail to demonstrate that the proposed project meets applicable criteria. The items included in Subsections 503.03.a. through 503.03.e., and all applicable issues and items specifically required in Sections 500 through 552, shall must be addressed in detail or justification must be provided for any proposed deviations where specifically allowed. As required, a preliminary engineering report shall PER must also identify and evaluate drinking water related problems, assemble basic information, present criteria and assumptions, examine alternative solutions with preliminary layouts and cost estimates, offer a conclusion with a proposed project, and outline official actions and procedures to implement the project. If specific items in Subsections 503.03.a. through 503.03.e. are not applicable to a particular design, then the designer shall must state this in the preliminary engineering report PER and state the reason why it is not applicable. Items adequately addressed in the facility plan under which the project is being designed may be addressed by reference for purposes of the preliminary engineering report PER. (3-24-22)( )

**a.** All preliminary engineering reports shall PERs must include items in Subsection 503.03.a. and the applicable items from Subsections 503.03.b. through 503.03.e. (3-24-22)( )

- i. ~~General information.~~The ~~preliminary engineering report~~ general information ~~shall~~ **must** include, but is not limited to: (3-24-22)( )
- (1) ~~Project description.~~A detailed description of the proposed project; (3-24-22)( )
  - (2) ~~Site selection.~~A general description of the location of the project and justification of the site selection; (3-24-22)( )
  - (3) ~~Access and utilities.~~A general discussion of adequacy of local roadways and availability of power or other utilities; (3-24-22)( )
  - (4) ~~Surrounding land use.~~A general discussion of surrounding land use, including any potential sources of contamination; and (3-24-22)( )
  - (5) ~~Security.~~A general discussion of planned security features such as fencing, lighting, alarm systems, etc. (3-24-22)( )
- ii. ~~Coordination with facility plan.~~The ~~preliminary engineering report shall~~The **PER must** discuss or reference items provided in the Department-approved facility plan. These items include, but are not limited to: (3-24-22)( )
- (1) ~~Existing System.~~A general description of the existing ~~system~~ **PWS** and how the project fits into the overall system and facility plan; (3-24-22)( )
  - (2) ~~Size.~~The estimated ~~system~~ **PWS** size based on number of persons, number of connections, or number of EDUs served or impacted by the project; (3-24-22)( )
  - (3) ~~Water Quantity.~~Design data for domestic, irrigation, fire fighting, commercial and industrial water uses, including peak hour, maximum day, and average day demands; (3-24-22)( )
  - (4) ~~Storage.~~How the project will affect various storage requirements. See definition of Components of Finished Water Storage in Section 003; (3-24-22)( )
  - (5) ~~Operating Pressure.~~Pressure ranges for all flow conditions prescribed by these rules; (3-24-22)( )
  - (6) ~~Hydraulic Analysis.~~A computer ~~analysis model~~ of the hydraulics of the distribution system ~~if requested based on flow demands and pressure requirements is required unless otherwise approved~~ by the Department; any ~~analysis hydraulic model~~ of an existing distribution system ~~shall must~~ be properly calibrated. The type and sophistication of ~~analysis shall hydraulic model will~~ be dependent on the type of ~~system~~ **PWS**; (3-24-22)( )
  - (7) ~~Sources of Water.~~A general discussion of the adequacy, quality and availability of source of water. A ~~water system~~ **PWS** that is to be served by a separate non-potable irrigation system must provide documentation to demonstrate the actual availability of water in sufficient quantity to ensure that the irrigation system will not compete with or in any way diminish the source of water for the potable water system; (3-24-22)( )
  - (8) ~~Sewage.~~Describe the ~~sewage wastewater~~ collection system and ~~sewage wastewater~~ treatment works, with special reference to their relationship to existing or proposed water works structures which may affect the operation of the water supply system, or which may affect the quality of the supply; (3-24-22)( )
  - (9) ~~Treatment wastes.~~Assesses and characterize all anticipated ~~treatment~~ waste discharges generated by the project and any activities that ~~could may~~ impact the water supply. The location of each waste handling area or discharge point ~~shall must~~ be shown on a scale map; (3-24-22)( )
  - (10) ~~Financing methods.~~Provide brief discussion of financing options investigated or planned; and (3-24-22)( )

- (11) ~~Flooding.~~ Discuss mechanisms for protection of the ~~system~~ PWS from flooding. (3-24-22)( )
- iii. ~~Code provisions.~~ The preliminary engineering report shall ~~i~~ include a summary of applicable codes and standards that apply to the proposed project. (3-24-22)( )
- iv. ~~Cost estimate.~~ The preliminary engineering report shall ~~p~~ Provide, as applicable, estimated construction costs for public works projects or projects funded through public monies. (3-24-22)( )
- v. ~~Construction schedule.~~ The preliminary engineering report shall ~~i~~ include the proposed construction schedule. (3-24-22)( )
- vi. ~~Potential sources of contamination.~~ Identify sources of contamination and describe how the drinking water sources will be protected. (3-24-22)( )
- vii. ~~Soils and ground water levels.~~ Generally discuss soil, ground-water conditions, and potential building foundation problems, including a description of: (3-24-22)( )
- (1) The character of the soil through which water mains are to be laid; ( )
- (2) Characteristics of the soil, water table, and geological substrate that may affect the design and construction of the foundations of proposed structures; and ( )
- (3) The approximate elevation of ground-water in relation to subsurface structures. (3-24-22)( )
- b. ~~Drinking water wells and spring construction projects.~~ In addition to items listed in Subsection 503.03.a., a preliminary engineering report PER for source water construction projects ~~shall~~ using wells or springs must include all items listed in Subsection 503.03.b., applicable items in Sections 510 through 514, and Sections 500 to 552 ~~should~~ are to be evaluated for their relevance to the project. (3-24-22)( )
- i. ~~Anticipated geology and hydrogeology.~~ Include geological data and existing well logs. (3-24-22)( )
- ii. ~~Drilling methodology.~~ Describe the anticipated drilling method and well construction. (3-24-22)( )
- iii. ~~Water quality.~~ Anticipated potability and water quality including monitoring results required for new sources by these rules. (3-24-22)( )
- iv. ~~Water rights.~~ Provide the appropriate documentation for the water rights for the drinking water source. (3-24-22)( )
- v. Dimensions of the well lot and location of source. Include geographical coordinates of the source location. ( )
- vi. ~~Evaluation of surface water influence.~~ For all new ground-water sources, including but not limited to wells, springs, and infiltration galleries, ~~systems shall~~ PWSs must supply information as required by the Department for the Department to determine if these sources are under the direct influence of surface water. The determination of direct influence may be based on site-specific measurements of water quality, documentation of well construction characteristics and geology with field evaluation, a combination of water quality and documentation, or other information required by the Department. (3-24-22)( )
- vii. Provide a site evaluation report as required by Section 510 for wells and 514 for springs. ( )
- c. ~~Well and pump house construction projects.~~ In addition to items listed in Subsection 503.03.a., preliminary engineering reports PERs for well and pump house construction projects ~~shall~~ must include all items listed in Subsection 503.03.c., applicable items in Sections 511, 541, 547, and Sections 500 to 552 ~~should~~ are to be

- evaluated for their relevance to the project. (3-24-22)( )
- i. ~~Well house.~~ Include information on the anticipated construction and well house equipment such as heating, ventilation, interior lighting, and drain(s). (3-24-22)( )
  - ii. ~~Water Level.~~ Provide a brief description of the means for measuring the water level in the well. (3-24-22)( )
  - iii. ~~Well pump.~~ Include information on the proposed or planned pump, including the pump curve. (3-24-22)( )
  - iv. ~~Controls.~~ Describe the equipment and controls for the well and pump house. This includes but is not limited to system control and data acquisition, variable frequency drive, and other manual or automated controls within the well house. (3-24-22)( )
  - v. Piping and appurtenances including but not limited to sample taps, discharge piping, flow meters, check valves, and pressure gauges. Describe the receiving system for the pump to waste volume of water including an evaluation of the capacity of the receiving system and, if applicable, provide documentation that the system owner will accept the estimated volume of water and any limitations the owner places upon that acceptance. ( )
  - vi. ~~Well vent.~~ Describe the well vent if applicable. (3-24-22)( )
  - vii. ~~Casings and well caps.~~ Describe the anticipated casing and well cap type and materials. (3-24-22)( )
  - viii. ~~Pitless adapters and units.~~ Describe the anticipated pitless adapter for the well. (3-24-22)( )
  - ix. ~~Soil and water conditions.~~ Describe the soil and ground-water conditions that may affect the design and construction of proposed structure(s). (3-24-22)( )
- d.** ~~Reservoir and storage construction projects.~~ In addition to items listed in Subsection 503.03.a., ~~preliminary engineering reports~~ PERs for reservoir and storage construction projects ~~shall~~ must include all items listed in Subsection 503.03.d., applicable items in Sections 544, and Sections 500 to 552 ~~should~~ are to be evaluated for their relevance to the project. (3-24-22)( )
- i. ~~Sizing.~~ Describe the required storage capacity and the related components of finished water storage. (3-24-22)( )
  - ii. ~~Overflow.~~ Describe the anticipated overflow system for the water storage project and where the overflow will discharge. (3-24-22)( )
  - iii. ~~Vents.~~ Describe the venting system used for the water storage project if applicable. (3-24-22)( )
  - iv. ~~Construction materials.~~ Describe the construction materials used for the storage project. (3-24-22)( )
  - v. ~~Protection from freezing.~~ Describe the protection of storage facility features from freezing especially riser pipes, overflows, and vents. (3-24-22)( )
  - vi. ~~Grading.~~ Describe any site work or grading that may be necessary. (3-24-22)( )
  - vii. ~~Corrosion prevention.~~ Provide a discussion on methods to prevent corrosion such as coatings, cathodic protection, corrosion resistant materials, and encasement. (3-24-22)( )
  - viii. ~~Disinfection.~~ Describe the methods to be used to disinfect the storage facility and the testing to check for proper disinfection. (3-24-22)( )



e. Surface water and ground-water under the direct influence of surface water (GWUDI) treatment construction projects. In addition to items listed in Subsection 503.03.a., ~~preliminary engineering reports~~ PERs for surface water treatment and GWUDI construction projects ~~shall must~~ include all items listed in Sections 503.03.e., applicable items in Sections 515 through 540, and Sections 500 to 552 ~~should are to~~ be evaluated for their relevance to the project. (3-24-22)( )

i. ~~Intake structures.~~ Describe the intake structures that will be used. (3-24-22)( )

ii. ~~Off-stream raw water storage.~~ If applicable, describe the proposed off-stream raw water storage. (3-24-22)( )

iii. ~~Treatment methods.~~ Describe the treatment methods and potential alternatives including the removal of pathogens, disinfection, enhanced disinfection, water quality monitoring, and redundancy provisions. (3-24-22)( )

iv. ~~Treatment Wastes.~~ Characterize the various wastes from the water treatment processes and, if applicable, their volumes, constituents, and proposed treatment and disposal. If discharging to a sanitary sewage system, verify that the system is capable of handling the flow to the treatment works and that the treatment works is capable and willing to accept the additional loading. (3-24-22)( )

v. ~~Monitoring Results.~~ Provide applicable raw water monitoring results as required by these rules including anticipated turbidity ranges, microbiological, physical, chemical, radiological, and other parameters as determined by the Department. (3-24-22)( )

vi. ~~Potential contamination.~~ An assessment of the degree of hazard to the supply by agricultural, industrial, recreational, and residential activities in the watershed, and by accidental spillage of materials that may be toxic, harmful or detrimental to treatment processes. (3-24-22)( )

vii. ~~Waste discharge.~~ Assess all waste discharges and activities that ~~could may~~ impact the water supply. The location of each waste discharge ~~shall must~~ be shown on a scale map. (3-24-22)( )

viii. ~~Hydrological and historical stream flow data.~~ Provide any available records and data regarding hydrological and historical stream flow. (3-24-22)( )

ix. ~~Water rights and water quantity.~~ A copy of the appropriate permit(s) or application(s) from the Idaho Department of Water Resources regarding authorization to appropriate public waters of the state of Idaho in sufficient quantity to meet the design requirements of the ~~system~~ PWS. (3-24-22)( )

x. ~~Turbidity.~~ Anticipated turbidity range. (3-24-22)( )

xi. ~~Watershed.~~ Assessment of the degree of control the ~~water system~~ PWS will be able to exercise over the watershed. (3-24-22)( )

xii. Projected future uses of impoundments or reservoirs within the watershed. (3-24-22)( )

xiii. ~~Water quality.~~ Submit source water sample data over a sufficient period of time to assess the microbiological, physical, chemical and radiological characteristics of the water. (3-24-22)( )

xiv. ~~Stream characteristics.~~ Provide consideration of currents, wind and ice conditions, and the effect of confluent streams. (3-24-22)( )

#### 504. ~~FACILITY AND DESIGN STANDARDS: REVIEW OF PLANS AND SPECIFICATIONS.~~

The Department will apply the facility and design standards set forth in these rules ~~shall be applied.~~ Subsections 500 through 548, in the review of plans and specifications for ~~public water system~~ PWS facilities. If design issues are not addressed by the facility and design standards set out in these rules, then guidance documents, some of which are listed in Subsection 002.02, ~~shall must~~ be used as guidance in the design and review of plans and specifications for

public drinking water facilities. See also Section 013.

(3-24-22)( )

**01. Ownership.** ~~The PWS owner must provide~~ documentation of the ownership and responsibility for operating the proposed ~~system shall be made available~~ PWS to the Department prior to or concurrent with the submittal of plans and specifications as required in Subsection 504.03. The documentation must show organization and financial arrangements adequate to assure construction, operation and maintenance of the ~~system~~ PWS according to these rules. Documentation ~~shall~~ also includes the name of the ~~water system~~ PWS, the name, address, and phone number of the supplier of water, the ~~system~~ PWS size, and the name, address, and phone number of the ~~system~~ PWS operator. This information may be presented in a will serve letter as required in Subsection 504.02.

(3-24-22)( )

**02. Connection to an Existing System Will Serve Letter.** If the proposed project is to be connected to an existing ~~public water system~~ PWS, a letter from the purveyor must be submitted to the Department stating that the purveyor will be able to provide services to the proposed project and that purveyor has reviewed and accepted the proposed construction plans and specifications that are subject to Department review and approval. The Department may require documentation supporting the ability of the purveyor to provide service to the new system without diminishing quality of service to existing customers, as described in Subsection 502.01.a and 502.01.b. This letter must be submitted prior to or concurrent with the submittal of plans and specifications as required in Subsection 504.03.

(3-24-22)( )

**03. Plans and Specifications Required.**

( )

**a.** Prior to construction of new ~~public drinking water systems, new drinking water systems designed to serve fifteen (15) or more service connections,~~ PWSs or material modifications of existing ~~public water systems~~ PWSs, the owner must submit plans and specifications ~~must be submitted~~ to the Department for review and approval. Construction ~~should~~ must commence as soon as practical after approval, and if construction is not completed within twelve (12) months of the Department's final approval, an extension or re-approval must be obtained from the Department. The Department may require re-submittal of all or part of the plans and specifications prior to issuing an extension or re-approving the plans and specifications.

(3-24-22)( )

**b.** Plans and specifications for simple water main extensions ~~shall do~~ not require pre-construction approval by the Department when such extensions will be owned and operated by a city, county, quasi-municipal corporation or regulated public utility, provided that such plans and specifications are reviewed and approved by a QLPE who was not involved in the preparation of the plans and specifications being reviewed to verify compliance with the requirements of these rules prior to initiation of construction. Any plans and specifications approved pursuant to Subsection 504.03.b. ~~shall~~ must be transmitted to the Department at the time construction is authorized and ~~shall will~~ be marked or stamped as "Approved for Construction." Along with the plans and specifications, the transmittal must include the items listed in Subsections 504.03.b.i. through 504.03.b.vii. The plans and specifications must bear the imprint of an Idaho licensed professional engineer's seal that is both signed and dated by the engineer, and the approval or transmittal letter must be sealed, signed, and dated by the QLPE that is approving the plans and specifications.

(3-24-22)( )

**i.** A statement that the author of the transmittal letter is the QLPE representing the city, county, quasi-municipal corporation or regulated public entity.

( )

**ii.** A statement that the extension project complies with the current facility plan or ~~preliminary engineering report~~ PER, or a statement that the ~~water system~~ PWS has adequate capacity. Please see Subsection 502.01.b. for further information.

(3-24-22)( )

**iii.** A statement from the city, county, quasi-municipal corporation or regulated public entity or its authorized agent that the ~~water system~~ PWS purveyor will serve the project.

(3-24-22)( )

**iv.** A statement from the city, county, quasi-municipal corporation or regulated public entity or its authorized agent that the ~~water system~~ PWS purveyor will own and operate the project after construction is complete.

(3-24-22)( )

**v.** A statement by the QLPE that the plans and specifications are approved for construction. ( )



- vi. A statement by the QLPE that the plans and specifications comply with the facility standards within these rules. ( )
- vii. A statement recommending whether sanitary restrictions can be released or ~~should~~ will remain in force. (3-24-22)( )
- c. Subsections 504.03.c.i. through 504.03.c.vi. outline the projects which QLPEs may approve and which QLPEs may not approve. ( )
- i. A QLPE may approve plans and specifications for simple water main extensions that are able to connect to an existing ~~water system~~ PWS owned by a city, county, quasi-municipal corporation, or regulated public utility at the time the extension is approved for construction by the QLPE. (3-24-22)( )
- ii. A QLPE may approve plans for simple water main extensions which will connect to an existing ~~water system~~ PWS, but are unable to connect to the ~~system~~ PWS at the time the extension is approved for construction by the QLPE, provided sanitary restrictions remain in force for the proposed extension. (3-24-22)( )
- iii. A QLPE may not approve plans and specifications which include mechanical systems such as booster stations. ( )
- iv. A QLPE may not approve plans and specifications for projects which the QLPE was the design engineer or otherwise involved in the design. ( )
- v. A QLPE employed by a city, county, quasi-municipal corporation, or regulated public utility may approve a design that was prepared by a subordinate engineer or an engineer from a separate design group within the city, county, quasi-municipal corporation, or regulated public utility. ( )
- vi. A QLPE who is not employed by a city, county, quasi-municipal corporation, or regulated public utility, but is retained by a city, county, quasi-municipal corporation, or regulated public utility for the purpose of plan and specification review may not approve projects designed by the company with which the QLPE is employed. ( )
- d. At the discretion of the city, county, quasi-municipal corporation or regulated public utility, the plans addressed by Subsection 504.03.b. may be referred to the Department for review and approval prior to initiation of construction. ( )
04. ~~Criteria for Review~~ Criteria. The Department ~~shall~~ will review plans and specifications to determine compliance with these rules and engineering standards of care. If the plans and specifications comply with these rules and engineering standards of care, the Department ~~shall~~ will not substitute its judgment for that of the owner's design engineer concerning the manner of compliance with the rule. (3-24-22)( )
05. ~~Schedule for Review~~ Schedule. The Department ~~shall~~ will review plans and specifications ~~and endeavor to resolve design issues within forty two (42) calendar days of submittal such that approval can be granted. If the Department and applicant have not resolved design issues within forty two (42) calendar days or at any time thereafter, the applicant may file a written demand to the Department for a decision. Upon receipt of such written demand, the Department shall deliver a written decision to the applicant within no more than seven (7) calendar days explaining any reasons for disapproval. The Department shall maintain records of all written demands for decision made pursuant to Subsection 504.05 with such records including the final decision rendered and the timeliness thereof in accordance with timelines set forth in Section 39-118, Idaho Code.~~ (3-24-22)( )
06. **Engineer's Seal Required.** Plans and specifications submitted to the Department ~~shall~~ must bear the imprint of an Idaho licensed professional engineer's seal; except that the Department will accept the seal of an Idaho licensed professional geologist on the following: (3-24-22)( )
- a. Well source, spring source, or infiltration gallery site evaluation reports, as specified in Subsections 510 and 514. ( )

b. Plans and specifications for well construction and results of field inspection and testing, as specified in Section 510. ( )

**07. Contents of Plans and Specifications.** Plans and specifications ~~shall~~ must, where pertinent, provide the following: (3-24-22)( )

- a. General layout, including: ( )
  - i. Suitable title. ( )
  - ii. Name of municipality or other entity or person responsible for the water supply. ( )
  - iii. Area or institution to be served. ( )
  - iv. Scale of drawings. ( )
  - v. North arrow. ( )
  - vi. Datum used. ( )
  - vii. General boundaries of municipality or area to be served. ( )
  - viii. Date, name, and address of the designing engineer. ( )
  - ix. Legible prints suitable for reproduction. ( )
  - x. Location and size of existing water mains, if applicable. ( )
  - xi. For ~~systems~~ PWSs undergoing material modification, location and nature of existing water works structures and appurtenances affecting the proposed improvements. (3-24-22)( )
- b. Detailed plans, including: ( )
  - i. Stream crossings, providing profiles with elevations of the stream bed and the estimated normal and extreme high and, where appropriate, low water levels. ( )
  - ii. Location and size of the property to be used for the development with respect to known references such as roads, streams, section lines, or streets. ( )
  - iii. Topography and arrangement of present or planned wells or structures. ( )
  - iv. Elevations of the one hundred (100) year flood level in relation to the floor of structures, upper termination of protective casings, and grade surrounding facilities. ( )
  - v. Details of well construction, including diameter and depth of drill holes, casing and liner diameters and depths, grouting depths, elevations, and designation of geological formations, water levels and other data as specified in Section 510. ( )
  - vi. Location of all known existing and potential sources of pollution within five hundred (500) feet of water sources or underground treated storage facilities. ( )
  - vii. Size, length, and materials of proposed water mains. ( )
  - viii. Location of existing or proposed streets; water sources, ponds, lakes, and drains; storm sanitary, combined and house sewers; septic tanks, disposal fields and cesspools. ( )

- ix. Schematic flow diagrams and hydraulic profiles showing the flow through various plant units. ( )
- x. Piping in sufficient detail to show flow through the plant including waste lines. ( )
- xi. Locations of all chemical storage areas, chemical feeding equipment, and points of chemical application. ( )
- xii. All appurtenances, specific structures, equipment, water treatment plant waste disposal units and points of discharge having any relationship to the plans for water mains or water works structures. ( )
- xiii. Locations of sanitary or other facilities, such as lavatories, showers, toilets, and lockers, when applicable or required by the Department. ( )
- xiv. Locations, dimensions, and elevations of all proposed plant facilities. ( )
- xv. Locations of all sampling taps owned by the ~~water system~~ PWS. (3-24-22)( )
- xvi. Adequate description of any significant features not otherwise covered by the specifications that may impact public safety or welfare. ( )
- c. Complete, detailed technical specifications ~~shall~~ must be supplied for the proposed project, including: (3-24-22)( )
  - i. A program for keeping existing water works facilities in operation during construction of additional facilities so as to minimize interruption of service. ( )
  - ii. Laboratory facilities and equipment. ( )
  - iii. Description of chemical feeding equipment. ( )
  - iv. Procedures for flushing, disinfection and testing, as needed, prior to placing the project in service. All wells, pipes, tanks, and equipment which can convey or store potable water ~~shall~~ must be disinfected in accordance with AWWA Standards, incorporated into these rules at Subsection 002.01. Plans or specifications ~~shall~~ must outline the procedure and include the disinfectant dosage, contact time, and method of testing the results of this procedure. (3-24-22)( )
  - v. Materials or proprietary equipment for sanitary or other facilities, including any necessary backflow or back-siphonage protection. ( )
- d. Complete design criteria, as set forth in these rules. ( )
- e. The Department may require additional information which is not part of the construction drawings, including, but not limited to, head loss calculations, proprietary technical data, and copies of contracts. ( )

**08. Notification of Material Deviations.** As set forth in Subsection 504.03, during construction or modification, the ~~reviewing authority~~ Department must be notified of any material deviation from the approved plans. The reviewing authority's prior written approval is required before any material deviation is allowed. (3-24-22)( )

**09. Record Plans and Specifications Required.** ( )

a. ~~Within thirty (30) calendar days of the completion of construction of facilities for which plans are required to be reviewed pursuant to Subsection 504.03, record plans and specifications based on information provided by the construction contractor and field observations made by the engineer or the engineer's designee depicting the actual construction of facilities performed, must be submitted to the Department by the engineer representing the city, county, quasi-municipal corporation or regulated public utility that owns the project, or by the~~

~~design engineer or owner-designated substitute engineer if the facilities will not be owned and operated by a city, county, quasi municipal corporation or regulated public utility. Such submittal by the professional engineer must confirm material compliance with the approved plans and specifications or disclose any material deviations therefrom. If the construction does not materially deviate from the approved plans and specifications, the owner may have a statement to that effect prepared by an Idaho licensed professional engineer and filed with the Department in lieu of submitting a complete and accurate set of record drawings. Must be submitted to the Department by the design engineer as specified in Section 39-118(3), Idaho Code.~~ (3-24-22)( )

b. Record plans and specifications, or a statement submitted in lieu of record plans and specifications, must bear the imprint of an Idaho licensed professional engineer's seal that is both signed and dated by the engineer. ( )

c. The Department will accept the seal and signature of an Idaho licensed professional geologist on record plans and specifications, or a statement bearing the seal and signature of an Idaho licensed professional geologist in lieu of record plans and specifications, for record plans and specifications for well construction and results of field inspection and testing, as specified in Section 510. ( )

10. **Exception.** The Department may waive the plan and specification approval required of any particular facility or category of facilities when doing so will have no significant impact on public health or the environment. (3-24-22)( )

11. ~~Requirement to Have Approved Plans and Specifications and Department Approval Letter~~ **On-Site During Construction.** It is the responsibility of the owner to maintain one (1) copy of the approved plans and specifications and the approval letter from the reviewing authority on-site during construction at all times. (3-24-22)( )

12. **Construction.** Except as provided in Subsection 504.03.b., no construction ~~shall~~ **will** commence until all of the necessary approvals have been received from the Department. The owner ~~shall~~ **must** provide for the inspection of the construction of a ~~public drinking water system~~ **PWS** facility by an Idaho licensed professional engineer to the extent required to confirm material compliance with the approved plans and to produce accurate record documents as required by Subsection 504.09. (3-24-22)( )

**505. -- 509. (RESERVED)**

**510. ~~FACILITY AND DESIGN STANDARDS: SITING AND CONSTRUCTION OF WELLS.~~**

Written approval by the Department is required before water from any new or reconstructed well may be served to the public. Any supplier of water for a ~~public water system~~ **PWS** served by one (1) or more wells ~~shall~~ **must** ensure that the following requirements are met: (3-24-22)( )

01. **Site Approval.** Prior to drilling, the site of a ~~public water system~~ **PWS** well must be approved in writing by the Department. ~~The Department shall require the supplier of water to submit a~~ **A** well site evaluation report **must be submitted prior to or concurrent with the PER for the well.** ~~that~~ **The well site evaluation must** take into account the proposed size, depth, and location of the well. The evaluation may include, but is not limited to the following types of information: (3-24-22)( )

- a. An evaluation of the quality of anticipated ground-water. (3-24-22)( )
- b. Identification of the known aquifers and the extent of each aquifer, based on the stratigraphy, sedimentation, and geologic structure beneath the proposed well site. ( )
- c. An estimate of hydrologic and geologic properties of each aquifer and confining layers. ( )
- d. Prediction of the sources of water to be extracted by the well and the drawdown of existing wells, springs, and surface water bodies that may be caused by pumping the proposed well. This prediction may be based on analytical or numerical models as determined by the Idaho Department of Water Resources permitting process. ( )

e. Demonstration of the extent of the capture zone of the well, based on the well’s design discharge and on aquifer geology, using estimates of hydraulic conductivity and storativity. ( )

f. Description of potential sources of contamination including, but not limited to, sewers and sewage treatment/disposal facilities, highways, railroads, landfills, outcroppings of consolidated water-bearing formations, chemical facilities, waste disposal wells, and agricultural uses within five hundred (500) feet of the well site. (3-24-22)( )

**02. Location.** ~~Each well shall be staked by the design engineer or licensed professional geologist prior to drilling, be located a minimum of fifty (50) feet from the nearest property line, be located a minimum of fifty (50) feet from any potential source of contamination, and be no closer to specified sources of contamination than set forth in Subsection 900.01.~~ In vulnerable settings, the Department may require engineering or hydrologic analysis to determine if the required setback distance is adequate to prevent contamination. Each well must be staked by the design engineer or licensed professional geologist prior to drilling and meet the following minimum distances:

<b>Minimum Distances from a Public Water System Well</b>	
<u>Frost free hydrant</u>	<u>5 feet</u>
<u>Property line</u>	<u>50 feet</u>
<u>Gravity wastewater line</u>	<u>50 feet</u>
<u>Any potential source of contamination</u>	<u>50 feet</u>
<u>Pressure wastewater line</u>	<u>100 feet</u>
<u>Class A Municipal Reclaimed Wastewater Pressure distribution line</u>	<u>50 feet</u>
<u>Individual home septic tank</u>	<u>100 feet</u>
<u>Individual home disposal field</u>	<u>100 feet</u>
<u>Individual home seepage pit</u>	<u>100 feet</u>
<u>Privies</u>	<u>100 feet</u>
<u>Livestock</u>	<u>50 feet</u>
<u>Drainfield - standard subsurface disposal module</u>	<u>100 feet</u>
<u>Absorption module - large soil absorption system</u>	<u>150 - 300 feet, see IDAPA 58.01.03</u>
<u>Canals, streams, ditches, lakes, ponds and tanks used to store non-potable substances</u>	<u>50 feet</u>

<b>Minimum Distances from a Public Water System Well</b>	
<u>Storm water facilities disposing storm water originating off the well lot</u>	50 feet
<u>Municipal or industrial wastewater treatment plant</u>	500 feet
<u>Reclamation and reuse of municipal and industrial wastewater sites</u>	See IDAPA 58.01.17
<u>Biosolids application site</u>	1,000 feet

(3-24-22)( )

**03. Construction Standards.** In addition to meeting the requirements of these rules, all wells ~~shall~~ **must** be constructed in accordance with IDAPA 37.03.09, “Well Construction Standards Rules,” and related rules and laws administered by the Idaho Department of Water Resources. All wells ~~shall~~ **must** comply with the drilling permit requirements of Section 42-235, Idaho Code. (3-24-22)( )

**a.** ~~Casing that meets the requirements set forth in Subsection 900.02 (Table 2). The use of plastic well casing for public water system wells may be considered on a case-by-case basis. Plastic casing shall meet or exceed ASTM Standard F480-02 and ANSI/NSF Standard 61.~~ Casing for steel pipe must meet the following requirements:

<b>STEEL PIPE</b>					
<b>SIZE</b>	<b>DIAMETER (inches)</b>		<b>THICKNESS (inches)</b>	<b>WEIGHT PER FOOT (pounds)</b>	
	<b>External</b>	<b>Internal</b>		<b>Plain Ends (calculated)</b>	<b>With Threads and Couplings (nominal)</b>
6 (ld)	6.625	6.065	0.280	18.97	19.18
8	8.625	7.981	0.322	28.55	29.35
10	10.750	10.020	0.365	40.48	41.85
12	12.750	12.000	0.375	49.56	51.15
14 (od)	14.000	13.250	0.375	54.57	57.00
16	16.000	15.250	0.375	62.58	
18	18.000	17.250	0.375	70.59	
20	20.000	19.250	0.500	78.60	
22	22.000	21.000	0.500	114.81	
24	24.000	23.000	0.500	125.49	
26	26.000	25.000	0.500	136.17	
28	28.000	27.000	0.500	146.85	

STEEL PIPE					
SIZE	DIAMETER (inches)		THICKNESS (inches)	WEIGHT PER FOOT (pounds)	
	External	Internal		Plain Ends (calculated)	With Threads and Couplings (nominal)
30	30.000	29.000	0.500	157.53	
32	32.000	31.000	0.500	168.21	
34	34.000	33.000	0.500	178.89	
36	36.000	35.000	0.500	189.57	

\* id = inside diameter  
od = outside diameter

(3-24-22)( )

**b.** The use of plastic well casing for PWS wells may be considered on a case-by-case basis. Plastic casing must meet or exceed ASTM Standard F480, current edition, and ANSI/NSF Standard 61. Plastic casing must also meet the following requirements: ( )

i. Have a minimum wall thickness equivalent to standard dimension *ratio* 21. However, diameters of 8 inches or greater or deep wells may require greater thickness to meet collapse strength requirements; ( )

ii. Must not be used at sites where permeation by hydrocarbons or degradation may occur; ( )

iii. Must be assembled using coupling or solvent welded joints. All coupling and solvents must meet ANSI/NSF Standard 14, ASTM F480, or similar requirements; and ( )

iv. Must not be driven. ( )

~~bc.~~ **bc.** ~~Public water system~~ PWS wells ~~shall~~ **must** have no less than fifty-eight (58) feet of annular seal of not less than one and one-half (1 ½) inches thickness as measured from land surface to the bottom of the seal unless: (3-24-22)( )

i. It can be demonstrated to the Department's satisfaction that there is a confining layer at lesser depth that is capable of preventing unwanted water from reaching the intake zone of the well; or ( )

ii. The best and most practical aquifer at a particular site is less than fifty-eight (58) feet deep; or; ( )

iii. The Department specifies a different annular seal depth based on local hydrologic conditions. ( )

~~iv. More stringent standards are required by applicable Rules of the Idaho Water Resources Board, referenced in Subsection 002.02.~~ (3-24-22)

**ed.** Specifications ~~shall~~ **must** include allowable tolerances for plumbness and alignment in accordance with AWWA Standards, incorporated by reference into these rules at Subsection 002.01, or as otherwise approved by the Department. If the well fails to meet these requirements, it may be accepted by the Department if it does not interfere with the installation or operation of the pump or uniform placement of grout. (3-24-22)( )

**de.** Geological data ~~shall~~ **must** be collected at each pronounced change in formation and shall be recorded in the driller's log. Supplemental data includes, but is not limited to, accurate geographical location such as



latitude and longitude or GIS coordinates, and other information on accurate records of drillhole diameters and depths, assembled order of size and length of casing, screens and liners, grouting depths, formations penetrated, and water levels. (3-24-22)( )

ef. The owner of each well ~~shall~~ must retain all records pertaining to each well until the well has been properly abandoned. (3-24-22)( )

fg. Wells with intake screens ~~shall~~ must: (3-24-22)( )

i. Be constructed of materials resistant to damage by chemical action of ground-water or cleaning operations. (3-24-22)( )

ii. Have openings based on sieve analysis of formation, ~~or~~ gravel pack materials, or both. (3-24-22)( )

iii. Have sufficient length and diameter to provide adequate specific capacity and aperture entrance velocity not to exceed point ~~three~~ one (0.31) feet per second, or as otherwise approved by the Department. (3-24-22)( )

iv. Be installed so that the pumping water level remains above the screen under all operating conditions, or otherwise approved by the Department. Where a bottom plate or sump is utilized, it ~~shall~~ must be of the same material as the screen, or as otherwise approved by the Department. Where a washdown assembly, tailpipe or sump is used below the screen, it may be made of a different material than the screen. (3-24-22)( )

gh. Permanent well casing ~~shall~~ must be surrounded by a minimum of one and one-half (1 ½) inches of grout to the depth required by Subsection 510.03.b. ~~of these rules~~, or by the Rules of the ~~Idaho Water Resources Board~~ referenced in Subsection 002.02 Idaho Department of Water Resources, whichever is greater. All casing identified in plans and specifications as temporary casing ~~shall~~ must be removed prior to well completion. (3-24-22)( )

i. Neat cement grout consisting of cement that conforms to AWWA Standard A-100, and water, with not more than six (6) gallons of water per ninety-four (94) pounds of cement, ~~shall~~ must be used for one and one-half (1 ½) inch ~~openings~~ annular space. Additives may be used to ~~enhance effectiveness~~ increase fluidity and are subject to approval by the ~~reviewing authority~~ Department and the Idaho Department of Water Resources on a case-by-case basis. (3-24-22)( )

ii. Bentonite grout ~~shall~~ must have a solids content not less than twenty-five (25) percent by weight when mixed with water and be specifically manufactured for use in sealing of well casing. Bentonite grout shall not contain weighting agents to increase solids content. Bentonite grout ~~shall~~ must not be used above the water table. All bentonite grout ~~shall~~ must be installed by positive displacement from the bottom up through a tremmie or float shoe. (3-24-22)( )

iii. Where a dry annular space is to be sealed, a minimum of two (2) inches on all sides of the casing ~~shall~~ will be required to place bentonite to depths not greater than one hundred (100) feet, using #8 mesh granular bentonite. All dry pour granular bentonite ~~shall~~ must be tagged at appropriate intervals to verify placement. If a bridge occurs, a tremmie pipe ~~shall~~ must be washed or jetted through the bridge to allow for pumping of grout. Bentonite chips ~~shall~~ must be of sufficient size to accommodate proper placement for the existing subsurface conditions. (3-24-22)( )

iv. Dry granular bentonite used in wells where a dry annular space is to be sealed with depths greater than one hundred (100) feet ~~shall~~ will require an annulus of at least three (3) inches on all sides of the casing, or as approved by the ~~reviewing authority~~ Department and the Idaho Department of Water Resources. If a bridge occurs, a tremmie pipe ~~shall~~ must be washed or jetted through the bridge to allow for pumping of grout. Bentonite chips ~~shall~~ must be of sufficient size to accommodate proper placement for the existing subsurface conditions. (3-24-22)( )

v. All chip bentonite seals installed through water ~~shall~~ must only be used in annular spaces of at least four (4) inches on all sides of the casing. If a bridge occurs, a tremmie pipe ~~shall~~ must be washed or jetted through the



bridge to allow for pumping of grout. Bentonite chips ~~shall~~ **must** be of sufficient size to accommodate proper placement for the existing subsurface conditions. Chip bentonite seals installed through water ~~shall~~ **must** be: (3-24-22)( )

- (1) Installed in accordance with manufacturer's specifications; or ( )
- (2) Installed by pouring chips over a one-quarter (1/4) inch mesh screen for three-eighths (3/8) inch chips to remove fines to prevent bridging at the water table; or ( )
- (3) Installed using coated pellets to retard hydration if approved by the ~~reviewing authority~~ **Department** and the Idaho Department of Water Resources. (3-24-22)( )

vi. Concrete may be approved on a case-by-case basis by the ~~reviewing authority~~ **Department** and the Idaho Department of Water Resources. Upon such approval, the approved method ~~shall~~ **must** use a six (6) sack minus one-half (1/2) inch Portland cement concrete and ~~shall~~ **must** be installed by positive displacement from the bottom up through a tremmie pipe. (3-24-22)( )

**04. Disinfection.** All tools, bits, pipe, and other materials to be inserted in the borehole ~~shall~~ **must** be cleaned and disinfected in accordance with the Well Construction Standards and permitting requirements of the ~~Idaho Water Resources Board, referenced in Subsection 002.02~~ **Idaho Department of Water Resources**. This applies to new well construction and repair of existing wells. (3-24-22)( )

**05. Well Completion Report-Required.** Upon completion of a well, and prior to its use as a drinking water source, the following information and data must be submitted by the ~~water system~~ **PWS** to the Department. The well completion report must be submitted to the Department prior to or concurrent with the submittal of the preliminary engineering report for well house construction/modification. The well completion report ~~shall~~ **must** bear the imprint of an Idaho licensed professional engineer's or an Idaho licensed professional geologist's seal that is both signed and dated by the engineer or geologist: (3-24-22)( )

- a. A copy of all well logs; ( )
- b. Results of test pumping, as specified in Subsection 510.06; ( )
- c. As constructed plans showing at least the following: ( )
  - i. Annular seal, including depth and sealant material used and method of application; ( )
  - ii. Casing perforations, results of sieve analysis used in designing screens installed in sand or gravel aquifers, gravel packs; and ( )
  - iii. Recommended pump location. ( )
- d. Other information as may be specified by the Department. ( )
- e. Sampling results for iron, manganese, corrosivity, and other secondary contaminants specified by the Department. Other monitoring requirements are specified in Subsections 510.05.e.i. through 510.05.e.iii. ( )
  - i. Community ~~S~~systems ~~must submit R~~ **must submit r** results of analysis for total coliform, inorganic chemical contaminants, organic chemicals, and radionuclide contaminants set forth in Subsections 050.01, 050.02, 050.05, 100.01, 100.03, 100.04, 100.05, and 100.06, unless analysis is waived pursuant to Subsection 100.07. (3-24-22)( )
  - ii. Non-transient Non-community ~~S~~systems ~~must submit r~~ **must submit r** Results of analysis for total coliform and inorganic and organic chemical contaminants listed in Subsections 050.01, 050.02, 100.01, 100.03, 100.04, unless analysis is waived pursuant to Subsection 100.07. (3-24-22)( )

iii. Transient Non-community ~~S~~systems ~~must submit -R~~results of a total coliform, nitrite, and nitrate analysis listed in Subsections 050.01, 100.01 and 100.03. (3-24-22)( )

**06. Test Pumping.** Upon completion of a ground-water source, test pumping ~~shall~~ **must** be conducted in accordance with the following procedures to meet the specified requirements: (3-24-22)( )

a. The well ~~shall~~ **must** be test pumped at the desired yield (design capacity) of the well for at least twenty-four (24) consecutive hours after the drawdown trend has stabilized, as determined by the supervising engineer or geologist. Alternatively, the well may be pumped at a rate of one hundred fifty percent (150%) of the desired yield for at least six (6) continuous hours after the drawdown trend has stabilized, as determined by the supervising engineer or geologist. The field pumping equipment must be capable of maintaining a constant rate of discharge during the test. Discharge water must be piped an adequate distance to prevent recharge of the well during the test. If the well fails the test protocol, design of the ~~water system shall~~ **PWS must** be re-evaluated and submitted to the Department for approval. (3-24-22)( )

b. Upon completion of well development, the well ~~shall~~ **must** be tested for sand production. Fifteen (15) minutes after the start of the test pumping (at or above the design production rate), the sand content of a new well ~~shall~~ **may** not be more than five (5) parts per million. Sand production ~~shall~~ **must** be measured by a centrifugal sand sampler or other means acceptable to the Department. If sand production exceeds five (5) ppm, the well ~~shall~~ **must** be screened gravel packed, or re-developed. (3-24-22)( )

c. The following data ~~shall~~ **must** be provided: (3-24-22)( )

i. Static water level ~~in the well prior to test pumping and stabilized drawdown;~~ (3-24-22)( )

ii. Well yield in gpm and duration of the pump test, including a discussion of any discrepancy between the desired yield and the yield observed during the test; ( )

iii. Water level in the well recorded at regular intervals during pumping; ( )

iv. Profile of water level recovery from the pumping level projected to the original static water level. ( )

v. Depth at which the test pump was positioned in the well; ( )

vi. Test pump capacity and head characteristics; ( )

vii. Sand production data. ( )

viii. Results of analysis based on the drawdown and recovery test pertaining to aquifer properties, long term ~~sustained~~ yield, and boundary conditions affecting drawdown. (3-24-22)( )

d. The Department may allow the use of other pump test protocols that are generally accepted by engineering firms with specialized experience in well construction, by the well drilling industry, or as described in national standards (such as ANSI/AWWA A100-97), as long as the minimum data specified in Subsection 510.06.c. are provided. The Department welcomes more extensive data about the well, such as step-drawdown evaluations used in determining well capacity for test pumping purposes, zone of influence calculations, and any other information that may be of use in source protection activities or in routine ~~water system~~ **PWS** operations. (3-24-22)( )

e. Where aquifer yield, sustainability, or water quality are questionable, the Department, at its discretion, may require additional site-specific investigations that ~~could~~ include test well construction, long-term pumping tests, or other means to demonstrate that the aquifer yield is sufficient to meet the long-term water requirements of the project. (3-24-22)( )

**07. Conversion of Non-Public Water System Wells for Public Water System Use.** Any existing well constructed for use other than as a ~~public water system~~ **PWS** source may be considered for use as a ~~public water system~~ **PWS** source on a case-by-case basis. The owner of such a well must demonstrate to the Department's

satisfaction that the well site conforms to the requirements of Subsections 510.01, 510.02, and Section 512, the well is constructed in a manner that is protective of public health, and that both the quantity and quality of water produced by the well meet ~~public water system~~ PWS standards set forth in these rules. (3-24-22)( )

08. **Observation Monitoring Wells.** If monitoring (observation) wells are used and are intended to remain in service after completion of the water supply well, the observation wells ~~shall~~ must be constructed in accordance with the requirements for permanent wells and be protected at the upper terminal to preclude entrance of foreign materials in accordance with the "Well Construction Standard Rules," IDAPA 37.03.09. ~~See Rules of the Idaho Water Resources Board referenced in Subsection 002.02.~~ (3-24-22)( )

09. **Well Abandonment.** ~~Any water supply well that will no longer be used must be abandoned by sealing the borehole carefully to prevent pollution of the ground water, eliminate any physical hazard, conserve aquifer yield, maintain confined head conditions in artesian wells, and prevent mixing of waters from different aquifers. The objective of proper well abandonment procedures is to restore, as far as possible, the original hydrogeologic conditions. The services of a licensed well driller are required. Instructions for abandoning various types of wells may be obtained from the Idaho Department of Water Resources. See Rules of the Idaho Water Resources Board referenced in Subsection 002.02.~~ Well decommissioning (abandonment) must be performed in accordance with Department of Water Resources requirements set forth in IDAPA 37.03.09, "Well Construction Standard Rules." (3-24-22)( )

**511. ~~FACILITY AND DESIGN STANDARDS: WELL PUMPS, DISCHARGE PIPING, AND APPURTENANCES.~~**

01. **Sample Tap Required.** A sample tap suitable for collecting bacteriological samples ~~shall~~ must be provided as required by Subsection 501.09 on the discharge piping from every well at a point where pressure is maintained but prior to any treatment. ~~This sample tap shall be of the smooth nosed type without interior or exterior threads, shall not be of the mixing or petcock type, and shall not have a screen, aerator, or other such appurtenance. The sample tap for collecting bacteriological samples may be used for other sampling purposes.~~ In addition, threaded hose bib taps may also be used for collecting samples, other than bacteriological samples, if equipped with an appropriate backflow prevention device as may be necessary to protect the ~~public water system~~ PWS from contamination. (3-24-22)( )

02. **Discharge Piping.** The discharge line ~~shall~~ must be equipped with the necessary valves and appurtenances to allow a well to be pumped to waste at the ~~design capacity of the~~ scour velocity of the well column via an approved air gap of no less than two (2) pipe diameters, unless otherwise approved by the Department, through an approved non-corrodible screen or equivalent at a location prior to the first service connection, and ~~shall~~ must meet the following requirements: (3-24-22)( )

- a. Be designed to minimize friction loss. ( )
- b. Have control valves and appurtenances located above the pump house floor when an above-ground discharge is provided. ( )
- c. Be protected against contamination. ( )
- d. Vertical turbine pumps ~~shall~~ must be equipped with an air release-vacuum relief valve, or equivalent, located upstream from the check valve, with exhaust/relief piping terminating in a down-turned position at least eighteen (18) inches above the floor and covered with a twenty-four (24) mesh corrosion resistant screen. (3-24-22)( )
- e. Have all exposed piping, valves and appurtenances protected against physical damage and freezing. ( )
- f. Be properly anchored to prevent movement, and protected against surge or water hammer. ( )
- g. The pump to waste discharge piping ~~shall~~ must be valved to ensure that other ~~system~~ PWS components that ~~could~~ may be negatively affected by the quality of the discharged water are not pressurized by the

water that is being pumped to waste.

(3-24-22)( )

h. Where two (2) or more wells are connected to a common well house, the discharge piping ~~shall~~ **must** be designed to ensure that each well can be pumped to waste independently without affecting the ability of the other well or wells to pressurize the ~~system~~ **PWS**.

(3-24-22)( )

03. **Pressure Gauge Required.** A pressure gauge ~~shall~~ **must** be provided on ~~all~~ discharge piping.

(3-24-22)( )

04. **Flow Meter and Check Valve.** Unless otherwise approved by the Department ~~based on documentation provided by the design engineer~~, an instantaneous and totalizing flow meter equipped with nonvolatile memory ~~shall~~ **must** be installed on the discharge line of each well in accordance with the manufacturer's specifications. Meters installed on ~~systems~~ **PWSs** with variable frequency drives ~~shall~~ **must** be capable of accurately reading the full range of flow rates. An accessible check valve, which is not located in the pump column, ~~shall~~ **must** be installed in the discharge line of each well between the pump and the shut-off valve. Additional check valves ~~shall~~ **must** be located in the pump column as necessary.

(3-24-22)( )

05. **Well Vent.** All wells ~~shall~~ **must** be vented, unless it can be demonstrated that the drawdown under maximum pumping conditions will not exceed ten (10) feet.

(3-24-22)( )

a. For wells not in a pump house, the open end of the vent ~~shall~~ **must** be screened with a twenty-four (24) mesh or similar non-corrodible screen and terminated downward at least eighteen (18) inches above the final ground surface.

(3-24-22)( )

b. If the well is in a pump house, the open end of the vent ~~shall~~ **must** be screened with a twenty-four (24) mesh or similar non-corrodible screen and must terminate **downward** at least twelve (12) inches above the pump house floor.

(3-24-22)( )

c. Artesian wells equipped with pumps may need venting or an air valve as determined by the Department.

( )

06. **Casings and Sanitary Well Caps.** The following requirements apply to well casings and sanitary caps:

( )

a. Casings ~~shall~~ **must** extend at least eighteen (18) inches above the final ground surface. If the well is located within a pump house, casings ~~shall~~ **must** extend least twelve (12) inches above the pump house floor. For a well located in an area subject to flooding, the Department may require an extension of the casing above the one hundred (100) year or highest known flood level, whichever is higher.

(3-24-22)( )

b. Wells ~~shall~~ **must** be cased and provided with an approved cap in such a manner that ~~surface water contamination~~ cannot enter the well.

(3-24-22)( )

c. For community ~~water systems~~ **PWSs**, a permanent means for measuring water level within the casing must be provided. For other ~~water systems~~ **PWSs**, a temporary means to measure water levels ~~should~~ **may** be made available. All equipment required for conducting water level measurements ~~shall~~ **must** be purchased and made available to the ~~water system~~ **PWS** operator at the time the well is put into service. Where pneumatic or electronic water level measuring equipment is used, it ~~shall~~ **must** be made using corrosion resistant materials attached firmly to the drop pipe or pump column and in such a manner as to prevent entrance of foreign materials.

(3-24-22)( )

07. **Well Houses.** For regulatory purposes, a well house is considered a pump house as defined in Section 003. Well houses must meet the requirements for pump houses as set forth in Section 541. All above ground discharge piping ~~shall~~ **must** be contained in a well house or otherwise protected from freezing.

(3-24-22)( )

08. **Pitless Adapters and Units.** ~~Pitless adapters or pitless units:~~

(3-24-22)( )

a. ~~Shall be of the type m~~Marked approved by the National Sanitation Foundation or Pitless Adapter Division of the Water Systems Council.

(3-24-22)( )

- b. ~~Shall be d~~Designed, constructed and installed to be watertight including the cap, cover, casing extension and other attachments. (3-24-22)( )
- c. ~~Shall be f~~Field tested for leaks before being put into service. The procedure outlined in “Manual of Individual and Non-Public Water Supply Systems,” referenced in Subsection 002.02, or other procedure approved by the Department ~~shall~~ **Must** be followed. (3-24-22)( )
- d. ~~Pitless adapters with a two (2) inch or smaller discharge line shall be p~~**If the discharge line is two (2) inches or smaller, be p**rovided with a swing joint outside the pitless adapter unit to reduce strain, deformation, and possible leakage of the pitless seal caused by settling soils in the trench. The orientation of swing joints ~~shall~~ **must** be such that any settling that occurs will tighten the threads. The hole in the casing ~~shall~~ **must** be cut with a saw rather than a torch with an opening large enough to allow seating of gaskets. (3-24-22)( )
- e. ~~Shall be p~~**P**rovided with a contamination-proof entrance connection for electrical cable. (3-24-22)( )
- f. ~~In the case of p~~**P**itless adapters: (3-24-22)( )
- i. Threaded adapters ~~shall~~ **must** be installed by drilling a hole not more than one quarter (1/4) inch larger than the outer diameter of the pitless shank. No torch-cut holes ~~shall~~ **will** be accepted. The orientation of swing joints ~~shall~~ **must** be such that any settling that occurs will tighten the threads. (3-24-22)( )
- ii. The only field welding permitted will be that needed to connect a pitless adapter to the casing. ( )
- g. ~~In the case of p~~**P**itless units **must be**: (3-24-22)( )
- i. ~~Shall be s~~**S**hop-fabricated from the point of connection with the well casing to the unit cap or cover. (3-24-22)( )
- ii. ~~Shall be e~~**C**onstructed of materials and weight at least equivalent to and compatible with the well casing. (3-24-22)( )
- iii. ~~Shall be t~~**T**hreaded or welded to the well casing. Threaded units ~~shall~~ **must** be installed by drilling a hole not more than one quarter (1/4) inch larger than the outer diameter of the pitless shank. No torch-cut holes ~~shall~~ **will** be accepted. If the connection to the casing is by field weld, the shop-assembled unit must be designed specifically for field welding to the casing. (3-24-22)( )
- iv. ~~Shall t~~**T**erminate at least eighteen (18) inches above final ground elevation ~~or three (3) feet above the 100 year flood level or the highest known flood elevation, whichever is higher, or as otherwise approved by the Department. For a well located in an area subject to flooding, the Department may require an extension of the casing above the one hundred (100) year or highest known flood level, whichever is higher.~~ (3-24-22)( )
- v. ~~Shall be p~~**P**rovided with access to disinfect the well. (3-24-22)( )
- vi. ~~Shall have f~~**F**ield connection ~~ed~~ to the lateral discharge from the pitless unit of threaded, flanged, or mechanical joint connection. (3-24-22)( )
- h. After installation of a pitless adapter or unit, the disturbed well seal ~~shall~~ **must** be repaired or replaced to meet original seal specifications unless otherwise ~~proposed by the design engineer and~~ approved by the Department. The engineering proposal ~~shall~~ **must** ensure that the material surrounding the final seal is moisture controlled and compacted such that it equals or exceeds the characteristics of the native soil prior to being disturbed. (3-24-22)( )
09. **Wells Not Allowed in Pits.** Wells ~~shall~~ **must** not be located in pits. Exceptions to this requirement will be granted by the Department if the well was constructed prior to November 5, 1964, and the installation is

constructed or reconstructed in accordance with the requirements of the Department to provide watertight construction of pit walls and floors, floor drains and acceptable pit covers. (3-24-22)( )

10. **Discharge Pumps.** Discharge pumps ~~shall be~~ are subject to the following requirements: (3-24-22)( )

a. Line shaft pumps ~~shall~~ must: (3-24-22)( )

i. Have the casing firmly connected to the pump structure or have the casing inserted into a recess extending at least one-half (1/2) inch into the pump base. ( )

ii. Have the pump foundation and base designed to prevent water from coming into contact with the joint. ( )

iii. Use lubricants that meet ANSI/NSF Standard 61. ( )

b. ~~When a s~~ Submersible pumps is used: (3-24-22)( )

i. The top of the casing ~~shall~~ must be effectively sealed against the entrance of water under all conditions of vibration or movement of conductors or cables. (3-24-22)( )

ii. The electrical cable ~~shall~~ must be firmly attached to the drop pipe at twenty-one (21) foot intervals or less, or at each coupling or joint. (3-24-22)( )

**512. ~~FACILITY AND DESIGN STANDARDS- WELL LOT.~~**

A well lot ~~shall~~ must be provided for wells constructed after November 1, 1977. The well lot ~~shall~~ must be owned in fee simple by the supplier of water or controlled by lease or easement with a term of not less than the useful life of the well and be large enough to provide a minimum distance of fifty (50) feet between the well and the nearest property line. (3-24-22)( )

01. **Use of Chemicals ~~on the Well Lot.~~** No pesticides, herbicides, or fertilizers ~~shall~~ may be applied to a well lot without prior approval from the Department. (3-24-22)( )

02. **Storage of Hazardous Materials ~~on the Well Lot.~~** No pesticides, herbicides, fertilizers, portable containers of petroleum products, or other materials known to be toxic or hazardous ~~shall~~ may be stored on a well lot, except that: (3-24-22)( )

a. An internal combustion engine to drive either a generator for emergency standby power or a pump to provide fire flows, and an associated fuel tank, may be placed on the well lot. ( )

b. A propane or natural gas powered generator is preferable to reduce risk of fuel spillage. ( )

c. If a diesel or gasoline-fueled engine is used, the fuel tank and connecting piping must be approved by the Underwriter's Laboratory, Inc., double-walled, meet the requirements of the local fire jurisdiction, and include both spill prevention and overflow protection features. The tank must be above ground and may be contained within the structural base of the generator unit. A spill containment structure must surround all fuel tanks and be sized to contain at least one hundred ten percent (110%) of the fuel tank volume. The Department may require additional containment capacity in settings where accumulation of snow, ice, or rain water may be expected to diminish the usable capacity of the structure. A licensed ~~water system~~ PWS operator ~~shall~~ must be present during filling of the tank following a period of usage, or during periodic extraction and replacement of outdated fuel. (3-24-22)( )

d. ~~Should~~ If the internal combustion engine ~~be~~ is located within the pump house, the floor of the pump house ~~shall~~ must be constructed so as to contain all petroleum drips and spills so that they will not be able to reach the floor drain(s). Engine exhaust ~~shall~~ must be directly discharged outside the pump house. (3-24-22)( )

e. ~~A spill containment structure shall surround all fuel tanks and be sized to contain at least one hundred ten percent (110%) of the fuel tank volume. The Department may require additional containment capacity in~~



~~settings where accumulation of snow, ice, or rain water could be expected to diminish the usable capacity of the structure.~~ (3-24-22)

**03. Location of Hydrants.** Hydrants of the frost free type shall be placed in the buried piping system at a minimum of five (5) feet away from the well casing to prevent drain water from accumulating and compromising the grout seal surrounding the well casing. (3-24-22)

**043. Parking Lots and Vehicle Storage.** ~~No~~ *is not* public parking or vehicle storage shall be *is not* allowed on the well lot, except that operation/maintenance vehicles may be ~~temporary~~ *temporarily* parked on the well lot during the normal course of business. (3-24-22)(    )

**513. ~~FACILITY AND DESIGN STANDARDS: NUMBER OF GROUND-WATER SOURCES REQUIRED – EXISTING SYSTEMS.~~**

Existing community ~~water systems~~ *PWSs* served by ground-water and intending to serve more than twenty-five (25) connections or equivalent dwelling units are subject to the following requirements for the number of ground-water sources required. (3-24-22)(    )

**01. Existing System with All Sources Constructed Prior to July 1, 1985.** A community ~~water system~~ *PWS* served by ground-water and with all existing sources constructed prior to July 1, 1985 will be required to comply with Subsection 501.17 upon substantially modifying the ~~system PWS~~ after July 2002. (3-24-22)(    )

**02. Existing System with Any Sources Constructed After July 1, 1985.** A community ~~water system~~ *PWS* served by ground-water with any sources constructed after July 1, 1985 is required to comply with Subsection 501.17 when a *material* modification is made to the ~~system PWS which increases the population served or number of service connections, increases the length of transmission and distribution water mains, or increases the peak or average water demand~~ *after May 8, 2009, which triggers the PWS to be classified as substantially modified.* (3-24-22)(    )

**514. ~~FACILITY AND DESIGN STANDARDS: SPRING SOURCES.~~**

Written approval by the Department is required before water from any new or reconstructed spring source may be served to the public. For new spring sources, the Department ~~shall~~ *will* require a site evaluation report containing applicable required information listed in Subsection 510.01. This information includes, but is not limited to, the following: an evaluation of the potability and quality of anticipated spring water; an estimate of hydrologic and geologic properties of the aquifer; and a description of potential sources of contamination within five hundred (500) feet of the spring. Any supplier of water for a ~~public water system~~ *PWS* served by one (1) or more springs ~~shall~~ *must* ensure that the following requirements are met: (3-24-22)(    )

**01. Protection of the Spring.** Springs ~~shall~~ *must* be housed in a permanent structure and protected from contamination including the entry of surface water, animals, and dust. (3-24-22)(    )

**02. Spring Box or Combined Spring Box/Finished Water Storage Design.** To facilitate efficient design and review of spring box or combined spring box/finished water storage designs, these site-specific designs ~~should~~ *must* be coordinated in advance with the Department. Specific issues to be addressed are: (3-24-22)(    )

a. The inlet ~~shall~~ *must* be screened as determined by the Department and located above the floor of the collection chamber. (3-24-22)(    )

b. Unless otherwise approved by the Department ~~based on documentation provided by the design engineer~~, the spring box or combined spring box/finished water storage tank ~~shall~~ *must* meet the applicable design requirements of Section 544 - Facility and Design Standards: General Design of Finished Water Storage. (3-24-22)(    )

**03. Sample Tap ~~Required~~.** A sample tap suitable for collecting bacteriological samples ~~shall~~ *must* be provided *as required by Subsection 501.09.* ~~This sample tap shall be of the smooth-nosed type without interior or exterior threads, shall not be of the mixing or petcock type, and shall not have a screen, aerator, or other such appurtenance. The sample tap for collecting bacteriological samples may be used for other sampling purposes.~~ In addition, threaded hose bib taps may also be used for collecting samples, other than bacteriological samples, if

equipped with an appropriate backflow prevention device as may be necessary to protect the ~~public water system~~ PWS from contamination. (3-24-22)( )

**04. Flow Measurement.** A flow meter or other flow measuring device ~~shall~~ must be provided. (3-24-22)( )

**05. Protected Area.** The entire area within a one hundred (100) foot radius of the spring box and collection piping ~~shall~~ must be owned by the supplier of water or controlled by a long term lease, ~~fenced secured~~ to prevent trespass ~~of or~~ livestock and void of buildings, dwellings and any potential sources of contamination. Surface water ~~shall~~ must be diverted from this area. (3-24-22)( )

**515. ~~FACILITY AND DESIGN STANDARDS: SURFACE SOURCES AND GROUND-WATER SOURCES UNDER THE DIRECT INFLUENCE OF SURFACE WATER.~~**

Written approval by the Department is required before water from any new surface source or ground-water source that is under the direct influence of surface water may be served to the public. Infiltration collection lines or galleries are considered ground-water under the direct influence of surface water unless demonstrated otherwise. Infiltration galleries that are not directly influenced by surface water ~~shall~~ must meet the requirements of Section 514. The area around infiltration lines ~~shall~~ must be under the control of the water purveyor for a distance acceptable to the Department. (3-24-22)( )

**01. Intake Structures.** Design of intake structures ~~shall~~ must provide for: (3-24-22)( )

- a. Withdrawal of water from more than one (1) level if quality varies with depth. ( )
- b. Separate facilities for release of less desirable water held in storage. ( )
- c. Where frazil ice may be a problem, holding the velocity of flow into the intake structure to a minimum, generally not to exceed point five (0.5) feet per second. Frazil ice is made up of randomly distributed ice crystals that are formed in flowing water that has cooled below thirty-two (32) degrees Fahrenheit and is prevented from forming into ice sheets by the movement of the water. ( )
- d. Inspection manholes every one thousand (1000) feet for pipe sizes large enough to permit visual inspection. ( )
- e. Cleaning the intake line as needed. ( )
- f. Adequate protection against rupture by dragging anchors, ice, or other hazards. ( )
- g. Ports located above the bottom of the stream, lake or impoundment, but at sufficient depth to be kept submerged at low water levels. ( )
- h. Where shore wells are not provided, a diversion device capable of keeping large quantities of fish or debris from entering an intake structure. ( )
- i. If necessary, provisions ~~shall~~ must be made in the intake structure to control the influx of nuisance aquatic organisms. Specific control methods must be approved by the ~~reviewing authority~~ Department. (3-24-22)( )
- j. When buried surface water collectors are used, sufficient intake opening area must be provided to minimize inlet headloss. Particular attention ~~shall~~ must be given to the selection of backfill material in relation to the collector pipe slot size and gradation of the native material over the collector system. (3-24-22)( )

**02. Raw Water Pumps.** Raw water pumping wells ~~shall~~ must: (3-24-22)( )

a. Have motors and electrical controls located above grade (except for submersible pumps); and protected from flooding as required by the ~~reviewing authority~~ Department. (3-24-22)( )



- b. Be accessible and designed to prevent flotation. ( )
- c. Be equipped with removable or traveling screens before the pump suction well. ( )
- d. Provide for introduction of chlorine or other chemicals in the raw water transmission main if necessary for quality control. ( )
- e. Where practical, have intake valves and provisions for back flushing or cleaning by a mechanical device and testing for leaks. ( )
- f. Have provisions for withstanding surges where necessary. ( )

**03. Off-stream Raw Water Storage.** An off-stream raw water storage reservoir is a facility into which water is pumped during periods of good quality and high stream flow for future release to treatment facilities. These off-stream raw water storage reservoirs ~~shall~~ must be constructed to assure that: (3-24-22)( )

- a. Water quality is protected by controlling runoff into the reservoir. ( )
- b. Dikes are structurally sound and protected against wave action and erosion. ( )
- c. Intake structures and devices meet requirements of Subsection 515.01. ( )
- d. Point of influent flow is separated from the point of withdrawal. ( )
- e. Separate pipes are provided for influent to and effluent from the reservoir. ( )

**04. Reservoirs.** Impoundments and reservoirs ~~shall~~ must provide, where applicable: (3-24-22)( )

- a. Removal of brush and trees to high water elevation. ( )
- b. Protection from floods during construction. (3-24-22)( )
- c. ~~Abandonment of all wells~~ Wells which will be inundated; by the reservoir must be abandoned in accordance with requirements of the Idaho Department of Water Resources. See Rules of the Idaho ~~Water Resources Board~~ Department of Water Resources referenced in Subsection 002.02. (3-24-22)( )

516. -- 517. (RESERVED)

**518. ~~FACILITY AND DESIGN STANDARDS:~~ ADDITIONAL DESIGN CRITERIA FOR SURFACE WATER TREATMENT SOURCES.**

Performance criteria for surface water treatment facilities are ~~specified in National Primary Drinking Water Regulations, as~~ set forth in Sections 300, 301, and 310 ~~of these rules~~. Surface water treatment systems must comply with applicable general design requirements in Section 503. In addition, the following design requirements apply specifically to surface water treatment facilities: (3-24-22)( )

**01. Engineering Design Requirements.** The ~~system shall~~ PWS must ensure that filtration and disinfection facilities for surface water or ground-water under the directly influenced ~~by of~~ surface water ~~sources~~ are designed, constructed and operated in accordance with all applicable engineering practices designated by the Department. The design of the water treatment plant must consider the worst raw water quality conditions that are likely to occur during the life of the facility. (3-24-22)( )

**02. Removal of Pathogens.** Filtration facilities (excluding disinfection) ~~shall~~ must be designed, constructed and operated to achieve at least two (2) log removal of Giardia lamblia cysts, two (2) log removal of Cryptosporidium oocysts, and one (1) log removal of viruses, except as allowed under Subsection 518.09.b. (3-24-22)( )

**03. Disinfection.** Disinfection facilities ~~shall~~ must be designed, constructed and operated so as to

achieve at least point five zero (0.50) log inactivation of Giardia lamblia cysts; and (3-24-22)( )

- a. Two (2) log inactivation of viruses if using conventional and slow sand filtration technology; or ( )
- b. Three (3) log inactivation of viruses if using direct and diatomaceous earth filtration technology; or ( )
- c. Four (4) log inactivation of viruses if using alternate filtration technology. ( )
- d. Four (4) log inactivation of viruses if filtration treatment is not used. ( )

**04. Enhanced Disinfection.** Higher levels of disinfection than specified under Subsection 518.03 may be required by the Department ~~in order~~ to provide adequate protection against Giardia lamblia and viruses. (3-24-22)( )

**05. Filter to Waste.** For plants constructed after December 31, 1992, each filter unit must be capable of filter to waste. For plants constructed prior to December 31, 1992, each filter unit must be capable of filter to waste unless the ~~system~~ PWS demonstrates through continuous turbidity monitoring or other means acceptable to the Department that water quality is not adversely affected following filter backwashing, cleaning or media replacement. (3-24-22)( )

**06. Continuous Turbidity Monitoring.** For conventional, direct, membrane, and diatomaceous earth filtration technology, equipment must be provided to continuously measure the turbidity of each filter unit. ( )

**07. Continuous Monitoring of Disinfectant.** Equipment must be provided and operated for continuous measurement of disinfectant residual prior to entry to the distribution system, unless the ~~system~~ PWS serves fewer than three thousand three hundred (3,300) people. (3-24-22)( )

**08. Continuous Operation Required.** Diatomaceous earth filtration facilities ~~shall~~ **must** include an alternate power source with automatic startup and alarm, or be designed in a manner to ensure continuous operation. (3-24-22)( )

**09. Acceptable Technology.** The purveyor ~~shall~~ **must** select a filtration technology acceptable to the Department. (3-24-22)( )

a. Conventional, direct, ~~membrane~~, slow sand, diatomaceous earth, and membrane filtration technologies are generally acceptable to the Department on a case-by-case basis. (3-24-22)( )

b. Alternate filtration technologies may be acceptable if the purveyor demonstrates all of the following to the satisfaction of the Department: ( )

i. That the filtration technology: ( )

(1) Is certified and listed by the National Sanitation Foundation (NSF) under Standard 53, Drinking Water Treatment Units - Health Effects, as achieving the NSF criteria for cyst reduction; or ( )

(2) Removes at least ninety-nine percent (99%) (two (2) logs) of Cryptosporidium oocysts or surrogate particles and removes or inactivates at least ninety-nine percent (99%) (two (2) logs) of Giardia lamblia cysts or Giardia lamblia cyst surrogate particles in a challenge study acceptable to the Department. ( )

ii. Based on field studies or other means acceptable to the Department, it must be demonstrated that the filtration technology has the following capabilities: ( )

(1) In combination with disinfection treatment, consistently achieves at least ninety-nine percent (99%) (two (2) logs) removal of Cryptosporidium oocysts or surrogate particles and at least ninety-nine and nine tenths

percent (99.9%) (three (3) logs) removal or inactivation of Giardia lamblia cysts and ninety-nine and ninety-nine hundredths percent (99.99%) (four (4) logs) removal or inactivation of viruses; and ( )

(2) Meets the turbidity performance requirements of 40 CFR 141.73 (b). ( )

**10. Pilot Studies.** The ~~system shall~~ **PWS must** conduct pilot studies in accordance with the following requirements and in accordance with Subsection 501.19 for all proposed filtration facilities and structural modifications to existing filtration facilities, unless the Department modifies the requirements in writing: (3-24-22)( )

**a.** The ~~system shall~~ **PWS must** obtain the Department's approval of the pilot study plan before the pilot filter is constructed and before the pilot study is undertaken. ( )

**b.** The design and operation of the pilot study ~~shall~~ **must** be overseen by an Idaho licensed professional engineer. (3-24-22)( )

**c.** The ~~system's~~ **PWS's** pilot study plan ~~shall~~ **must** identify at a minimum: (3-24-22)( )

i. The objectives of the pilot study; ( )

ii. Pilot filter design; ( )

iii. Water quality and operational parameters to monitor; ( )

iv. Amount of data to collect; and ( )

v. Qualifications of the pilot plant operator. ( )

**d.** The ~~system shall~~ **PWS must** ensure that the pilot study is: (3-24-22)( )

i. Conducted to simulate conditions of the proposed full-scale design; ( )

ii. Conducted for at least twelve (12) consecutive months or for a shorter period upon approval by the Department; ( )

iii. Conducted to evaluate the reliability of the treatment system to achieve applicable water quality treatment criteria specified for filtration systems in 40 CFR 141.72 and 40 CFR 141.73; and ( )

iv. Designed and operated in accordance with good engineering practices documented in references acceptable to the Department. ( )

**11. Redundant Disinfection.** Surface water systems constructed after July 1, 1985, are required to install redundant disinfection components or maintain a backup unit on site as required to maintain constant application of disinfectant whenever water is being delivered to the distribution system. ( )

**519. ~~FACILITY AND DESIGN STANDARDS: SURFACE WATER TREATMENT; DESIGN STANDARDS FOR MICROSCREENING.~~**

A microscreen may be used to reduce nuisance organisms and organic loadings. It ~~shall~~ **may** not be used in place of filtration or coagulation in the preparation of water for filtration. (3-24-22)( )

**01. Design Considerations.** The following ~~shall~~ **must** be taken into account during design: (3-24-22)( )

**a.** ~~The n~~ Nature of the suspended matter to be removed. (3-24-22)( )

**b.** ~~The e~~ Corrosiveness of the water. (3-24-22)( )

- c. ~~The~~**E**ffect of chlorination, when required as pre-treatment. (3-24-22)( )
- d. ~~The~~**D**uplication of units for continuous operation during equipment maintenance. (3-24-22)( )
- e. Automated backflushing operation when used in conjunction with microfiltration treatment. ( )
- 02. **Design Requirements.** Design ~~shall~~ **must** provide the following: (3-24-22)( )
  - a. A durable, corrosion-resistant screen. ( )
  - b. A by-pass arrangement. ( )
  - c. Protection against back-siphonage when potable water is used for washing. ( )
  - d. Proper disposal of water used to wash the microscreen. ( )

**520. ~~FACILITY AND DESIGN STANDARDS:~~ SURFACE WATER TREATMENT: CLARIFICATION PROCESSES.**

Treatment facilities designed to include clarification for processing surface water ~~shall~~ **must** meet the following requirements: (3-24-22)( )

**01. Two Units Required.** A minimum of two (2) units ~~for redundancy shall~~ **each must** be provided for flocculation ~~and~~ sedimentation, ~~and solids removal~~ such that plant design capacity can be maintained with any component out of service for maintenance or repairs. Drains and pumps must be sized to allow dewatering in a reasonable period of time. (3-24-22)( )

**02. Parallel or Serial Operation.** The units ~~shall~~ **must** be capable of being operated either in series or parallel where softening is performed. (3-24-22)( )

~~**03. Independent Units.** The units shall be constructed in such a way that each can be taken out of service without disrupting operation, and with drains or pumps sized to allow dewatering in a reasonable period of time.~~ (3-24-22)

~~**043. Manual Start-Up.** The units ~~shall~~ **must** be started manually following shutdown.~~ (3-24-22)( )

~~**054. Pre-Treatment.** Waters exhibiting high turbidity may require pretreatment, usually sedimentation with or without the addition of coagulation chemicals. When presedimentation is provided, the following requirements must be met:~~ ( )

~~a. Incoming water ~~shall~~ **must** be dispersed across the full width of the line of travel as quickly as possible. Short circuiting must be prevented.~~ (3-24-22)( )

~~b. Provisions for bypassing pre-sedimentation basins ~~shall~~ **must** be included.~~ (3-24-22)( )

~~c. The need for redundant pretreatment components ~~shall~~ **must** be evaluated according to the type and necessity of the pretreatment.~~ (3-24-22)( )

~~**065. Rapid Mix.** Unless otherwise approved by the Department ~~based on documentation provided by the design engineer~~, a rapid mix device or chamber is required prior to flocculation, clarification, sedimentation, and settler units. The need for redundant rapid mix components ~~shall~~ **must** be evaluated. Rapid mix ~~shall mean is~~ the rapid dispersion of chemicals throughout the water to be treated, usually by violent agitation. The engineer ~~shall~~ **must** submit the design basis for the velocity gradient (G value) selected, considering the chemicals to be added and water temperature, color and other related water quality parameters. Basins or mixing chambers ~~shall~~ **must** be equipped with devices capable of providing adequate mixing for all treatment flow rates.~~ (3-24-22)( )

**076. Flocculation.** Flocculation ~~shall mean is~~ the gathering together of fine particles in water by gentle mixing after the addition of coagulant chemicals to form larger particles. ~~and must include:~~ (3-24-22)( )

a. Basin inlet and outlet design ~~shall must~~ minimize short-circuiting and destruction of floc. A drain, pumps, or a combination of both drain and pumps ~~shall must~~ be provided to accomplish dewatering and sludge removal. (3-24-22)( )

b. The flow-through velocity ~~shall must~~ not be less than one-half (0.5) nor greater than one and one-half (1.5) feet per minute with a detention time for floc formation of at least thirty (30) minutes unless otherwise approved by the Department. (3-24-22)( )

c. Agitators ~~shall must~~ be driven by variable speed drives. (3-24-22)( )

d. Flocculation and sedimentation basins ~~shall must~~ be as close together as possible. The velocity of flocculated water through pipes or conduits to settling basins ~~shall must~~ be not less than one-half (0.5) nor greater than one and one-half (1.5) feet per second. Allowances must be made to minimize turbulence at bends and changes in direction. (3-24-22)( )

**087. Small Systems May Use Baffling.** Baffling may be used to provide for flocculation in small ~~treatment~~ plants upon approval by the Department. (3-24-22)( )

**098. Sedimentation Units.** The following criteria apply to conventional sedimentation units: ( )

a. A minimum of two (2) hours of settling time ~~shall must~~ be provided following flocculation unless adequate settling in less time can be demonstrated. (3-24-22)( )

b. Inlets ~~shall must~~ be designed to distribute the water equally and at uniform velocities. (3-24-22)( )

c. Outlet weirs or submerged orifices ~~shall must~~ maintain velocities suitable for settling in the basin and minimize short-circuiting. Outlet weirs ~~shall must~~ be designed so that the rate of flow over the outlet weirs or through the submerged orifices ~~shall will~~ not exceed twenty-thousand (20,000) gallons per day per foot of the outlet launder. The entrance velocity through the submerged orifices ~~shall must~~ not exceed one-half (0.5) feet per second. (3-24-22)( )

d. The velocity through settling basins ~~shall must~~ not exceed one-half (0.5) feet per minute. The basins must be designed to minimize short-circuiting. Fixed or adjustable baffles must be provided as necessary to achieve the maximum potential for clarification. (3-24-22)( )

e. When an overflow weir or pipe is provided the overflow ~~shall must~~ discharge by gravity with a free fall at a location where the discharge will be noted. (3-24-22)( )

f. Adequate sludge collection equipment that ensures proper basin coverage ~~shall must~~ be provided and basins must be provided with a means for dewatering. (3-24-22)( )

g. Flushing lines or hydrants ~~shall must~~ be provided and must be equipped with backflow prevention devices acceptable ~~to the Department under Section 543.~~ (3-24-22)( )

h. Sludge removal design ~~shall must~~ provide that sludge pipes are not less than three (3) inches in diameter and arranged so as to facilitate cleaning. Entrance to sludge withdrawal piping ~~shall must~~ be designed to prevent clogging. Provision ~~shall must~~ be made for the operator to observe and sample sludge being withdrawn from the unit. (3-24-22)( )

i. Sludge ~~shall must~~ be disposed of in accordance with applicable regulations, as set forth in Section 540. (3-24-22)( )

**1009. Solids Contact Clarifiers.** Solids contact clarifiers are generally acceptable for combined

softening and clarification where water characteristics, especially temperature, do not fluctuate rapidly, flow rates are uniform and operation is continuous. A minimum of two (2) units are required for surface water treatment as required in Subsection 520.01. ( )

a. Chemicals ~~shall~~ must be applied at such points and by such means as to ensure satisfactory mixing of the chemicals with the water. (3-24-22)( )

b. Unless otherwise approved by the Department ~~based on documentation provided by the design engineer~~, a rapid mix device or chamber ahead of the solids contact clarifier is required to assure proper mixing of the chemicals applied. Mixing devices employed ~~shall~~ must be constructed so as to provide good mixing of the raw water with previously formed sludge particles and prevent deposition of solids in the mixing zone. (3-24-22)( )

c. Flocculation equipment ~~shall~~ must be adjustable as to speed, pitch, or a combination of speed and pitch and must provide for coagulation in a separate chamber or baffled zone within the unit. (3-24-22)( )

d. Sludge removal design ~~shall~~ must provide that sludge pipes are not less than three (3) inches in diameter and arranged so as to facilitate cleaning. Entrance to sludge withdrawal piping ~~shall~~ must be designed to prevent clogging. Provision ~~shall~~ must be made for the operator to observe and sample sludge being withdrawn from the unit. (3-24-22)( )

e. Blow-off outlets and drains must terminate and discharge at places acceptable to the Department in regard to control of potential cross connections. Cross connection control must be included for the potable water lines used to backflush sludge lines. ( )

f. The detention time ~~shall~~ must be established on the basis of the raw water characteristics and other local conditions that affect the operation of the unit. The Department may request data to support decisions made with respect to detention times. ~~The Department may alter detention time requirements.~~ (3-24-22)( )

g. Controls for sludge withdrawal which minimize water losses ~~shall~~ must be provided. (3-24-22)( )

h. Unless otherwise approved by the Department ~~based on documentation provided by the design engineer~~, weirs ~~shall~~ must be adjustable and at least equivalent in length to the perimeter of the tank. Weir loading ~~shall~~ must not exceed ten (10) gallons per minute per foot of weir length for units used as clarifiers or twenty (20) gallons per minute per foot of weir length for units used for softening. Where orifices are used, the loading rates per foot of launder rates ~~shall~~ must be equivalent to weir loadings. Either ~~shall~~ must produce uniform rising rates over the entire area of the tank. (3-24-22)( )

i. Upflow rates ~~shall~~ must not exceed one (1) gallon per minute per square foot of area at the sludge separation line for units used as clarifiers or one and three-quarters (1.75) gallons per minute per foot of area at the slurry separation line for units used as softeners. The Department may consider higher rates if supporting data is provided. (3-24-22)( )

**140. Settler Units.** Settler units consisting of variously shaped tubes or plates installed in multiple layers and at an angle to the flow may be used for sedimentation following flocculation. ( )

a. Inlets and outlets ~~shall~~ must be designed to maintain velocities suitable for settling in the basin and to minimize short-circuiting. Plate units ~~shall~~ must be designed to minimize unequal distribution across the units. (3-24-22)( )

b. Drain piping from the settler units must be sized to facilitate a quick flush of the settler units and to prevent flooding other portions of the plant. ( )

c. Although most units will be located within a plant, outdoor installations must provide sufficient freeboard above the top of settlers to prevent freezing in the units. ( )

d. Water ~~shall~~ must be applied to tube settlers at a maximum rate of two (2) gallons per minute per

square foot of cross-sectional area for tube settlers, unless higher rates are justified through pilot plant or in-plant demonstration studies. ~~See in accordance with~~ Subsection 501.19 ~~for general information on conducting pilot studies.~~ (3-24-22)( )

e. Water ~~shall~~ must be applied to plate settlers at a maximum plate loading rate of one-half (0.5) gallons per minute per square foot, based on eighty (80) percent of the projected horizontal plate area. (3-24-22)( )

f. Flushing lines ~~shall~~ must be provided to facilitate maintenance and must be properly protected against backflow or back siphonage. (3-24-22)( )

**121. High Rate Clarification.** High rate clarification processes may be approved upon demonstrating satisfactory performance under on-site pilot ~~plant conditions~~ in accordance with Subsection 501.19 or documentation of full scale plant operation with similar raw water quality conditions. Reductions in detention times ~~and/or~~ increases in weir loading rates ~~shall~~ must be justified. ~~See Subsection 501.19 for general information on conducting pilot studies.~~ Examples of such processes include dissolved air flotation, ballasted flocculation, contact flocculation/clarification, and helical upflow. (3-24-22)( )

**521. ~~FACILITY AND DESIGN STANDARDS: SURFACE WATER TREATMENT: FILTRATION USING RAPID RATE GRAVITY FILTERS.~~**

**01. Pretreatment.** The use of rapid rate gravity filters ~~shall~~ requires pretreatment in the form of coagulation, flocculation, and sedimentation. (3-24-22)( )

**02. Rate of Filtration.** The filter rate must be proposed and justified by the design engineer ~~to the satisfaction of in~~ the Department ~~prior to the preparation of final plans and specifications~~ approved PER. (3-24-22)( )

**03. Number of Units.** A minimum of two (2) units for redundancy ~~shall~~ must be provided for filtration such that plant design capacity can be maintained with any component out of service for maintenance or repairs. Where declining rate filtration is provided, the variable aspect of filtration rates, and the number of filters must be considered when determining the design capacity for the filters. (3-24-22)( )

**04. Structure and Hydraulics.** The filter structure ~~shall~~ must be designed to provide for: (3-24-22)( )

a. ~~Vertical walls within the filter.~~ There ~~shall~~ may be no protrusion of the vertical filter walls into the filter media. (3-24-22)( )

b. Cover by superstructure with sufficient headroom to permit normal inspection and operation. ( )

c. Minimum depth of filter box of eight and one-half (8.5) feet. ( )

d. Minimum water depth over the surface of the filter media of three (3) feet. ( )

e. Trapped effluent to prevent backflow of air to the bottom of the filters. ( )

f. Prevention of floor drainage to the filter with a minimum four (4) inch curb around the filters. ( )

g. Prevention of flooding by providing overflow. ( )

h. Maximum velocity of treated water entering the filters of two (2) feet per second. ( )

i. Cleanouts and straight alignment for influent pipes or conduits where solids loading is heavy, or following lime-soda softening. ( )



- j. Washwater drain capacity to carry maximum flow. ( )
- k. Walkways around filters to be not less than twenty-four (24) inches wide and equipped with safety handrails or walls. ( )
- l. Construction so as to prevent cross connections and common walls between potable water and non-potable fluids. ( )
05. **Wash~~w~~ Water Troughs.** Washwater troughs ~~shall~~ **must** be constructed to have: (3-24-22)( )
- a. The bottom elevation above the maximum level of expanded media during washing. ( )
- b. A two (2) inch freeboard at the maximum rate of wash. ( )
- c. The top edge level and all at the same elevation. ( )
- d. Spacing so that each trough serves the same number of square feet of filter area. ( )
- e. Maximum horizontal travel of suspended particles to reach the trough not to exceed three (3) feet. ( )
06. **Filter Material.** The media ~~shall~~ **must** be clean silica sand or other natural or synthetic media free from detrimental chemical or bacterial contaminants, approved by the Department, and having the following characteristics: (3-24-22)( )
- a. A total depth of not less than twenty-four (24) inches and generally not more than thirty (30) inches. ( )
- b. An effective size range of the smallest material no greater than forty-five hundredths (0.45) of a millimeter to fifty-five hundredths (0.55) of a millimeter. ( )
- c. A uniformity coefficient of the smallest material not greater than one and sixty-five hundredths (1.65). ( )
- d. A minimum of twelve (12) inches of media with an effective size range no greater than forty-five hundredths (0.45) of a millimeter to fifty-five hundredths (0.55) of a millimeter and a specific gravity greater than other filtering materials within the filter. ( )
- e. Types of filter media are as follows: ( )
- i. Clean, crushed anthracite or a combination of anthracite and other media may be considered on the basis of experimental data specific to the project. The anthracite ~~shall~~ **must** have the following characteristics: (3-24-22)( )
- (1) Effective size of forty-five hundredths (0.45) of a millimeter to fifty-five hundredths (0.55) of a millimeter with uniformity coefficient not greater than sixty-five hundredths (1.65) when used alone. ( )
- (2) Effective size of eight tenths (0.8) of a millimeter to one and two-tenths (1.2) millimeters with a uniformity coefficient not greater than one and eighty-five hundredths (1.85) when used as a cap. ( )
- (3) Effective size for anthracite used as a single media on potable ground-water for iron and manganese removal only ~~shall~~ **must** be a maximum of eight tenths (0.8) of a millimeter (effective sizes greater than this may be approved based upon onsite pilot plant studies or other demonstration acceptable to the Department). See Subsection 501.19 for general information on conducting pilot studies. (3-24-22)( )
- ii. Sand media ~~shall~~ **must** have the following characteristics: (3-24-22)( )



- (1) Effective size of forty-five hundredths (0.45) of a millimeter to fifty-five hundredths (0.55) of a millimeter. ( )
  - (2) Uniformity coefficient of not greater than one and sixty-five hundredths (1.65). ( )
  - (3) Larger size sand media may be allowed by the Department where full-scale tests have demonstrated that treatment goals can be met under all conditions. ( )
- iii. Granular activated carbon (GAC) as a single media may be considered for filtration only after pilot or full-scale testing and with prior approval of the Department. ~~See in accordance with~~ Subsection 501.19 ~~for general information on conducting pilot studies.~~ The design ~~shall~~ must include the following: (3-24-22)( )
- (1) The media must meet the basic specifications for filter media as given in Subsections 521.06.a. through d., except that larger size media may be allowed where full scale tests have demonstrated that treatment goals can be met under all conditions. ( )
  - (2) There must be a means for periodic treatment of filter material for control of bacterial and other growth. ( )
  - (3) Provisions must be made for frequent replacement or regeneration. ( )
- iv. Other media will be considered based on experimental data and operating experience. ( )
- v. A three (3) inch layer of torpedo sand ~~shall~~ must be used as a supporting media for filter sand where supporting gravel is used, and ~~shall~~ must have an effective size of eight-tenths (0.8) millimeters to two (2.0) millimeters, and a uniformity coefficient not greater than one and seven-tenths (1.7). (3-24-22)( )
- vi. Gravel, when used as the supporting media, ~~shall~~ must consist of cleaned and washed, hard, durable, rounded silica particles and ~~shall~~ must not include flat or elongated particles. The coarsest gravel ~~shall~~ must be two and one-half (2.5) inches in size when the gravel rests directly on a lateral system and must extend above the top of the perforated laterals. Not less than four (4) layers of gravel ~~shall~~ must be provided in accordance with the size and depth distribution specified in the table below. Reduction of gravel depths and other size gradations may be considered upon justification to the ~~reviewing authority for slow sand filtration or~~ Department when proprietary filter bottoms are specified.

Size of Gravel	Depth
2 ½ to 1 ½ inches	5 to 8 inches
1 ½ to ¾ inches	3 to 5 inches
¾ to ½ inches	3 to 5 inches
½ to 3/16 inches	2 to 3 inches
3/16 to 3/32 inches	2 to 3 inches

(3-24-22)( )

**07. Filter Bottoms and Strainer Systems.** Departure from the standards set out in Subsection 521.07 may be acceptable for high rate filters and for proprietary bottoms. Porous plate bottoms ~~shall~~ must not be used where iron or manganese may clog them or with waters softened by lime. The design of manifold-type collection systems ~~shall~~ must: (3-24-22)( )

- a. Minimize loss of head in the manifold and laterals. ( )
- b. Ensure even distribution of wash water and even rate of filtration over the entire area of the filter.

- ( )
- c. Provide the ratio of the area of the final openings of the strainer systems to the area of the filter at about three-thousandths (0.003), ( )
- d. Provide the total cross-sectional area of the laterals at ~~about~~ twice the total area of the final openings. (3-24-22)( )
- e. Provide the cross-sectional area of the manifold at one and one-half (1.5) to two (2) times the total area of the laterals. ( )
- f. Lateral perforations without strainers ~~shall~~ must be directed downward. (3-24-22)( )
- 08. Surface or Subsurface Wash.** Surface or subsurface wash facilities are required except for filters used exclusively for iron or manganese removal, and may be accomplished by a system of fixed nozzles or a revolving-type apparatus. All devices ~~shall~~ must be designed with: (3-24-22)( )
- a. Provision for water pressures of at least forty-five (45) pounds per square inch. ( )
- b. A properly installed vacuum breaker or other approved device to prevent back siphonage if connected to the treated water system. ( )
- c. Rate of flow of two (2.0) gallons per minute per square foot of filter area with fixed nozzles or one-half (0.5) gallon per minute per square foot with revolving arms. ( )
- d. Air wash can be considered based on experimental data and operating experiences. ( )
- 09. Air Scouring.** Air scouring can be considered in place of surface wash provided the following conditions are met: ( )
- a. Air flow for air scouring the filter must be three (3) to five (5) standard cubic feet per minute square foot of filter area when the air is introduced in the underdrain; a lower air rate must be used when the air scour distribution system is placed above the underdrains. ( )
- b. A method for avoiding excessive loss of the filter media during backwashing must be provided. ( )
- c. Air scouring must be followed by a fluidization wash sufficient to restratify the media. ( )
- d. Air must be free from contamination. ( )
- e. Air scour distribution systems ~~shall~~ must be placed below the media and supporting bed interface with the following exception: if placed at the interface the air scour nozzles ~~shall~~ must be designed to prevent media from clogging the nozzles or entering the air distribution system. (3-24-22)( )
- f. Piping for the air distribution system ~~shall~~ must not be flexible hose which will collapse when not under air pressure and ~~shall~~ must not be a relatively soft material which may erode at the orifice opening with the passage of air at high velocity. (3-24-22)( )
- g. Air delivery piping ~~shall~~ must not pass down through the filter media nor ~~shall~~ may there be any arrangement in the filter design which ~~would~~ allow s short circuiting between the applied unfiltered water and the filtered water. (3-24-22)( )
- h. The backwash water delivery system must be capable of fifteen (15) gallons per minute per square foot of filter surface area (37 m/hr); however, when air scour is provided the backwash water rate must be variable and ~~should~~ not exceed eight (8) gallons per minute per square foot (20 m/hr) unless operating experience shows that a higher rate is necessary to remove scoured particles from filter media surfaces. (3-24-22)( )

i. The filter underdrains ~~shall~~ **must** be designed to accommodate air scour piping when the piping is installed in the underdrain. (3-24-22)( )

10. **Filter Appurtenances.** The following ~~shall~~ **must** be provided for every filter: (3-24-22)( )

a. Influent and effluent sampling taps. ( )

b. A gauge capable of indicating loss of head. ( )

c. A meter indicating rate-of flow. A modified rate controller which limits the rate of filtration to a maximum rate may be used. However, equipment that simply maintains a constant water level on the filters is not acceptable, unless the rate of flow onto the filter is properly controlled. A pump or a flow meter in each filter effluent line may be used as the limiting device for the rate of filtration only if approved by the Department on a site-specific basis. ( )

11. **Backwash.** Provisions ~~shall~~ **must** be made for washing filters as follows: (3-24-22)( )

a. A minimum backwash rate such that a fifty (50) percent expansion of the filter bed is achieved. ( )

b. Filtered water provided at the required rate by wash water tanks, a wash water pump, from the high service main, or a combination of these. ( )

c. Wash water pumps in duplicate unless an alternate means of obtaining wash water is available. ( )

d. Not less than fifteen (15) minutes wash of one filter at the design rate of wash. ( )

e. A wash water regulator or valve on the main wash water line to obtain the desired rate of filter wash with the wash water valves on the individual filters open wide. ( )

f. A rate-of-flow indicator, preferably with a totalizer, on the main wash water line, located so that it can be easily read by the operator during the washing process. ( )

g. Design to prevent rapid changes in backwash water flow. Backwash ~~shall~~ **must** be operator initiated. Automated systems ~~shall~~ **must** be operator adjustable. (3-24-22)( )

12. **Roof Drainage.** Roof drains ~~shall~~ **must** not discharge into the filters or basins and conduits preceding the filters. (3-24-22)( )

**522. ~~FACILITY AND DESIGN STANDARDS: SURFACE WATER TREATMENT: FILTRATION USING DIATOMACEOUS EARTH.~~**

The use of these filters may be considered for application to surface waters with low turbidity and low bacterial contamination, and may be used for iron removal for ground-waters providing the removal is effective and the water is of satisfactory sanitary quality before treatment. (3-24-22)( )

01. **Conditions of Use.** Diatomaceous earth filters are expressly excluded from consideration for the following conditions: ( )

a. Bacteria removal; ( )

b. Color removal; ( )

c. Turbidity removal where either the gross quantity of turbidity is high or the turbidity exhibits poor filterability characteristics; or ( )

- d. Filtration of waters with high algae counts. ( )
- 02. Treated Water Storage.** Treated water storage capacity in excess of normal requirements ~~shall~~ **must** be provided to allow operation of the filters at a uniform rate during all conditions of ~~system~~ **PWS** demand at or below the approved filtration rate, and guarantee continuity of service during adverse raw water conditions without by-passing the system. (3-24-22)( )
- 03. Number of Units.** A minimum of two (2) units for redundancy ~~shall~~ **must** be provided for filtration such that plant design capacity can be maintained with any component out of service for maintenance or repairs. (3-24-22)( )
- 04. Precoat.** A uniform precoat ~~shall~~ **must** be applied hydraulically to each septum by introducing a slurry to the tank influent line and employing a filter-to-waste recirculation system. (3-24-22)( )
- 05. Body Feed.** A body feed system to apply additional amounts of diatomaceous earth slurry during the filter run is required to avoid short filter runs or excessive head losses. ( )
- a. The rate of body feed is dependent on raw water quality and characteristics and must be determined in the pilot plant study. ~~See in accordance with~~ Subsection 501.19 ~~for general information on conducting pilot studies.~~ (3-24-22)( )
- b. Continuous mixing of the body feed slurry is required. ( )
- 06. Filtration Requirements.** ( )
- a. Rate of filtration ~~shall~~ **must** be controlled by a positive means. (3-24-22)( )
- b. Head loss ~~shall~~ **must** not exceed thirty (30) psi for pressure diatomaceous earth filters, or a vacuum of fifteen (15) inches of mercury for a vacuum system. (3-24-22)( )
- c. A recirculation or holding pump ~~shall~~ **must** be employed to maintain differential pressure across the filter when the unit is not in operation in order to prevent the filter cake from dropping off the filter elements. A minimum recirculation rate of one-tenth (0.1) gallon per minute per square foot of filter area ~~shall~~ **must** be provided. (3-24-22)( )
- d. The septum or filter elements ~~shall~~ **must** be structurally capable of withstanding maximum pressure and velocity variations during filtration and backwash cycles, and ~~shall~~ **must** be spaced such that no less than one (1) inch is provided between elements or between any element and a wall. (3-24-22)( )
- e. The filter influent ~~shall~~ **must** be designed to prevent scour of the diatomaceous earth from the filter element. (3-24-22)( )
- 07. Backwash.** A satisfactory method to thoroughly remove and dispose of spent filter cake ~~shall~~ **must** be provided. (3-24-22)( )
- 08. Appurtenances.** The following ~~shall~~ **must** be provided for every filter: (3-24-22)( )
- a. Sampling taps for raw and filtered water. ( )
- b. Loss of head or differential pressure gauge. ( )
- c. Rate-of-flow indicator. ( )
- d. A throttling valve used to reduce rates below normal during adverse raw water conditions. ( )
- e. Evaluation of the need for body feed, recirculation, and any other pumps. ( )

- f. Provisions for filtering to waste with appropriate measures for backflow prevention. ( )

09. **Monitoring.** A continuous monitoring turbidimeter with recorder is required on each filter effluent for plants treating surface water. ( )

**523. ~~FACILITY AND DESIGN STANDARDS: SURFACE WATER TREATMENT: SLOW SAND FILTRATION.~~**

The use of ~~these slow sand~~ filters ~~shall~~ requires prior engineering studies to demonstrate the adequacy and suitability of this method of filtration for the specific water supply. Slow Sand Filtration and Diatomaceous Earth Filtration for Small Water Systems, Manual ~~on~~ of Design for Slow Sand Filtration, and Slow Sand Filtration, and Recommended Operations and Optimization Goals, Slow Sand Filtration referenced in Subsection 002.02, may be used as guidance in design and operation of slow sand filtration facilities. (3-24-22)( )

01. **Quality of Raw Water.** Slow rate gravity filtration ~~shall~~ must be limited to waters having maximum turbidities of ten (10) nephelometric units and maximum color of fifteen (15) units; such turbidity must not be attributable to colloidal clay. Raw water quality data must include examinations for algae. For source water having variable turbidity, the potential use of a roughing filter or other pretreatment technology ~~should~~ must be evaluated. The Department may allow the use of a pretreatment technology on raw waters that exceed the normal limits for turbidity and color, if it can be demonstrated to the Department's satisfaction that pretreatment will enable slow sand filtration to properly operate and comply with these Rules. (3-24-22)( )

02. **Number of Units.** A minimum of two (2) units for redundancy ~~shall~~ must be provided for filtration such that plant design capacity can be maintained with any component out of service for maintenance or repairs. The Department may allow a single bed filter if it can be demonstrated to the Department's satisfaction that an alternative water source is available such that the water system PWS can provide plant design capacity with the filter taken out of service for maintenance and repairs. (3-24-22)( )

03. **Structural Details and Hydraulics.** Slow rate gravity filters ~~shall~~ must be ~~so~~ designed ~~as~~ to provide a cover, unless otherwise approved by the Department ~~based on documentation provided by the design engineer,~~ headroom to permit normal movement by operating personnel for scraping and sand removal operations, adequate access hatches and access ports for handling of sand and for ventilation, filtration to waste, an overflow at the maximum filter water level, and protection from freezing. A permanent means of determining sand depth ~~shall~~ must be provided. (3-24-22)( )

04. **Underdrains.** Each filter unit ~~shall~~ must be equipped with a main drain and an adequate number of lateral underdrains to collect the filtered water. The underdrains ~~shall~~ must be so spaced that the maximum velocity of the water flow in the underdrain will not exceed three-fourths (0.75) feet per second. The maximum spacing of laterals ~~shall not exceed~~ is three (3) feet if pipe laterals are used. (3-24-22)( )

05. **Filter Material.** The following requirements apply: ( )

a. A minimum depth of thirty (30) inches of filter sand ~~shall~~ must be placed on graded gravel layers. (3-24-22)( )

b. The effective size ~~shall~~ must be between fifteen hundredths (0.15) of a millimeter and thirty-five hundredths (0.35) of a millimeter. Larger sizes may be considered by the Department based on the results of a pilot study. See in accordance with Subsection 501.19 ~~for general information on conducting pilot studies.~~ (3-24-22)( )

c. The uniformity coefficient ~~shall~~ must not exceed three point zero (3.0). (3-24-22)( )

d. The sand ~~shall~~ must be cleaned and washed free from foreign matter. (3-24-22)( )

e. The sand ~~shall~~ must be rebbed to the original minimum depth of thirty (30) inches when scraping has reduced the bed depth to no less than twenty-four (24) inches. Where sand is to be reused in order to provide biological seeding and shortening of the ripening process, rebbeding ~~shall~~ must utilize a "throw over" technique

whereby new sand is placed on the support gravel and existing sand is replaced on top of the new sand. The maximum filtration rate ~~shall~~ **must** not exceed zero point one (0.1) gallon per minute per square foot for each individual bed. (3-24-22)( )

**06. Filter Sand Support.** ( )

a. A three (3)-inch layer of sand ~~shall~~ **must** be used as a supporting media for filter sand. The supporting sand ~~shall~~ **must** have an effective size of zero point eight (0.8) millimeters to two point zero (2.0) millimeters and a uniformity coefficient not greater than one point seven (1.7). (3-24-22)( )

b. Gravel ~~shall~~ **must** consist of cleaned and washed, hard, durable, rounded rock particles and ~~shall~~ **may** not include flat or elongated particles. The coarsest gravel ~~shall~~ **must** be two and one-half (2.5) inches in size when the gravel rests directly on a lateral system and must extend above the top of the perforated laterals. Not less than four (4) layers of gravel ~~shall~~ **may** be provided in accordance with the size and depth distribution specified in the table below. Reduction of gravel depths and other size gradations may be considered upon justification in the Department.

Size of Gravel	Depth
2 1/2 to 1 1/2 inches	5 to 8 inches
1 1/2 to 3/4 inches	3 to 5 inches
3/4 to 1/2 inches	3 to 5 inches
1/2 to 3/16 inches	2 to 3 inches
3/16 to 3/32 inches	2 to 3 inches

(3-24-22)( )

**07. Depth of Water Over Filter Beds.** The design ~~shall~~ **must** provide a depth of at least three (3) to six (6) feet of water over the sand. Influent water ~~shall~~ **must** not scour the sand surface. (3-24-22)( )

**08. Control Appurtenances.** Each filter ~~shall~~ **must** be equipped with a loss of head gauge, an orifice, Venturi meter, or other suitable means of discharge measurement installed on each filter to control the rate of filtration, and an effluent pipe designed to maintain the water level above the top of the filter sand. The effluent piping must not be directly interconnected with the other filter beds. A sample tap ~~shall~~ **must** be provided for each filter bed. (3-24-22)( )

**09. Ripening.** Slow sand filters must be filtered-to-waste until they are biologically mature before being put into service following construction, scraping, re-sanding, or reopening after extended shutdown. The period of filter-to-waste ~~shall~~ **must** be as follows: (3-24-22)( )

a. Filters ~~shall~~ **must** be filtered-to-waste after scraping or cleaning until the effluent turbidity falls consistently below the pre-cleaning level, unless otherwise approved by the Department ~~based on documentation provided by the design engineer.~~ (3-24-22)( )

b. Filters ~~shall~~ **must** be filtered-to-waste following construction, re-sanding, or extended shutdown based on project specific protocols ~~that have been~~ approved by the Department and ~~then~~ incorporated into a Department approved operation and maintenance manual. These protocols may be based on factors from standard literature such as those listed in Subsection 002.02 but typically include factors such as minimum filter-to-waste time periods, bacteriological testing, and effluent turbidity. Sampling results from the filter-to-waste period ~~shall~~ **must** be provided to the Department for review and the Department must provide authorization prior to restarting service to the public. (3-24-22)( )

**10. Supernatant Drain Required.** Filter beds ~~shall~~ **must** be equipped with a supernatant drain to allow for quick removal of water standing over sand that has become impermeable because it requires scraping or



rebedding. (3-24-22)( )

11. **Filter Bed Control and Minimum Rate of Flow.** Each filter bed ~~shall~~ must be controlled separately and filters must be operated at a constant filtration rate with any changes made gradually. The minimum rate of filtration ~~shall~~ must be at least two hundredths (0.02) gallons per minute per square foot. (3-24-22)( )

**524. ~~FACILITY AND DESIGN STANDARDS: SURFACE WATER TREATMENT: DIRECT FILTRATION.~~**

Direct filtration, as used herein, refers to the filtration of a surface water following chemical coagulation and possibly flocculation but without prior settling. The nature of the treatment process will depend upon the raw water quality. A full scale direct filtration plant ~~shall~~ must not be constructed without prior pilot studies which are acceptable to the reviewing authority Department. In-plant demonstration studies are required where conventional treatment plants are converted to direct filtration. Where direct filtration is proposed, an engineering report ~~shall~~ must be submitted prior to conducting pilot plant or in-plant demonstration studies. ~~See in accordance with~~ Subsection 501.19 ~~for general information on conducting pilot studies.~~ (3-24-22)( )

**01. Filtration Requirements. ( )**

a. Filters ~~shall~~ must be rapid rate gravity filters with dual or mixed media. The final filter design ~~shall~~ must be based on the pilot plant or in-plant demonstration studies, and all portions of Section 518 apply. Pressure filters or single media sand filters ~~shall~~ will not be used. (3-24-22)( )

b. A continuous recording turbidimeter ~~shall~~ must be installed on each filter effluent line and on the composite filter effluent line. (3-24-22)( )

c. Additional continuous monitoring equipment such as particle counting or streaming current metering to assist in control of coagulant dose may be required by the reviewing authority Department. (3-24-22)( )

02. **Siting Requirements.** The plant design and land ownership surrounding the plant ~~shall~~ must allow for modifications of the plant. (3-24-22)( )

03. **Redundancy.** A minimum of two (2) units ~~shall~~ must be provided for filtration such that plant capacity can be maintained with any component out of service for maintenance or repairs. (3-24-22)( )

**525. ~~FACILITY AND DESIGN STANDARDS: LOW PRESSURE MEMBRANE FILTRATION.~~**

Low pressure filtration, as used herein, refers to microfiltration or ultrafiltration processes. Low pressure membrane systems can provide greater than 3-log removal of Giardia lamblia and Cryptosporidium, and ultrafiltration systems can also provide up to 2-log virus removal. The Department will determine maximum available removal credits for the specific membrane under consideration. The actual log removal credit that a low pressure membrane filtration system will receive is the lower of the values determined by the following: the removal efficiency demonstrated during challenge testing, or the maximum log removal that can be verified by direct integrity testing required during the course of normal operation. Membrane systems ~~shall~~ must contain sufficient design to allow for offline direct integrity testing of all units or modules at the required interval while retaining the capability to supply maximum day demand to the ~~water system~~ PWS. Membrane systems ~~shall~~ must have at least two (2) units unless it can be demonstrated to the satisfaction of the Department that a secondary source or treatment component can supply the required minimum plant design capacity. (3-24-22)( )

**01. Membrane Selection and Design Considerations. ( )**

a. ~~Challenge Testing.~~ Challenge testing involves seeding feed water with an organism or particulate and measuring the log reduction of the organism or particulate between the feed and filtrate. It is a one-time product-specific test event performed by an approved third party designed to demonstrate the removal ability of the membrane. Challenge testing ~~shall~~ must be conducted by the third party entity in general conformance with the USEPA Membrane Filtration Guidance Manual referenced in Subsection 002.02 (Membrane Filtration Guidance Manual). The challenge test report ~~shall~~ is to be submitted to the Department along with the ~~preliminary engineering report~~ PER for the project. The Department may accept another state's challenge test report approval.

(3-24-22)( )

b. ~~Water Quality Considerations for Design.~~ A review of historical source water data ~~shall~~ must be conducted to determine the degree of pretreatment needed if any, the feasibility of membrane filtration, and an estimated cost of the system. At a minimum, the following parameters ~~shall~~ are to be investigated: Seasonal temperature and turbidity profiles, total organic loading, occurrence of algae, microbial activity, iron, manganese, and hardness levels, and any other inorganic or physical parameters determined to be necessary by the Department. The data ~~shall~~ will be used to determine anticipated fouling and scaling, backwash and cleaning cycles and regimens, acceptable trans-membrane pressure differentials, and design flux, especially during lowest anticipated water temperature. (3-24-22)( )

c. ~~Pilot Study.~~ A pilot study ~~shall~~ must be conducted for a period that ~~shall be~~ is determined by the design engineer and approved by the Department. The duration ~~should~~ will include the season of lowest water temperatures and the season including the highest anticipated turbidity, algal bloom, TOC, and iron/manganese event or otherwise cover four seasons of source water quality conditions. The Department may approve a shorter duration proof pilot to verify design criteria that affect the reliable production capacity of the membrane system. The Department may approve the use of a full scale pilot study where the full scale facility will act as the pilot study. The Department may also waive the pilot study requirement. Proof pilot studies, full scale pilot studies, and the waiving of the pilot study requirement will only be approved in circumstances where source water conditions and fouling characteristics are already well understood. Such source waters include but are not limited to ground-water under the influence of surface water, waters with existing membrane plants, waters where sufficient pilot test data has already been generated, and extensively used or tested membrane products where production or test data on similar waters is available (i.e., same lake, reservoir, or same reach for stream sources). In addition to the requirements in Subsection 501.19, the pilot study ~~shall~~ must include: (3-24-22)( )

- i. A means to identify the best membrane to use for the anticipated water quality; ( )
- ii. Analysis of any need for pretreatment; ( )
- iii. Range of anticipated flux rates; ( )
- iv. Operating and transmembrane pressure; ( )
- v. Fouling and scaling potential; ( )
- vi. Backwash and recovery cleaning, cleaning processes, and intervals; ( )
- vii. Efficiency and process mass balance; ( )
- viii. Waste stream volume, characterization, and disposal method; ( )
- ix. Turbidity; and ( )
- x. Integrity testing results and procedures. ( )

**02. Monitoring and Compliance Requirements for Membranes.** ~~Public drinking water systems~~ PWSs that use low pressure membrane filtration must comply with the following requirements. (3-24-22)( )

- a. Initial Start-Up. ( )
  - i. ~~Notify~~ the Department ~~shall be notified~~ at least one (1) week in advance of the planned start-up date. (3-24-22)( )
  - ii. The design engineer ~~shall~~ will oversee start-up procedures. (3-24-22)( )
  - iii. All monitoring equipment ~~shall~~ will be calibrated prior to start-up. (3-24-22)( )



- iv. The system ~~shall~~ **must** pass direct integrity testing prior to going on-line and producing water for distribution. (3-24-22)( )
- v. A method for the disposal of start-up water ~~shall~~ **needs to** be approved by the Department prior to start-up. (3-24-22)( )
- b. Direct Integrity Testing.** ( )
- i. ~~Scale of Testing.~~ Testing must be conducted on each membrane skid in service at least daily for the first year of operation. (3-24-22)( )
- ii. ~~Resolution.~~ The test method used must have a resolution of three (3)  $\mu\text{m}$  or less for Cryptosporidium and Giardia lamblia removal credit. (3-24-22)( )
- iii. ~~Sensitivity.~~ The test method used must have sensitivity sufficient to verify the ability of the membrane filtration system to remove the constituent at a level commensurate with the credit awarded by the Department. (3-24-22)( )
- (1) Formulae for sensitivity calculation for pressure-based tests are available in the Membrane Filtration Guidance Manual referenced in Subsection 002.02. The volumetric concentration factor used in the calculation may be either calculated or determined experimentally. ( )
- (2) Formulae for sensitivity calculation for marker-based tests are available in the Membrane Filtration Guidance Manual referenced in Subsection 002.02. ( )
- iv. ~~Control Limit.~~ A control limit must be established within the sensitivity limits of the direct integrity test that is indicative of an integral membrane unit capable of achieving the log removal credit awarded by the Department. (3-24-22)( )
- (1) If the direct integrity test results exceed the control limit for any membrane unit, that unit must be removed from service. ( )
- (2) Any unit taken out of service for exceeding a direct integrity test control limit cannot be returned to service until repairs are confirmed by subsequent direct integrity test results that are within the control limit. ( )
- v. ~~Frequency.~~ Direct integrity testing must be conducted on each membrane unit at a frequency of at least once per day that the unit is in operation. The Department may extend testing frequency up to a duration of once per week after one (1) year of daily testing showing a less than five percent (5%) testing failure rate for the previous year. During weekly testing, if at any time the system fails more than two (2) direct integrity tests within a three (3) month period, the system ~~shall~~ **must** return to daily testing. (3-24-22)( )
- c. Indirect Integrity Monitoring.** ( )
- i. ~~Scale of Testing.~~ Testing must be conducted on each membrane unit in service. (3-24-22)( )
- ii. ~~Monitoring Method.~~ Continuous indirect integrity monitoring must be conducted using turbidity monitoring unless the Department approves an alternative method. (3-24-22)( )
- iii. ~~Frequency.~~ Continuous indirect integrity monitoring must be conducted at a frequency of at least one (1) reading every fifteen (15) minutes. The Department may allow a time delay in reporting compliance turbidity measurements if it can be demonstrated that elevated turbidity readings above fifteen hundredths (0.15) NTU immediately following direct integrity testing or maintenance are the result of factors related to entrained air or membrane wettability and are not related to membrane integrity. (3-24-22)( )
- iv. ~~Control Limit.~~ If the continuous indirect integrity monitoring results exceed the specified control limit for any membrane unit for a period greater than fifteen (15) minutes (i.e., two (2) consecutive readings at fifteen

(15) minute intervals), direct integrity testing must be immediately conducted on that unit. (3-24-22)( )

(1) The control limit for turbidity monitoring is fifteen hundredths (0.15) NTU. ( )

(2) Control limits for Department approved alternative methods ~~shall~~ will be established by the Department. (3-24-22)( )

**d.** ~~Operations Plan~~—A project specific operation and maintenance manual ~~shall~~ must be provided as required in Subsection 501.12. See definition of Operation and Maintenance Manual in Section 003 for the typical contents of an operation and maintenance manual and the included operations plan. The operations plan in the operation and maintenance manual for membrane systems ~~shall~~ must include, but is not limited to the following information: (3-24-22)( )

i. Filtration: ( )

(1) Control of feed flow to the membrane system; ( )

(2) Measurement of inlet/outlet pressures and filtrate flows; ( )

(3) Measurement of transmembrane pressure changes during filter run; and ( )

(4) Feed flow control in response to temperature changes. ( )

ii. Membrane backwashing: ( )

(1) Programming automated frequency; ( )

(2) Proper backwash venting and disposal; see Section 540; ( )

(3) Appropriate backwash rate; and ( )

(4) Monitoring during return of filter to service. ( )

iii. Chemical cleaning: ( )

(1) Selection of proper chemical washing sequence; ( )

(2) Proper procedures for dilution of chemicals; ( )

(3) Monitoring of pH through chemical cleaning cycle; ( )

(4) Rinsing of membrane system following chemical clean; and ( )

(5) Return of filter to service. ( )

iv. Chemical feeders (in the case that chemical pretreatment is applied): ( )

(1) Calibration check; ( )

(2) Settings and adjustments (how they ~~should be~~ are made); and (3-24-22)( )

(3) Dilution of chemicals and polymers (proper procedures). ( )

v. Monitoring and observing operation: ( )

(1) Observation of feed water or pretreated water turbidity; ( )

- (2) Observation of trans-membrane pressure increase between backwashes; ( )
- (3) Filtered water turbidity; ( )
- (4) Procedures to follow if turbidity breakthrough occurs. ( )
- vi. Troubleshooting. ~~A troubleshooting checklist or guide shall be included. Suggested troubleshooting items include but are not limited to the following:~~ (3-24-22)( )

  - (1) No raw water (feed water) flow to plant; ( )
  - (2) Can't control rate of flow of water through equipment; ( )
  - (3) Valving configuration for direct flow and cross-flow operation modes; ( )
  - (4) Poor raw water quality (raw water quality falls outside the performance range of the equipment); ( )
  - (5) Poor filtrate quality; ( )
  - (6) Failed membrane integrity test; ( )
  - (7) Low pump feed pressure; ( )
  - (8) Automatic operation (if provided) not functioning; ( )
  - (9) Filtered water turbidity too high; ( )
  - (10) Head loss builds up excessively rapidly; ( )
  - (11) Reduced flux; ( )
  - (12) Machine will not start and "Power On" indicator off; ( )
  - (13) Machine will not start and "Power On" indicator on; ( )
  - (14) Pump cavitation; ( )
  - (15) Valve stuck or won't operate; and ( )
  - (16) No electric power. ( )

- e. ~~Reporting.~~ The sensitivity, resolution, and frequency of the direct integrity test proposed for use with the full-scale facility must be reported to the Department prior to initial operation. The following ~~shall~~ **must** be reported to the Department on a monthly basis: (3-24-22)( )
  - i. Any direct integrity test results exceeding the control limit, as well as the corrective action taken in response, must be reported to the Department within ten (10) days of the end of the monthly monitoring cycle on a Department reporting form. The form is available at [www.deq.idaho.gov](http://www.deq.idaho.gov); ( )
  - ii. Any continuous indirect integrity monitoring results triggering direct integrity testing, as well as any corrective action taken in response, must be reported to the Department within ten (10) days of the end of the monthly monitoring cycle on a Department reporting form. The form is available at [www.deq.idaho.gov](http://www.deq.idaho.gov); ( )
  - iii. Any additional information considered necessary by the Department on a case-specific basis to verify proper operation and maintenance of the membrane filtration process; and ( )

iv. All direct integrity test results and continuous indirect integrity monitoring results must be retained for a minimum of three (3) years. ( )

526. -- 528. (RESERVED)

529. ~~FACILITY AND DESIGN STANDARDS:~~ **REQUIRED** DISINFECTION OF DRINKING WATER, ULTRAVIOLET LIGHT.

01. General. ( )

a. Ultraviolet (UV) light technology is a primary disinfectant typically used for Cryptosporidium, Giardia lamblia, and virus inactivation of both surface water and ground-water supplies. Reactor performance in terms of inactivation of any particular organism is a function of the delivered dose which is determined by validation testing. PWSs that are required to maintain a disinfectant residual in the distribution system must supplement UV disinfection with a chemical disinfectant. (3-24-22)( )

b. UV disinfection credit will be awarded for filtered ~~systems~~ PWSs and unfiltered ~~systems~~ PWSs if the ~~system~~ unfiltered PWS meets the requirements ~~for unfiltered systems~~ in 40 CFR 141.71. SystemsPWSs will receive Cryptosporidium, Giardia lamblia, and virus treatment credits by achieving the corresponding UV dose values for the appropriate target pathogen and log reduction shown in Subsection 529.03, calculated to take into account the validation factor and reduction equivalent dose. The target pathogen and the target log inactivation ~~shall~~ be is used to identify the corresponding required UV dose. (3-24-22)( )

c. For ~~water systems~~ PWSs using UV light to meet microbial treatment requirements, at least ninety-five percent (95%) of the water delivered to the public every month must be treated by UV reactors operating within validated conditions for the required UV dose. (3-24-22)( )

d. When reviewing proposed UV disinfection projects, the Department will use the USEPA UV Disinfection Guidance Manual for the Final Long Term 2 Enhanced Surface Water Treatment Rule referenced in Subsection 002.02 (UV Disinfection Guidance Manual) for guidance. ( )

02. Pilot Studies and Validation. ( )

a. The Department may allow on-site pilot studies on a case ~~by~~ case basis in accordance with Subsection 501.19. Pilot studies are usually used to determine how much fouling occurs on site, to evaluate UV system reliability (e.g. UV sensors, UV transmittance (UVT) monitors, ballast reliability) and to provide operators experience running a UV system. They may also be used to assess lamp aging or impacts of power quality. See Subsection 501.19 for general information on conducting pilot studies. (3-24-22)( )

b. Validation testing determines the operating conditions and monitoring algorithms that the UV system will use to define how much UV dose is being delivered by the reactor during operation. The validated dose as determined through validation testing is compared to the required dose in the UV Dose Table (Subsection 529.03) to determine inactivation credit. The validated dose is calculated by dividing the determined reduction equivalent dose by a validation factor to account for biases and experimental uncertainty. UV light treatment reactors ~~shall~~ must be validated by a third party entity approved by the Department. At a minimum, validation testing must account for the following: UV absorbance of the water; lamp fouling and aging; measurement uncertainty of on-line UV sensors; UV dose distributions arising from the velocity profiles through the reactor; failure of UV lamps and other critical system components; inlet and outlet piping configuration of the UV reactor; lamp and UV sensor locations; and other parameters required by the Department. The Department may allow alternative test microbes such as MS2 phage where the UV dose response better matches that of Cryptosporidium and Giardia lamblia to provide more accurate and efficient UV dose monitoring. Additional guidance is available in the UV Disinfection Guidance Manual, referenced in Subsection 002.02, or another validation standard as approved by the Department. (3-24-22)( )

c. Validation testing ~~shall~~ must be conducted on full scale testing of a reactor that conforms uniformly to the UV reactors used by the ~~system~~ PWS and inactivation of a test microorganism whose dose response characteristics have been quantified with a low pressure mercury vapor lamp. (3-24-22)( )

- d. Validation testing must determine and establish validated operating conditions under which the reactor delivers the required UV dose in Subsection 529.03. Validated operating conditions include: ( )
- i. Flow rate; ( )
  - ii. UV Intensity as measured by a UV sensor; ( )
  - iii. UV lamp operating status. ( )
- e. The ~~d~~Department may approve an alternative approach to validation testing. (3-24-22)( )

03. **UV Dose Table.** The treatment credits listed in the dose table are based on UV light at a wavelength of two hundred fifty-four (254) nm as produced by a low pressure mercury vapor lamp. To receive treatment credit for other lamp types, the ~~system shall~~ PWS **must** demonstrate an equivalent germicidal dose through validation testing.

UV Dose Table (millijoules per square centimeter)			
Log	Cryptosporidium	Giardia lamblia	Virus
0.5	1.6	1.5	39
1.0	2.5	2.1	58
1.5	3.9	3.0	79
2.0	5.8	5.2	100
2.5	8.5	7.7	121
3.0	12	11	143
3.5	15	15	163
4.0	22	22	186

(3-24-22)( )

04. **Reactor Design.** Inlet and outlet conditions ~~shall~~ **must** ensure that UV dose delivery at the plant is equal to or exceeds that utilized during validation. At a minimum, design criteria ~~shall need to~~ address target pathogen(s), required log inactivation and UV dose, flow rate, UVT, and lamp aging and fouling factors. UVT and flow rate ~~shall are to~~ be selected to account for seasonal changes in UVT. Lamp aging and fouling factors ~~shall must~~ be supported by documentation or pilot study data. Recommended approaches of the UV Disinfection Guidance Manual, referenced in Subsection 002.02, ~~shall are to~~ be used in meeting this requirement. (3-24-22)( )

a. The reactor systems must be designed to monitor and record parameters to verify the operation within the validated operating conditions approved by the Department. The ~~system PWS~~ must be equipped with facilities to monitor and record UV intensity as measured by a UV sensor, flow rate, lamp status, UVT, and other parameters designated by the Department. (3-24-22)( )

b. The ultraviolet treatment device ~~shall must~~ be designed to provide a UV light dose equal to or greater than that specified in the UV Dose Table for the required log reduction. The UV Disinfection Guidance Manual, referenced in Subsection 002.02, ~~shall must~~ be utilized in evaluating the appropriate dose required for the target microbe. The reactor ~~shall also will need to~~ deliver the target dose while operating within the validated operating conditions for that particular unit. (3-24-22)( )

c. The ultraviolet treatment assemblies ~~shall must~~ be designed to allow for cleaning and replacement of the lamp, lamp sleeves, and sensor window or lens. (3-24-22)( )

d. All ultraviolet treatment device designs ~~shall must~~ evaluate lamp fouling and aging issues and

manufacturer's recommendations regarding fouling, aging, and replacement ~~shall will~~ be discussed in the Operation and Maintenance Manual. (3-24-22)( )

e. For in-situ cleaning of the lamp sleeve, the design ~~shall must~~ protect the potable water from cleaning solutions. (3-24-22)( )

f. When off-line chemical cleaning systems are used, the UV enclosure ~~shall must~~ be removed from service, drained, flushed with an NSF/ANSI Standard 60 certified solution, drained, and rinsed before being placed back in service. (3-24-22)( )

g. On-line systems that use wipers or brushes may use chemical solutions provided they are NSF/ANSI Standard 60 certified. ( )

h. An automatic shutdown valve ~~shall must~~ be installed in the water supply line from the ultraviolet treatment device such that if power is not provided to the reactor or valve, the valve ~~shall will~~ be in the closed position. (3-24-22)( )

i. The design of the inlet and outlet piping configuration and the locations of expansions, bends, tees and valves ~~shall will~~ assure that the UV dose delivery is equal to or greater than the required UV dose. Approach length prior to each reactor included in the credited dose calculations, downstream length following each reactor, and locations of any cleaning device/mechanism ~~shall must~~ be based on validation testing. (3-24-22)( )

j. For parallel trains, the flow to each reactor ~~shall must~~ be equally distributed and metered or otherwise account for uneven flows in the design to ensure that the required UV dose is delivered to each train under varying flow conditions. (3-24-22)( )

k. Valves ~~shall must~~ be provided to allow isolating and removing from service each UV reactor. (3-24-22)( )

l. Reactors ~~shall will~~ be provided with air relief and pressure control valves per manufacturer requirements. (3-24-22)( )

m. UVT analyzers ~~shall must~~ be provided if UVT is part of the dose monitoring strategy. It is recommended that UVT be monitored on a regular basis for all ~~systems~~ PWSs to assess UVT variability. (3-24-22)( )

n. A single train with a standby reactor or a sufficient number of parallel ultraviolet treatment devices ~~shall must~~ be installed to ensure that adequate disinfection is provided when one unit is out of service. The Department may approve an alternate method that provides adequate disinfection such as standby chlorination. Any ~~system~~ PWS that produces water on an irregular schedule may provide documentation for the Department's review and approval that a single reactor ~~would be is~~ an acceptable design by demonstrating there ~~would be is~~ adequate ~~for~~ time for maintenance and cleaning during operation shutdowns. (3-24-22)( )

o. No bypass of the ultraviolet treatment process may be installed unless an alternate method of providing adequate disinfection is provided. ( )

**05. Controls.** ( )

a. A delay mechanism ~~shall must~~ be installed to provide sufficient lamp warm-up prior to allowing water to flow from the ultraviolet treatment unit. (3-24-22)( )

b. An automatic shutdown ~~shall must~~ be designed to activate the shutdown valve in cases where the ultraviolet light dose falls below the approved design dose or outside of the validated specifications. (3-24-22)( )

**06. Reliability.** The ~~system~~ PWS must be capable of producing the plant design capacity at all times. (3-24-22)( )

a. ~~Standby equipment.~~ Unless otherwise approved by the Department ~~based on documentation provided by the design engineer~~ and in accordance with Subsection 529.04.n., a minimum of two (2) reactors is required to maintain disinfection when one unit is taken out of service. Each reactor must be sized to deliver the required UV dose under the operating conditions of flow and UVT that occur at the plant. The conditions ~~shall~~ **must** fall within the validated range of the reactor as determined during validation testing. (3-24-22)( )

b. ~~Power supply.~~ The quality and reliability of the power supply ~~shall~~ **must** be analyzed and back-up power supplies ~~shall~~ **will** be discussed in the contingency plan. (3-24-22)( )

c. ~~Validated operating conditions.~~ If UVT is above the validated range of UVT, the UV dose monitoring algorithm ~~shall~~ **must** default to the maximum of the validated range. If UVT is below the validated range, the UV system operation ~~shall~~ **must** be recorded as outside of the validated operating conditions. When UVT falls outside of ranges identified in the validated operating conditions, the contingency plan ~~shall~~ **will** be enacted if UVT is part of the dose monitoring strategy. (3-24-22)( )

d. ~~Contingency plan.~~ A contingency plan for total UV disinfection failure, loss of power, or in the event that water quality changes produce water quality unsuitable for UV disinfection ~~shall~~ **must** be described in the ~~preliminary engineering report~~ **PER**. (3-24-22)( )

07. **Monitoring.** ~~Water systems~~ **PWSs** using UV light must monitor for the parameters necessary to demonstrate operation within the validated conditions of the required UV dose. **PWSs owners** must check the calibration of UV sensors and online UVT monitors and recalibrate in accordance with a protocol approved by the Department. At a minimum, the following parameters must be monitored: (3-24-22)( )

a. ~~Flow rate.~~ If the flow rate is below the validated range, then the UV dose monitoring algorithm ~~shall~~ **must** default to the validated range. If the flow rate is above the validated range, then the UV system operation ~~shall~~ **will** be recorded as outside of the validated operating conditions; (3-24-22)( )

b. UV intensity as measured by UV sensors; ( )

c. UVT if UVT is part of the dose monitoring strategy; and ( )

d. Lamp status. ( )

08. **Alarms.** The settings or predetermined set points for the alarms ~~shall~~ **must** be specified in the ~~preliminary engineering report~~ **PER**. The report ~~shall~~ **must** also specify the alarms that ~~shall~~ **will** activate the contingency plan response. At a minimum, the following alarms are required: (3-24-22)( )

a. Low UV intensity; ( )

b. High turbidity if required by the Department; ( )

c. Low UVT; ( )

d. Low UV dose; ( )

e. Lamp failure; ( )

f. UVT monitor failure; ( )

g. UV sensor failure; ( )

h. Low water level; and ( )

i. High flow rate. ( )



**09. Initial Startup.** The following items ~~shall~~ **must** be tested and verified before UV disinfected water is distributed: (3-24-22)( )

- a. Electrical components; ( )
- b. Water level; ( )
- c. Flow split between reactor trains if applicable; ( )
- d. Controls and alarms; and ( )
- e. Instrument calibration. ( )

**10. Operation and Maintenance Manual.** A project specific operation and maintenance manual ~~shall~~ **must** be provided as required in Subsection 501.12. See definition of Operation and Maintenance Manual in Section 003 for the typical contents of an operation and maintenance manual and the included operations plan. The operations plan in the operation and maintenance manual ~~shall~~ **must** include, but is not limited to, the following information: (3-24-22)( )

- a. ~~Lamp aging and replacement intervals.~~ Lamp replacement intervals may be based on the degree of lamp aging as indicated by the UV sensors; (3-24-22)( )
- b. Lamp fouling analysis and cleaning procedures; ( )
- c. Lamp replacement; and ( )
- d. Lamp breakage. ( )

**530. ~~FACILITY AND DESIGN STANDARDS:~~ DISINFECTION OF DRINKING WATER, DISINFECTING AGENTS.**

~~Disinfection may be accomplished~~ **PWS owners may accomplish** with gas and liquid chlorine, calcium or sodium hypochlorites, chlorine dioxide, ozone, or ultraviolet light. Other disinfecting agents will be considered, providing reliable application equipment is available and testing procedures for a residual are recognized in “Standard Methods for the Examination of Water and Wastewater,” referenced in Subsection 002.02, or an equivalent means of measuring effectiveness exists. The required amount of primary disinfection needed ~~shall~~ **will** be specified by the Department. Consideration must be given to the formation of disinfection by-products (DBP) when selecting the disinfectant. See Section 531, ~~Facility Design Standards~~ Design Standards for Chemical Application. For ~~public water systems~~ **PWSs** using only ground-water and that voluntarily chlorinate, see Subsection 552.04. (3-24-22)( )

**01. Chlorination.** ( )

a. In addition to the requirements of Section 531, chlorination equipment ~~shall~~ **must** meet the following requirements: (3-24-22)( )

- i. Solution-feed gas chlorinators or hypochlorite feeders of the positive displacement type must be provided. ( )
- ii. Standby or backup equipment of sufficient capacity ~~shall~~ **will** be available to replace the largest unit. Spare parts ~~shall~~ **will** be on hand to replace parts subject to wear and breakage. (3-24-22)( )
- iii. Automatic proportioning chlorinators are required where the rate of flow or chlorine demand is not reasonably constant. ( )
- iv. Each eductor (submerged jet pump) must be selected for the point of application with particular attention given to the quantity of chlorine to be added, the maximum injector waterflow, the total discharge back pressure, the injector operating pressure, and the size of the chlorine solution line. ( )



v. The chlorine solution injector/diffuser must be compatible with the point of application to provide a rapid and thorough mix with all the water being treated. ( )

vi. Automatic switch-over of chlorination treatment units ~~shall~~ will be provided, where necessary, to assure continuous disinfection. (3-24-22)( )

b. Effective contact time and point of application requirements are as follows: ( )

i. Effective contact time sufficient to achieve the inactivation of target pathogens under the expected range of raw water pH and temperature variation must be demonstrated through tracer studies or other evaluations or calculations acceptable to the Department. Improving Clearwell Design for CT Compliance, referenced in Section 002.02, contains information that may be used as guidance for these calculations. Additional baffling can be added to new or existing basins to minimize short circuiting and increase contact time. ( )

ii. At least two (2) contactors ~~shall~~ must be provided which are each capable of providing the required effective contact time at one-half (1/2) of the plant design capacity. Alternatively, a single contactor that can provide effective contact time at plant design capacity may be designed with separate sections and bypass piping to allow sections to be cleaned or maintained individually during low flow conditions. Any ~~system~~ PWS that produces water on an irregular schedule may provide documentation for the Department's review and approval that a single contactor ~~would be~~ is an acceptable design by demonstrating there ~~would be~~ is adequate time for maintenance and cleaning during operation shutdowns. (3-24-22)( )

iii. At plants treating surface water, except slow sand filtration systems: (3-24-22)

(+) ~~Unless otherwise approved by the Department, in addition to the injection point prior to the disinfection contact tank, injection points shall, including all appurtenant chemical feed piping, must~~ also be provided for applying the disinfectant to the raw water, settled water, and water entering the distribution system. (3-24-22)( )

(2) ~~Unless otherwise approved by the Department, chemical piping or tubing shall be installed from the disinfectant feed system to each injection system during the initial construction.~~ (3-24-22)

iv. For pipeline contactors, provision ~~shall~~ must be made to drain accumulated sediment from the bottom of the contactor if the discharge from the contactor is not located at the bottom. (3-24-22)( )

c. Chlorine residual test equipment recognized in the "Standard Methods for the Examination of Water and Wastewater," referenced in Subsection 002.02, ~~shall~~ must be provided for use by the operator. All surface water treatment plants that serve a population greater than three thousand three hundred (3,300) must have equipment to measure chlorine residuals continuously entering the distribution system. A sample tap ~~shall~~ must be provided to measure chlorine residual and ~~shall~~ will be located at a point after receiving the required contact time and at or prior to the first service connection. (3-24-22)( )

d. Chlorinator piping requirements: ( )

i. ~~Cross-connection protection:~~ The chlorinator water supply piping ~~shall~~ must be designed to prevent contamination of the treated water supply by sources of questionable quality. At all facilities treating surface water, pre- and post-chlorination systems must be independent to prevent possible siphoning of partially treated water into the clear well. The water supply to each eductor ~~shall~~ must have a separate shut-off valve. No master shut-off valve will be allowed. (3-24-22)( )

ii. The pipes carrying elemental liquid or dry gaseous chlorine under pressure must be Schedule 80 seamless steel tubing or other materials recommended by the Chlorine Institute (never use PVC). Rubber, PVC, polyethylene, or other materials recommended by the Chlorine Institute must be used for chlorine solution piping and fittings. Nylon products are not acceptable for any part of the chlorine solution piping system. ( )

02. **Disinfection with Ozone.** ~~Systems~~ PWSs that are required to maintain a disinfectant residual in the

distribution system ~~shall~~ **must** supplement ozone disinfection with a chemical disinfectant. (3-24-22)( )

a. The following are requirements for feed gas preparation: ( )

i. Feed gas can be air, oxygen enriched air, or high purity oxygen. Sources of high purity oxygen include purchased liquid oxygen conforming with AWWA Standard B-304; on site generation using cryogenic air separation; or temperature, pressure or vacuum swing (adsorptive separation) technology. In all cases, the design engineer must ensure that the maximum dew point of -76°F (-60°C) will not be exceeded at any time. ( )

ii. Air compression: ( )

(1) Air compressors ~~shall~~ **will** be of the liquid-ring or rotary lobe, oil-less, positive displacement type for smaller systems or dry rotary screw compressors for larger systems. (3-24-22)( )

(2) The air compressors ~~shall~~ **will** have the capacity to simultaneously provide for maximum ozone demand, provide the air flow required for purging the desiccant dryers (where required) and allow for standby capacity. (3-24-22)( )

(3) Air feed for the compressor ~~shall~~ **will** be drawn from a point protected from rain, condensation, mist, fog and contaminated air sources to minimize moisture and hydrocarbon content of the air supply. (3-24-22)( )

(4) A compressed air after-cooler, entrainment separator, or a combination of the two (2) with automatic drain ~~shall~~ **will** be provided prior to the dryers to reduce the water vapor. (3-24-22)( )

(5) A back-up air compressor must be provided so that ozone generation is not interrupted in the event of a break-down. ( )

iii. Air drying: ( )

(1) Dry, dust-free and oil-free feed gas must be provided to the ozone generator. Dry gas is essential to prevent formation of nitric acid, to increase the efficiency of ozone generation and to prevent damage to the generator dielectrics. Sufficient drying to a maximum dew point of -76°F (-60°C) must be provided at the end of the drying cycle. ( )

(2) Drying for high pressure systems may be accomplished using heatless desiccant dryers only. For low pressure systems, a refrigeration air dryer in series with heat-reactivated desiccant dryers ~~shall~~ **will** be used. (3-24-22)( )

(3) A refrigeration dryer capable of reducing inlet air temperature to 40°F (4°C) ~~shall~~ **will** be provided for low pressure air preparation systems. The dryer can be of the compressed refrigerant type or chilled water type. (3-24-22)( )

(4) For heat-reactivated desiccant dryers, the unit ~~shall~~ **must** contain two (2) desiccant filled towers complete with pressure relief valves, two (2) four-way valves and a heater. In addition, external type dryers ~~shall~~ **must** have a cooler unit and blowers. The size of the unit ~~shall~~ **will** be such that the specified dew point will be achieved during a minimum adsorption cycle time of sixteen (16) hours while operating at the maximum expected moisture loading conditions. (3-24-22)( )

(5) Multiple air dryers ~~shall~~ **will** be provided so that the ozone generation is not interrupted in the event of dryer breakdown. (3-24-22)( )

(6) Each dryer ~~shall~~ **will** be capable of venting “dry” gas to the atmosphere, prior to the ozone generator, to allow start-up when other dryers are “on-line.” (3-24-22)( )

iv. Air filters: ( )

(1) Air filters ~~shall will~~ be provided on the suction side of the air compressors, between the air compressors and the dryers and between the dryers and the ozone generators. (3-24-22)( )

(2) The filter before the desiccant dryers ~~shall will~~ be of the coalescing type and be capable of removing aerosol and particulates larger than 0.3 microns in diameter. The filter after the desiccant dryer ~~shall will~~ be of the particulate type and be capable of removing all particulates greater than 0.1 microns in diameter, or smaller if specified by the generator manufacturer. (3-24-22)( )

v. Piping in the air preparation system can be common grade steel, seamless copper, stainless steel or galvanized steel. The piping must be designed to withstand the maximum pressures in the air preparation system. ( )

b. The following requirements apply to the ozone generator: ( )

i. Capacity. ( )

(1) The production rating of the ozone generators ~~shall must~~ be stated in pounds per day and kWhr per pound at a maximum cooling water temperature and maximum ozone concentration. (3-24-22)( )

(2) The design ~~shall will~~ ensure that the minimum concentration of ozone in the generator exit gas will not be less than one (1) percent (by weight). (3-24-22)( )

(3) Generators ~~shall will~~ be sized to have sufficient reserve capacity so that the ~~system PWS~~ does not operate at peak capacity for extended periods of time resulting in premature breakdown of the dielectrics. (3-24-22)( )

(4) The production rate of ozone generators will decrease as the temperature of the coolant increases. If there is to be a variation in the supply temperature of the coolant throughout the year, then pertinent data ~~shall will~~ be used to determine production changes due to the temperature change of the supplied coolant. The design ~~shall will~~ ensure that the generators can produce the required ozone at maximum coolant temperature. (3-24-22)( )

(5) Appropriate ozone generator backup equipment must be provided. ( )

ii. ~~Electrical~~—The generators can be low, medium or high frequency type. Specifications ~~shall will~~ require that the transformers, electronic circuitry and other electrical hardware be proven, high quality components designed for ozone service. (3-24-22)( )

iii. ~~Cooling~~—Adequate cooling ~~shall must~~ be provided. The cooling water must be properly treated to minimize corrosion, scaling and microbiological fouling of the water side of the tubes. Where cooling water is treated, cross connection control ~~shall must~~ be provided to prevent contamination of the potable water supply. (3-24-22)( )

iv. ~~Materials~~—To prevent corrosion, the ozone generator shell and tubes ~~shall must~~ be constructed of Type 316L stainless steel. (3-24-22)( )

c. The following requirements apply to ozone contactors: ( )

i. Bubble diffusers. ( )

(1) Where disinfection is the primary application, a minimum of two (2) contact chambers, each equipped with baffles to prevent short circuiting and induce countercurrent flow, ~~shall will~~ be provided. Ozone ~~shall must~~ be applied using porous-tube or dome diffusers. (3-24-22)( )

(2) The minimum contact time ~~shall will~~ be ten (10) minutes. A shorter contact time (CT) may be approved by the Department if justified by appropriate design and “CT” considerations. (3-24-22)( )

(3) Where taste and odor control is of concern, multiple application points and contactors ~~shall will~~ be

considered. (3-24-22)( )

(4) Contactors ~~shall will~~ be separate closed vessels that have no common walls with adjacent rooms. The contactor must be kept under negative pressure and sufficient ozone monitors ~~shall will~~ be provided to protect worker safety. (3-24-22)( )

(5) Contact vessels can be made of reinforced concrete, stainless steel, fiberglass or other material which will be stable in the presence of residual ozone and ozone in the gas phase above the water level. If contact vessels are made of reinforced concrete, all reinforcement bars ~~shall must~~ be covered with a minimum of one and one-half (1.5) inches of concrete. (3-24-22)( )

(6) Where necessary, a system ~~shall is to~~ be provided between the contactor and the off-gas destruct unit to remove froth from the air and return the other to the contactor or other location acceptable to the reviewing authority Department. If foaming is expected to be excessive, then a potable water spray system ~~shall must~~ be placed in the contactor head space. (3-24-22)( )

(7) All openings into the contactor for pipe connections, hatchways, etc. ~~shall must~~ be properly sealed using welds or ozone resistant gaskets such as Teflon or Hypalon. (3-24-22)( )

(8) Multiple sampling ports ~~shall must~~ be provided to enable sampling of each compartment's effluent water and to confirm "CT" calculations. (3-24-22)( )

(9) A pressure/vacuum relief valve ~~shall must~~ be provided in the contactor and piped to a location where there will be no damage to the destruction unit. (3-24-22)( )

(10) The depth of water in bubble diffuser contactors ~~shall must~~ be a minimum of eighteen (18) feet. The contactor ~~shall must~~ also have a minimum of three (3) feet of freeboard to allow for foaming. (3-24-22)( )

(11) All contactors ~~shall will~~ have provisions for cleaning, maintenance and drainage of the contactor. Each contactor compartment ~~shall must~~ also be equipped with an access hatchway. (3-24-22)( )

(12) Aeration diffusers ~~shall must~~ be fully serviceable by either cleaning or replacement. (3-24-22)( )

ii. Other contactors, such as the venturi or aspirating turbine mixer contactor, may be approved by the Department provided adequate ozone transfer is achieved and the required contact times and residuals can be met and verified. ( )

d. The following requirements apply to ozone destruction units: ( )

i. A system for treating the final off-gas from each contactor must be provided in order to meet safety and air quality standards. Acceptable systems include thermal destruction and thermal/catalytic destruction units. ( )

ii. The maximum allowable ozone concentration in the discharge is 0.1 ppm (by volume). ( )

iii. At least two (2) units ~~shall will~~ be provided which are each capable of handling the entire gas flow. (3-24-22)( )

iv. Exhaust blowers ~~shall must~~ be provided in order to draw off-gas from the contactor into the destruct unit. (3-24-22)( )

v. Catalysts must be protected from froth, moisture and other impurities which may harm the catalyst. ( )

vi. The catalyst and heating elements ~~shall will~~ be located where they can easily be reached for maintenance. (3-24-22)( )

- e. ~~Piping materials:~~ Only low carbon 304L and 316L stainless steels ~~shall~~ may be used for ozone service with 316L preferred. (3-24-22)( )
- f. The following requirements apply to joints and connections: ( )
- i. Connections on piping used for ozone service are to be welded where possible. ( )
- ii. Connections with meters, valves or other equipment are to be made with flanged joints with ozone resistant gaskets, such as Teflon or Hypalon. Screwed fittings ~~shall~~ may not be used because of their tendency to leak. (3-24-22)( )
- iii. A positive closing plug or butterfly valve plus a leak-proof check valve ~~shall~~ must be provided in the piping between the generator and the contactor to prevent moisture reaching the generator. (3-24-22)( )
- g. The following ~~requirements apply to~~ instrumentation must be provided: (3-24-22)( )
- i. Pressure gauges ~~shall be provided~~ at the discharge from the air compressor, at the inlet to the refrigeration dryers, at the inlet and outlet of the desiccant dryers, at the inlet to the ozone generators and contactors, and at the inlet to the ozone destruction unit. (3-24-22)( )
- ii. ~~Each generator shall have a~~ Δ trip which shuts down the generator when the wattage exceeds a certain preset level. (3-24-22)( )
- iii. Dew point monitors ~~shall be provided~~ for measuring the moisture of the feed gas from the desiccant dryers. Where there is potential for moisture entering the ozone generator from downstream of the unit or where moisture accumulation can occur in the generator during shutdown, post-generator dew point monitors ~~shall~~ must be used. (3-24-22)( )
- iv. Air flow meters ~~shall be provided~~ for measuring air flow from the desiccant dryers to each of the other ozone generators, air flow to each contactor, and purge air flow to the desiccant dryers. (3-24-22)( )
- v. Temperature gauges ~~shall be provided~~ for the inlet and outlet of the ozone cooling water and the inlet and outlet of the ozone generator feed gas and, if necessary, for the inlet and outlet of the ozone power supply cooling water. (3-24-22)( )
- vi. Water flow meters ~~shall be installed~~ to monitor the flow of cooling water to the ozone generators and, if necessary, to the ozone power supply. (3-24-22)( )
- vii. Ozone monitors ~~shall be installed~~ to measure zone concentration in both the feed-gas and off-gas from the contactor and in the off-gas from the destruct unit. For disinfection systems, monitors ~~shall also be provided~~ for monitoring ozone residuals in the water. The number and location of ozone residual monitors ~~shall~~ must be such that the amount of time that the water is in contact with the ozone residual can be determined. (3-24-22)( )
- viii. A minimum of one ambient ozone monitor ~~shall be~~ installed in the vicinity of the contactor and a minimum of one ~~shall be~~ installed in the vicinity of the generator. Ozone monitors ~~shall also~~ must be installed in any areas where ozone gas may accumulate. (3-24-22)( )
- h. Safety requirements are as follows: ( )
- i. The maximum allowable ozone concentration in the air to which workers may be exposed must not exceed one-tenth part per million (0.1 ppm) by volume. ( )
- ii. Noise levels resulting from the operating equipment of the ozonation system ~~shall~~ must be controlled to within acceptable limits by special room construction and equipment isolation. (3-24-22)( )
- iii. PWS owners must provide eEmergency exhaust fans ~~must be provided~~ in the rooms containing the

ozone generators to remove ozone gas if leakage occurs. (3-24-22)( )

iv. PWS owners must post a sign ~~shall be posted~~ indicating “No smoking, oxygen in use” at all entrances to the treatment plant. In addition, no flammable or combustible materials ~~shall may~~ be stored within the oxygen generator areas. (3-24-22)( )

**03. Disinfection with Chlorine Dioxide.** Chlorine dioxide may be considered as a primary and residual disinfectant, a pre-oxidant to control tastes and odors, to oxidize iron and manganese, and to control hydrogen sulfide and phenolic compounds. When choosing chlorine dioxide, consideration must be given to formation of the regulated by-products, chlorite and chlorate. ( )

a. Chlorine dioxide generation equipment ~~shall must~~ be factory assembled pre-engineered units with a minimum efficiency of ninety-five (95) percent. The excess free chlorine ~~shall may~~ not exceed three (3) percent of the theoretical stoichiometric concentration required. (3-24-22)( )

b. Other design requirements include: ( )

i. The design ~~shall must~~ comply with all applicable portions of Subsections 530.01.a. through 530.01.d. (3-24-22)( )

ii. The maximum residual disinfectant level allowed ~~shall be is~~ zero point eight (0.8) milligrams per liter (mg/l), even for short term exposures. (3-24-22)( )

iii. Notification of a change in disinfection practices and the schedule for the changes ~~shall must~~ be made known to the public; particularly to hospitals, kidney dialysis facilities and fish breeders, as chlorine dioxide and its by-products may have effects similar to chloramines. (3-24-22)( )

**04. Other Disinfecting Agents.** Proposals for use of disinfecting agents other than those listed ~~shall must~~ be submitted to the Department for approval ~~prior to preparation of final plans and specifications. in the preliminary engineering report required under Section 503.~~ (3-24-22)( )

**531. ~~FACILITY AND DESIGN STANDARDS:~~ DESIGN STANDARDS FOR CHEMICAL APPLICATION.**

**01. General Equipment Design.** General equipment design ~~shall must~~ be such that: (3-24-22)( )

a. Feeders will be able to supply, at all times, the necessary amounts of chemicals at an accurate rate, throughout the range of feed. ( )

b. Chemical-contact materials and surfaces are resistant to the aggressiveness of the chemical solution. ( )

c. Corrosive chemicals are introduced in such a manner as to minimize potential for corrosion. ( )

d. Chemicals that are incompatible are not stored or handled together. At facilities where more than one (1) chemical is stored or handled, tanks and pipelines ~~shall must~~ be clearly labeled to identify the chemical they contain. (3-24-22)( )

e. All chemicals are conducted from the feeder to the point of application in separate conduits. ( )

f. Chemical feeders are as near as practical to the feed point. ( )

g. Chemical feeders and pumps ~~shall must~~ operate at no lower than twenty percent (20%) of the feed range unless two fully independent adjustment mechanisms such as pump pulse rate and stroke length are fitted, ~~w~~hen the pump ~~shall must~~ operate at no lower than ten percent (10%) of the rated maximum. (3-24-22)( )

- h. Spare parts ~~shall~~ must be on hand for parts of feeders that are subject to frequent wear and damage. (3-24-22)( )
- i. Redundant chemical feeders with automatic switchover ~~shall~~ must be provided when necessary to ensure adequate treatment. If the water treatment system includes at least two (2) process trains of equipment so that the plant design capacity can be maintained with any component out of service, redundant chemical feeders are not required on each process train. (3-24-22)( )
- 02. Facility Design.** ( )
- a. Where chemical feed is necessary for the protection of the supply, such as disinfection, coagulation or other essential processes, a minimum of two feeders ~~shall~~ must be provided and a separate feeder ~~shall~~ will be used for each chemical applied. (3-24-22)( )
- b. Chemical application control systems ~~shall~~ must meet the following requirements: (3-24-22)( )
- i. Feeders may be manually or automatically controlled, with automatic controls being designed so as to allow override by manual controls. ( )
- ii. Chemical feeders ~~shall~~ will be ~~controlled~~ energized by a flow sensing device so that injection of the chemicals will not continue when the flow of water stops. (3-24-22)( )
- iii. Automatic proportioning ~~chlorinators~~ chemical feeders are required where the rate of flow ~~or chlorine demand~~ is not reasonably constant. (3-24-22)( )
- iv. A means to measure water flow must be provided in order to determine chemical feed rates. ( )
- v. Provisions ~~shall~~ will be made for measuring the quantities of chemicals used. (3-24-22)( )
- vi. Weighing scales ~~shall~~ will be provided for weighing cylinders at all plants utilizing chlorine gas, fluoride solution feed. (3-24-22)( )
- vii. Weighing scales ~~shall~~ must be capable of providing reasonable precision in relation to average daily dose. (3-24-22)( )
- viii. Where conditions warrant, for example with rapidly fluctuating intake turbidity, coagulant and coagulant aid addition may be made according to turbidity, streaming current or other sensed parameter. ( )
- c. Dry chemical feeders ~~shall~~ will measure chemicals volumetrically or gravimetrically, provide adequate solution water and agitation of the chemical in the solution pot, and completely enclose chemicals to prevent emission of dust to the operating room. (3-24-22)( )
- d. Positive displacement type solution feed pumps must be capable of operating at the required maximum head conditions found at the point of injection. ( )
- e. Liquid chemical feeders ~~shall~~ must be such that chemical solutions cannot be siphoned or overfed into the water supply, by assuring discharge at a point of positive pressure, or providing vacuum relief, or providing a suitable air gap, or providing other suitable means or combinations as necessary. (3-24-22)( )
- f. Cross connection control must be provided to assure that the following requirements are satisfied. ( )
- i. The service water lines discharging to solution tanks ~~shall~~ must be properly protected from backflow. (3-24-22)( )



- ii. No direct connection exists between any sewer and a drain or overflow from the feeder, solution chamber or tank by providing that all drains terminate at least six (6) inches or two pipe diameters, whichever is greater, above the overflow rim of a receiving sump, conduit or waste receptacle. ( )
- g. Chemical feed equipment ~~shall~~ must be readily accessible for servicing, repair, and observation of operation. (3-24-22)( )
- h. In-plant water supply for chemical mixing ~~shall~~ must be: (3-24-22)( )
- i. Ample in quantity and adequate in pressure. ( )
- ii. Provided with means for measurement when preparing specific solution concentrations by dilution. ( )
- iii. Properly treated for hardness, when necessary. ( )
- iv. Properly protected against backflow. ( )
- v. Obtained from a location sufficiently downstream of any chemical feed point to assure adequate mixing. ( )
- i. Chemical storage facilities ~~shall~~ must satisfy the following requirements: (3-24-22)( )
- i. Storage tanks and pipelines for liquid chemicals ~~shall~~ must be specified for use with individual chemicals and not used for different chemicals. Off-loading areas must be clearly labeled to prevent accidental cross-contamination. (3-24-22)( )
- ii. Chemicals ~~shall~~ will be stored in covered or unopened shipping containers, unless the chemical is transferred into an approved storage unit. (3-24-22)( )
- j. Bulk liquid storage tanks ~~shall~~ must comply with the following requirements: (3-24-22)( )
- i. A means which is consistent with the nature of the chemical ~~solution shall~~ stored will be provided in a ~~solution~~ liquid storage tank to maintain a uniform strength of solution. Continuous agitation ~~shall~~ will be provided to maintain slurries in suspension. (3-24-22)( )
- ii. Means ~~shall~~ will be provided to measure the liquid level in the tank. (3-24-22)( )
- iii. Bulk liquid storage tanks ~~shall~~ will be kept covered. Bulk liquid storage tanks with access openings ~~shall~~ will have such openings curbed and fitted with overhanging covers. (3-24-22)( )
- iv. Subsurface locations for bulk liquid storage tanks ~~shall~~ will be free from sources of possible contamination, and assure positive drainage for ground-waters, accumulated water, chemical spills and overflows. (3-24-22)( )
- v. Bulk liquid storage tanks ~~shall~~ will be vented, but ~~shall~~ may not vent through vents common with other chemicals or day tanks. Acid storage tanks must be vented to the outside atmosphere, but not through vents in common with other chemicals or day tanks. (3-24-22)( )
- vi. Each bulk liquid storage tank ~~shall~~ will be provided with a valved drain, protected against backflow and cross-connections. (3-24-22)( )
- vii. Bulk liquid storage tanks ~~shall~~ will have an overflow, when provided, that is turned downward with the end screened with a twenty-four (24) mesh or similar non-corrodible screen, have a free fall discharge, and be located where noticeable. (3-24-22)( )



~~viii.~~ Where chemical feed is necessary for the protection of the supply, a means to assure continuity of chemical supply while servicing a bulk liquid storage tank will be provided. ( )

~~viii~~ix. Bulk liquid storage tanks ~~shall will~~ be provided with secondary containment so that chemicals from equipment failure, spillage, or accidental drainage ~~shall be fully contained will not enter the water in conduits, treatment, or storage basins.~~ A common receiving basin may be provided for each group of compatible chemicals. The bulk liquid storage tank basin or the common receiving basin ~~shall will~~ provide a secondary containment volume sufficient to hold one hundred ten percent (110%) of the volume of the largest storage tank. Piping ~~shall will~~ be designed to minimize or contain chemical spills in the event of pipe ruptures. (3-24-22)( )

~~ix.~~ Where chemical feed is necessary for the protection of the supply, a means to assure continuity of chemical supply while servicing a bulk liquid storage tank shall be provided. (3-24-22)

~~k.~~ Day tanks are subject to the requirements in Subsections 531.02.k.i. through 531.02.k.iv. will be provided where bulk storage of liquid chemical is provided. However, upon approval by the Department, chemicals may be fed directly from shipping containers no larger than fifty-five (55) gallons. For the purposes of Section 531, day tanks are defined as liquid chemical tanks holding no more than a thirty (30) hour chemical supply. (3-24-22)( )

~~i.~~ Day tanks shall be provided where bulk storage of liquid chemicals are provided. The Department may allow chemicals to be fed directly from shipping containers no larger than fifty-five (55) gallons are subject to the requirements in Subsections 531.02.j.i. through 531.02.j.vii. except shipping containers do not require overflow pipe and drains. (3-24-22)( )

~~ii.~~ Day tanks shall meet all the requirements of Subsection 531.02.j., with the exception of Subsection 531.02.j.viii. Shipping containers do not require overflow pipes or drains as required by Subsection 531.02.j. and are not subject to the requirements of Subsection 531.02.j.viii. (3-24-22)

~~iii.~~ Where feasible, secondary containment shall will be provided so that chemicals from equipment failure, spillage, or accidental drainage of day tanks shall will be fully contained. A common receiving basin may be provided for each group of compatible chemicals. The common receiving basin shall will provide a secondary containment volume sufficient to hold the volume of the largest storage tank. If secondary containment is not feasible, day tanks shall will be located and protective curbing provided so that chemicals from equipment failure, spillage, or accidental drainage of day tanks shall will not enter the water in conduits, treatment, or storage basins. Secondary containment is not required for a day tank if an Idaho licensed professional engineer demonstrates to the Department that the chemical concentration and volume, if spilled, will not be a safety hazard to employees, will not be hazardous to the public health, and will not harm the environment. (3-24-22)( )

~~iv~~iii. Day tanks and the tank refilling line entry points shall will be clearly labeled with the name of the chemical contained. (3-24-22)( )

iv. Filling of day tanks may not be automated unless otherwise approved by the Department. ( )

l. Provisions shall must be made for measuring quantities of chemicals used to prepare feed solutions. (3-24-22)( )

m. Vents from feeders, storage facilities and equipment exhaust shall must discharge to the outside atmosphere above grade and remote from air intakes. (3-24-22)( )

**03. Chemicals.** Chemical shipping containers shall must be fully labeled to include chemical name, purity and concentration, supplier name and address, and evidence of ANSI/NSF certification where applicable. (3-24-22)( )

**04. Safety Requirements for Chemical Facilities.** ( )

a. The following requirements apply to chlorine gas feed and storage rooms: ( )

- i. Each storage room ~~shall will~~ be enclosed and separated from other operating areas. They ~~shall will~~ be constructed in such a manner that all openings between the chlorine room and the remainder of the plant are sealed, and provided with doors equipped with panic hardware, assuring ready means of exit and opening outward only to the building exterior. (3-24-22)( )
- ii. Each room ~~shall will~~ be provided with a shatter resistant inspection window installed in an interior wall. (3-24-22)( )
- iii. Each room ~~shall will~~ have a ventilating fan with a capacity which provides one (1) complete air change per minute when the room is occupied. Where this is not appropriate due to the size of the room, a lesser rate may be allowed by the Department on a site specific basis. (3-24-22)( )
- iv. The ventilating fan ~~shall will~~ take suction near the floor as far as practical from the door and air inlet, with the point of discharge ~~so~~ located as ~~not to contaminate~~ far away as possible from doors, air inlets to any rooms or structures ~~or occupied areas~~. Air inlets ~~shall will~~ be through louvers near the ceiling. (3-24-22)( )
- v. Louvers for chlorine room air intake and exhaust ~~shall will~~ facilitate airtight closure. (3-24-22)( )
- vi. Separate switches for the fan and lights ~~shall will~~ be located outside of the chlorine room and at the inspection window. Outside switches ~~shall will~~ be protected from vandalism. A signal light indicating fan operation ~~shall will~~ be provided at each entrance when the fan can be controlled from more than one (1) point. (3-24-22)( )
- vii. Vents from feeders and storage ~~shall will~~ discharge to the outside atmosphere, above grade. (3-24-22)( )
- viii. Where provided, floor drains ~~shall will~~ discharge to the outside of the building and ~~shall will~~ not be connected to any internal drainage systems or external drainage systems unless the external drainage systems drain to an approved discharge point. (3-24-22)( )
- ix. Chlorinator rooms ~~shall will~~ be heated to sixty degrees Fahrenheit (60°F) and be protected from excessive heat. Cylinders and gas lines ~~shall will~~ be protected from temperatures above that of the feed equipment. (3-24-22)( )
- x. Pressurized chlorine feed lines ~~shall may~~ not carry chlorine gas beyond the chlorinator room. (3-24-22)( )
- xi. Critical isolation valves ~~shall will~~ be conspicuously marked and access kept unobstructed. (3-24-22)( )
- xii. All chlorine rooms, buildings, and areas ~~shall will~~ be posted with a prominent danger sign warning of the presence of chlorine. (3-24-22)( )
- xiii. Full and empty cylinders of chlorine gas ~~shall will~~ be isolated from operating areas and stored in definitely assigned places away from elevators, stairs, or gangways. They ~~shall will~~ be restrained in position to prevent being knocked over or damaged by passing or falling objects. In addition, they ~~shall will~~ be stored in rooms separate from ammonia storage, out of direct sunlight, and at least twenty (20) feet from highly combustible materials. Cylinders ~~shall may~~ not be kept in unventilated enclosures such as lockers and cupboards. (3-24-22)( )
- b. Where acids and caustics are used, they ~~shall must~~ be kept in closed corrosion-resistant shipping containers or storage units. Acids and caustics ~~shall may~~ not be handled in open vessels, but ~~shall will~~ be pumped in undiluted form from original containers through suitable hose to the point of treatment or to a covered day tank. (3-24-22)( )
- c. ~~Sodium chlorite for chlorine dioxide generation~~. Proposals for the storage and use of sodium

chlorite ~~shall must~~ be approved by the Department prior to the preparation of final plans and specifications. Provisions ~~shall must~~ be made for proper storage and handling of sodium chlorite to eliminate any danger of fire or explosion associated with its oxidizing nature. (3-24-22)( )

i. Chlorite (sodium chlorite) ~~shall will~~ be stored by itself in a separate room. It must be stored away from organic materials. The storage structure ~~shall will~~ be constructed of noncombustible materials. If the storage structure must be located in an area where a fire may occur, water must be available to keep the sodium chlorite area cool enough to prevent heat-induced explosive decomposition of the chlorite. (3-24-22)( )

ii. Care ~~shall will~~ be taken to prevent spillage. An emergency plan of operation ~~shall will~~ be available for the clean up of any spillage. Storage drums ~~shall will~~ be thoroughly flushed prior to recycling or disposal. (3-24-22)( )

d. Where ammonium hydroxide is used, an exhaust fan ~~shall must~~ be installed to withdraw air from high points in the room and makeup air ~~shall must~~ be allowed to enter at a low point. The feed pump, regulators, and lines ~~shall must~~ be fitted with pressure relief vents discharging outside the building away from any air intake and with water purge lines leading back to the headspace of the bulk storage tank. (3-24-22)( )

e. Where anhydrous ammonia is used, the storage and feed systems (including heaters where required) ~~shall must~~ be enclosed and separated from other work areas and constructed of corrosion resistant materials. (3-24-22)( )

i. Pressurized ammonia feed lines ~~shall will~~ be restricted to the ammonia room. (3-24-22)( )

ii. An emergency air exhaust system, as described in Subsection 531.04.a., but with an elevated intake, ~~shall must~~ be provided in the ammonia storage room. (3-24-22)( )

iii. Leak detection systems ~~shall must~~ be fitted in all areas through which ammonia is piped. (3-24-22)( )

iv. Special vacuum breaker/regulator provisions must be made to avoid potentially violent results of backflow of water into cylinders or storage tanks. ( )

v. Consideration ~~shall must~~ be given to the provision of an emergency gas scrubber capable of absorbing the entire contents of the largest ammonia storage unit whenever there is a risk to the public as a result of potential ammonia leaks. (3-24-22)( )

**05. Operator Safety.** The Idaho General Safety and Health Standards, referenced in Subsection 002.02, may be used as guidance in designing facilities to ensure the safety of operators. ~~The following requirements are in addition to the requirements of Subsection 501.12.~~ Facilities must meet applicable regulations from the Occupational Health and Safety Administration. (3-24-22)( )

~~a. Respiratory protection equipment, meeting the requirements of the National Institute for Occupational Safety and Health (NIOSH) shall be available where chlorine gas is handled, and shall be stored at a convenient heated location, but not inside any room where chlorine is used or stored. The units shall use compressed air, have at least a thirty (30) minute capacity, and be compatible with or exactly the same as units used by the fire department responsible for the plant. (3-24-22)~~

~~b. Chlorine leak detection. A bottle of concentrated ammonium hydroxide (fifty-six (56) per cent ammonia solution) shall be available for chlorine leak detection. Where ton containers are used, a leak repair kit approved by the Chlorine Institute shall be provided. (3-24-22)~~

~~c. Protective equipment. (3-24-22)~~

~~i. At least one pair of rubber gloves, a dust respirator of a type certified by NIOSH for toxic dusts, an apron or other protective clothing, and goggles or face mask shall be provided for each operator. (3-24-22)~~

~~ii. A deluge shower and eyewashing device shall be installed where strong acids and alkalis are used or stored. A water holding tank that will allow water to come to room temperature shall be installed in the water line feeding the deluge shower and eyewashing device. Other methods of water tempering will be considered on an individual basis. (3-24-22)~~

~~iii. For chemicals other than strong acids and alkalis, an appropriate eye washing device or station shall be provided. (3-24-22)~~

~~iv. Other protective equipment shall be provided as necessary. (3-24-22)~~

**06. Design Requirements for Specific Applications.** In addition to Subsection 531.01 through 531.03, the following design requirements apply for the specific applications within Subsection 531.06 of this rule. ( )

**a. Sodium chlorite for chlorine dioxide generation.** Positive displacement feeders ~~shall will~~ be provided for sodium chlorite used for chlorine dioxide generation. Tubing for conveying sodium chlorite or chlorine dioxide solutions ~~shall must~~ be Type 1 PVC, polyethylene or materials recommended by the manufacturer. Chemical feeders may be installed in chlorine rooms if sufficient space is provided. Otherwise, facilities meeting the requirements of chlorine rooms ~~shall will~~ be provided. Feed lines ~~shall will~~ be installed in a manner to prevent formation of gas pockets and ~~shall will~~ terminate at a point of positive pressure. Check valves ~~shall will~~ be provided to prevent the backflow of chlorine into the sodium chlorite line. (3-24-22)( )

**b. Hypochlorite facilities shall must** meet the following requirements: (3-24-22)( )

i. Hypochlorite ~~shall will~~ be stored in the original shipping containers or in hypochlorite compatible containers. Storage containers or tanks ~~shall will~~ be sited out of the sunlight in a cool and ventilated area. (3-24-22)( )

ii. Stored hypochlorite ~~shall will~~ be pumped undiluted to the point of addition. Where dilution is unavoidable, deionized or softened water ~~shall will~~ be used unless otherwise approved by the Department. (3-24-22)( )

iii. Storage areas, tanks, and pipe work ~~shall will~~ be designed to avoid the possibility of uncontrolled discharges and a sufficient amount of appropriately selected spill absorbent ~~shall will~~ be stored on-site. (3-24-22)( )

iv. Hypochlorite feeders ~~shall will~~ be positive displacement pumps with compatible materials for wetted surfaces. (3-24-22)( )

v. To avoid air locking in smaller installations, small diameter suction lines ~~shall will~~ be used with foot valves and degassing pump heads. In larger installations flooded suction ~~shall will~~ be used with pipe work arranged to ease escape of gas bubbles. Calibration tubes or mass flow monitors which allow for direct physical checking of actual feed rates ~~shall will~~ be fitted. (3-24-22)( )

vi. Injectors ~~shall will~~ be made removable for regular cleaning where hard water is to be treated. (3-24-22)( )

**c.** When ammonium sulfate is used, the tank and dosing equipment contact surfaces ~~shall must~~ be made of corrosion resistant non-metallic materials. Provision ~~shall will~~ be made for removal of the agitator after dissolving the solid. The tank ~~shall will~~ be fitted with a lid and vented outdoors. Injection of the solution ~~should will~~ take place in the center of treated water flow at a location where there is high velocity movement. (3-24-22)( )

**d.** When aqua ammonia (ammonium hydroxide) is used, the feed pumps and storage ~~shall will~~ be enclosed and separated from other operating areas. The aqua ammonia room ~~shall will~~ be equipped as required for chlorinator rooms with the following changes: (3-24-22)( )

i. A corrosion resistant, closed, unpressurized tank ~~shall will~~ be used for bulk storage, vented through

an inert liquid trap to a high point outside and an incompatible connector, or lockout provisions ~~shall~~ will be made to prevent accidental addition of other chemicals to the storage tank. (3-24-22)( )

ii. The storage tank ~~shall~~ will be designed to avoid conditions where temperature increases cause the ammonia vapor pressure over the aqua ammonia to exceed atmospheric pressure. This capability can be provided by cooling/refrigeration or diluting or mixing the contents with water without opening the system. (3-24-22)( )

iii. The aqua ammonia ~~shall~~ will be conveyed direct from storage to the treated water stream injector without the use of a carrier water stream unless the carrier stream is softened. (3-24-22)( )

iv. The point of delivery to the main water stream ~~shall~~ will be placed in a region of turbulent water flow. (3-24-22)( )

v. Provisions ~~shall~~ will be made for easy access for removal of calcium scale deposits from the injector. (3-24-22)( )

**532. ~~FACILITY AND DESIGN STANDARDS:~~ DESIGN STANDARDS FOR SOFTENING.**

The softening process selected must be based upon the mineral qualities of the raw water and the desired finished water quality in conjunction with requirements for disposal of sludge or brine waste (see Section 540), cost of plant, cost of chemicals, and plant location. Applicability of the process chosen ~~shall~~ must be demonstrated. (3-24-22)( )

**01. Lime or Lime-Soda Process.** Rapid mix, flocculation, and sedimentation processes ~~shall~~ must meet the requirements of Section 520. In addition the following requirements must be met: (3-24-22)( )

a. When split treatment is used, an accurate means of measuring and splitting the flow must be provided. ( )

b. Rapid mix basins must provide not more than thirty (30) seconds detention time with adequate velocity gradients to keep the lime particles dispersed. ( )

c. Equipment for stabilization of water softened by the lime or lime-soda process is required, see Section 537. ( )

d. Mechanical sludge removal equipment ~~shall~~ will be provided in the sedimentation basin. (3-24-22)( )

e. Provisions must be included for proper disposal of softening sludges; see Section 540. ( )

f. The plant processes must be manually started following shut-down. ( )

**02. Cation Exchange Process.** ( )

a. Pre-treatment is required when the content of iron, manganese, or a combination of the two, is one milligram per liter (1 mg/L) or more. (3-24-22)( )

b. The units may be of pressure or gravity type, of either an upflow or downflow design. Automatic regeneration based on volume of water softened ~~shall~~ will be used unless manual regeneration is justified and is approved by the Department. A manual override ~~shall~~ will be provided on all automatic controls. (3-24-22)( )

c. Rate-of-flow controllers or the equivalent ~~shall~~ will be used to control the hydraulic loading of cation exchange units. (3-24-22)( )

d. The bottoms, strainer systems and support for the exchange resin ~~shall~~ will conform to the criteria provided for rapid rate gravity filters in Section 521. (3-24-22)( )

e. ~~Cross-Connection Control.~~ Backwash, rinse and air relief discharge pipes ~~shall~~ will be installed in

such a manner as to prevent any possibility of back-siphonage. (3-24-22)( )

f. A bypass must be provided around softening units to produce a blended water of desirable hardness. Totalizing meters must be installed on the bypass line and on each softener unit. The bypass line must have a shutoff valve. ( )

g. When the applied water contains a chlorine residual, the cation exchange resin ~~shall~~ must be a type that is not damaged by residual chlorine. (3-24-22)( )

h. Smooth-nose sampling taps must be provided for the collection of representative samples. The taps ~~shall~~ will be located to provide for sampling of the softener influent, effluent, blended water, and on the brine tank discharge piping. The sampling taps for the blended water ~~shall~~ will be at least twenty (20) feet downstream from the point of blending. Petcocks are not acceptable as sampling taps. (3-24-22)( )

i. Brine and salt storage tanks ~~shall~~ must meet the following requirements: (3-24-22)( )

i. Salt dissolving or brine tanks and wet salt storage tanks must be covered and must be corrosion-resistant. ( )

ii. The make-up water inlet must be protected from back-siphonage. ( )

iii. Wet salt storage basins must be equipped with manholes or hatchways for access and for direct dumping of salt from truck or railcar. Openings must be provided with raised curbs and watertight covers having overlapping edges similar to those required for finished water reservoirs. ( )

iv. Overflows, where provided, must be protected with twenty-four (24) mesh or similar non-corrodible screens, and must terminate with either a turned down bend having a proper free fall discharge or a self-closing flap valve. ( )

v. The salt ~~shall~~ will be supported on graduated layers of gravel placed over a brine collection system. (3-24-22)( )

vi. Alternative designs which are conducive to frequent cleaning of the wet salt storage tank may be considered. ( )

vii. An eductor may be used to transfer brine from the brine tank to the softeners. If a pump is used, a brine measuring tank or means of metering ~~shall~~ will be provided to obtain the proper dilution. (3-24-22)( )

j. Suitable disposal must be provided for brine waste; see Section 540. Where the volume of spent brine must be reduced, consideration may be given to using a part of the spent liquid concentrate for a subsequent regeneration. ( )

k. Pipes and contact materials must be resistant to the aggressiveness of salt. Plastic and red brass are acceptable piping materials. Steel and concrete must be coated with a non-leaching protective coating which is compatible with salt and brine. ( )

l. Bagged salt and dry bulk salt storage ~~shall~~ will be enclosed and separated from other operating areas in order to prevent damage to equipment. (3-24-22)( )

**533. ~~FACILITY AND DESIGN STANDARDS:~~ DESIGN STANDARDS FOR TASTE AND ODOR CONTROL.**

Provision ~~shall~~ must be made for the control of taste and odor. Chemicals ~~shall~~ must be added sufficiently ahead of other treatment processes to assure adequate contact time for an effective and economical use of the chemicals. Where severe taste and odor problems are encountered, in-plant studies, pilot plant studies, or both in-plant and pilot plant studies may be required. ~~See in accordance with~~ Subsection 501.19 ~~for general information on conducting pilot studies.~~ (3-24-22)( )



01. **Chlorination.** When using chlorination as a method of taste and odor control adequate contact time must be provided to complete the chemical reactions involved. ( )

02. **Chlorine Dioxide.** Provisions ~~shall~~ must be made for proper storing and handling of the sodium chlorite, so as to eliminate any danger of explosion. (3-24-22)( )

03. **Powdered Activated Carbon.** ( )

a. The PWS owner can add carbon ~~can be added~~ as a pre-mixed slurry or by means of a dry-feed machine as long as the carbon is properly wetted. (3-24-22)( )

b. Continuous agitation or resuspension equipment is necessary to keep the carbon from depositing in the slurry storage tank. ( )

c. ~~Provision shall be made~~ The PWS owner must provide for adequate dust control. (3-24-22)( )

d. The PWS owner must handle powdered activated carbon ~~shall be handled~~ as a potentially combustible material. (3-24-22)( )

04. **Granular Activated Carbon.** Replacement of anthracite with GAC may be considered as a control measure for geosmin and methyl isoborneol (MIB) taste and odors from algae blooms in surface water applications. Demonstration studies are required by the Department. ( )

05. **Copper Sulfate and Other Copper Compounds.** Continuous or periodic treatment of surface water with copper compounds to kill algae or other growths ~~shall~~ must be controlled to prevent copper in excess of one point zero (1.0) milligrams per liter as copper in the plant effluent or distribution system. Care ~~shall~~ must be taken to assure an even distribution of the chemical within the treatment area. (3-24-22)( )

06. **Potassium Permanganate.** Application of potassium permanganate may be considered, providing the treatment ~~shall~~ will be designed so that the products of the reaction are not visible in the finished water. (3-24-22)( )

07. **Ozone.** Ozonation may be used as a means of taste and odor control. Adequate contact time must be provided to complete the chemical reactions involved. ( )

08. **Other Methods.** Other methods of taste and odor control ~~shall~~ may be made only after pilot plant tests and approval of the Department. (3-24-22)( )

**534. ~~FACILITY AND DESIGN STANDARDS: AERATION PROCESSES.~~**

~~Public water systems~~ PWS owners that install aeration treatment are subject to ~~the Rules of the Department of Environmental Quality, IDAPA 58.01.01, "Rules for the Control of Air Pollution in Idaho."~~ The ~~system~~ PWS owner or the design engineer ~~shall~~ must contact one of the Department's regional offices for information on obtaining a permit or an exemption for the emissions resulting from the aeration process. General information may be found on the ~~DEQ Department~~ website <http://www.deq.idaho.gov>. (3-24-22)( )

01. **Natural Draft Aeration.** Design ~~shall~~ must provide: (3-24-22)( )

a. Perforations in the distribution pan three sixteenths to one-half (3/16 – 1/2) inches in diameter, spaced one to three (1-3) inches on centers to maintain a six (6) inch water depth. ( )

b. ~~For d~~ Distribution of water uniformly over the top tray. (3-24-22)( )

c. Discharge through a series of three (3) or more trays with separation of trays not less than twelve (12) inches. ( )

d. Loading at a rate of one to five (1-5) gallons per minute for each square foot of total tray area. ( )

- e. Trays with slotted, heavy wire (1/2 inch openings) mesh or perforated bottoms. ( )
- f. Construction of durable material resistant to aggressiveness of the water and dissolved gases. ( )
- g. Protection from insects by twenty-four (24) mesh or similar non-corrodible screen. ( )
- 02. Forced or Induced Draft Aeration.** ~~Devices shall be designed to~~ Design must provide: (3-24-22)( )
- a. Include a blower with a weatherproof motor in a tight housing and screened enclosure. ( )
- b. Ensure adequate counter current of air through the enclosed aerator column. ( )
- c. Exhaust air directly to the outside atmosphere. ( )
- d. Include a down-turned and twenty-four (24) mesh or similar non-corrodible screened air outlet and inlet. ( )
- e. Be such that air introduced in the column ~~shall~~ will be as free from obnoxious fumes, dust, and dirt as possible. (3-24-22)( )
- f. Be such that sections of the aerator can be easily reached or removed for maintenance of the interior or installed in a separate aerator room. ( )
- g. Provide loading at a rate of one to five (1-5) gallons per minute for each square foot of total tray area. ( )
- h. Ensure that the water outlet is adequately sealed to prevent unwarranted loss of air. ( )
- i. Discharge through a series of five (5) or more trays with separation of trays not less than six (6) inches or as approved by the Department. ( )
- j. Provide distribution of water uniformly over the top tray. ( )
- k. Be of durable material resistant to the aggressiveness of the water and dissolved gases. ( )
- 03. Spray Aeration.** ~~Design shall~~ must provide: (3-24-22)( )
- a. A hydraulic head of between five (5) and twenty-five (25) feet. ( )
- b. Nozzles, with the size, number, and spacing of the nozzles being dependent on the flowrate, space, and the amount of head available. ( )
- c. Nozzle diameters in the range of one (1) to one and one-half (1.5) inches to minimize clogging. ( )
- d. An enclosed basin to contain the spray. Any openings for ventilation must be protected with a twenty-four (24) mesh or similar non-corrodible screen. ( )
- 04. Pressure Aeration.** Pressure aeration may be used for oxidation purposes only if the pilot plant study indicates the method is applicable; it is not acceptable for removal of dissolved gases. ~~See Subsection 501.19 for general information on conducting pilot studies.~~ Filters following pressure aeration must have adequate exhaust devices for release of air. Pressure aeration devices ~~shall~~ must be designed to give thorough mixing of compressed air with water being treated and provide twenty-four (24) mesh or similar non-corrodible screened and filtered air, free of obnoxious fumes, dust, dirt and other contaminants. (3-24-22)( )



05. **Packed Tower Aeration.** Packed tower aeration may be used for the removal of volatile organic chemicals, trihalomethanes, carbon dioxide, and radon. Final design ~~shall~~ **must** be based on the results of pilot studies and be approved by the Department. (3-24-22)( )

a. Process design criteria. ( )

i. Justification for the design parameters selected (i.e., height and diameter of unit, air to water ratio, packing depth, surface loading rate, etc.) ~~shall~~ **must** be provided to the Department for review. The pilot study ~~shall~~ **must** evaluate a variety of loading rates and air to water ratios at the peak contaminant concentration. Special consideration ~~shall~~ **will** be given to removal efficiencies when multiple contaminations occur. Where there is considerable past performance data on the contaminant to be treated and there is a concentration level similar to previous projects, the Department may approve the process design based on use of appropriate calculations without a pilot study. (3-24-22)( )

ii. The tower ~~shall~~ **must** be designed to reduce contaminants to below the maximum contaminant level and to the lowest practical level. (3-24-22)( )

iii. The type and size of the packing used in the full scale unit ~~shall~~ **must** be the same as that used in the pilot study. (3-24-22)( )

iv. The maximum air to water ratio for which credit will be given is 80:1. ( )

v. The design ~~shall~~ **must** consider potential fouling problems from calcium carbonate and iron precipitation and from bacterial growth. It may be necessary to provide pretreatment. Disinfection capability ~~shall~~ **will** be provided prior to and after packed tower aeration. (3-24-22)( )

vi. The effects of temperature ~~shall~~ **must** be considered. (3-24-22)( )

vii. Redundant packed tower aeration capacity at the design flowrate ~~shall~~ **will** be provided. (3-24-22)( )

b. The tower may be constructed of stainless steel, concrete, aluminum, fiberglass or plastic. Uncoated carbon steel is not allowed. Towers constructed of light-weight materials ~~shall~~ **must** be provided with adequate support to prevent damage from wind. Packing materials ~~shall~~ **must** be resistant to the aggressiveness of the water, dissolved gases and cleaning materials and ~~shall~~ **must** be suitable for contact with potable water. (3-24-22)( )

c. Water flow system. ( )

i. Water ~~shall~~ **must** be distributed uniformly at the top of the tower using spray nozzles or orifice-type distributor trays that prevent short circuiting. (3-24-22)( )

ii. A mist eliminator ~~shall~~ **must** be provided above the water distributor system. (3-24-22)( )

iii. A side wiper redistribution ring ~~shall~~ **must** be provided at least every ten (10) feet in order to prevent water channeling along the tower wall and short circuiting. (3-24-22)( )

iv. Sample taps ~~shall~~ **must** be provided in the influent and effluent piping. The sample taps ~~shall~~ **must** satisfy the requirements of Subsection 501.09. (3-24-22)( )

v. The effluent sump, if provided, ~~shall~~ **must** have easy access for cleaning purposes and be equipped with a drain valve. The drain ~~shall~~ **may** not be connected directly to any storm or sanitary sewer. (3-24-22)( )

vi. The design ~~shall~~ **must** prevent freezing of the influent riser and effluent piping when the unit is not operating. (3-24-22)( )

- vii. The water flow to each tower ~~shall~~ **must** be metered. (3-24-22)( )
- viii. An overflow line ~~shall~~ **must** be provided which discharges twelve (12) to fourteen (14) inches above a splash pad or drainage inlet. Proper drainage ~~shall~~ **must** be provided to prevent flooding of the area. (3-24-22)( )
- ix. Means ~~shall~~ **must** be provided to prevent flooding of the air blower. (3-24-22)( )
- d. Air flow system. ( )
  - i. The air inlet to the blower and the tower discharge vent ~~shall~~ **must** be down-turned and protected with a non-corrodible twenty-four (24) mesh screen to prevent contamination from extraneous matter. (3-24-22)( )
  - ii. The air inlet ~~shall~~ **must** be in a protected location. (3-24-22)( )
  - iii. An air flow meter ~~shall~~ **must** be provided on the influent air line or an alternative method to determine the air flow ~~shall~~ **will** be provided. (3-24-22)( )
  - iv. A positive air flow sensing device and a pressure gauge must be installed on the air influent line. The positive air flow sensing device must be a part of an automatic control system which will turn off the influent water if positive air flow is not detected. The pressure gauge will serve as an indicator of fouling buildup. ( )
  - v. A backup motor for the air blower must be readily available. ( )
- e. Other features that ~~shall~~ **must** be provided: (3-24-22)( )
  - i. A sufficient number of access ports with a minimum diameter of twenty-four (24) inches to facilitate inspection, media replacement, media cleaning and maintenance of the interior. ( )
  - ii. A method of cleaning the packing material when iron, manganese, or calcium carbonate fouling may occur. ( )
  - iii. Tower effluent collection and pumping wells constructed to clearwell standards. ( )
  - iv. Provisions for extending the tower height without major reconstruction. ( )
  - v. No bypass ~~shall~~ **may** be provided unless specifically approved by the Department. (3-24-22)( )
  - vi. Disinfection and adequate contact time after the water has passed through the tower and prior to the distribution system. ( )
  - vii. Adequate packing support to allow free flow of water and to prevent deformation with deep packing heights. ( )
  - viii. Operation of the blower and disinfectant feeder equipment during power failures. ( )
  - ix. Adequate foundation to support the tower and lateral support to prevent overturning due to wind loading. ( )
  - x. Fencing and locking gate to prevent vandalism. ( )
  - xi. An access ladder with safety cage for inspection of the aerator including the exhaust port and demister. ( )
  - xii. Electrical interconnection between blower, disinfectant feeder and supply pump. ( )

**06. Other Methods of Aeration.** Other methods of aeration may be used if applicable to the treatment needs. Such methods include but are not restricted to spraying, diffused air, cascades and mechanical aeration. The treatment processes are subject to the approval of the Department. ( )

**07. Protection of Aerators.** All aerators except those discharging to lime softening or clarification plants ~~shall~~ **must** be protected from contamination by birds, insects, wind borne debris, rainfall and water draining off the exterior of the aerator. (3-24-22)( )

**08. Disinfection.** Ground ~~water~~ supplies exposed to the atmosphere by aeration must receive disinfection as described in Section 530 as the minimum additional treatment. (3-24-22)( )

**535. ~~FACILITY AND DESIGN STANDARDS:~~ DESIGN STANDARDS FOR IRON AND MANGANESE CONTROL SYSTEMS.**

Iron and manganese control, as used herein, refers solely to treatment processes designed specifically for this purpose. The treatment process used will depend upon the character of the raw water. The selection of one (1) or more treatment processes must meet specific local conditions as determined by engineering investigations, including chemical analyses of representative samples of water to be treated, and receive the approval of the Department. The Department may require a pilot plant study in order to gather all information pertinent to the design. ~~See in accordance with~~ Subsection 501.19 ~~for general information on conducting pilot studies.~~ (3-24-22)( )

**01. Removal by Oxidation, Detention and Filtration.** ( )

**a.** Oxidation may be by aeration or by chemical oxidation with chlorine, potassium permanganate, ozone or chlorine dioxide. ( )

**b.** Detention time: ( )

**i.** A minimum detention time of thirty (30) minutes ~~shall~~ **must** be provided following aeration to ensure that the oxidation reactions are as complete as possible. This minimum detention may be omitted only where a pilot plant study indicates no need for detention. The detention basin may be designed as a holding tank without provisions for sludge collection but with sufficient baffling to prevent short circuiting. (3-24-22)( )

**ii.** Sedimentation basins ~~shall~~ **must** be provided when treating water with high iron or manganese content, or where chemical coagulation is used to reduce the load on the filters. Provisions for sludge removal ~~shall~~ **must** be made. (3-24-22)( )

**c. ~~Filtration.~~** Rapid rate pressure filters are normally used for iron and manganese removal. Pressure filters ~~shall~~ **may** not be used in the filtration of surface or other polluted waters or following lime-soda softening. (3-24-22)( )

**i.** The rate of filtration ~~shall~~ **may** not exceed three (3) gallons per minute per square foot of filter area except where in-plant testing as approved by the Department has demonstrated satisfactory results at higher rates. (3-24-22)( )

**ii.** The filters ~~shall~~ **must** be designed to provide for: (3-24-22)( )

(1) Loss of head gauges on the inlet and outlet pipes of each battery of filters. ( )

(2) An easily readable meter or flow indicator on each battery of filters. ( )

(3) Filtration and backwashing of each filter individually with an arrangement of piping as simple as possible to accomplish these purposes. ( )

(4) Minimum side wall shell height of five (5) feet. A corresponding reduction in side wall height is acceptable where proprietary bottoms permit reduction of the gravel depth. ( )

- (5) The top of the wash water collectors to be at least eighteen (18) inches above the surface of the media, ( )
- (6) The underdrain system to efficiently collect the filtered water and to uniformly distribute the backwash water at a rate not less than fifteen (15) gallons per minute per square foot of filter area. ( )
- (7) Backwash flow indicators and controls that are easily readable while operating the control valves. ( )
- (8) An air release valve on the highest point of each filter. ( )
- (9) An accessible manhole to facilitate inspection and repairs for filters thirty-six (36) inches or more in diameter. Sufficient handholds ~~shall will~~ be provided for filters less than thirty-six (36) inches in diameter. (3-24-22)( )
- (10) A means to observe the wastewater during backwashing and construction to prevent cross connection. ( )

**02. Removal by Manganese Coated Media Filtration.** This process consists of a continuous or batch feed of potassium permanganate to the influent of a manganese coated media filter. ( )

a. Other oxidizing agents or processes such as chlorination or aeration may be used prior to the permanganate feed to reduce the cost of the chemical. ( )

b. An anthracite media cap of at least six (6) inches or more as required by the Department ~~shall must~~ be provided over manganese coated media. (3-24-22)( )

c. Normal filtration rate ~~shall must~~ be three (3) gallons per minute per square foot. (3-24-22)( )

d. Normal wash rate ~~shall will~~ be eight (8) to ten (10) gallons per minute per square foot with manganese greensand and fifteen (15) to twenty (20) gallons per minute with manganese coated media. (3-24-22)( )

e. Sample taps ~~shall must~~ be provided prior to application of permanganate, immediately ahead of filtration, at points between the anthracite media, and at the filter effluent. The sample taps ~~shall must~~ satisfy the requirements of Subsection 501.09. (3-24-22)( )

**03. Removal by Ion Exchange.** This process is not acceptable where either the raw water or wash water contains dissolved oxygen or other oxidants. ( )

**04. Biological Removal.** Biofiltration to remove manganese, iron, or a combination of manganese and iron requires on-site piloting testing to establish effectiveness. The final filter design ~~shall must~~ be based on the on-site pilot plant studies. (3-24-22)( )

**05. Sequestration by Polyphosphates.** This process ~~shall may~~ not be used when iron, manganese or a combination thereof exceeds one point zero (1.0) mg/l. The total phosphate applied ~~shall must~~ not exceed ten (10) mg/l as PO<sub>4</sub>. Where phosphate treatment is used, satisfactory chlorine residuals ~~shall must~~ be maintained in the distribution system. Possible adverse affects on corrosion must be addressed when phosphate addition is proposed for iron sequestering. (3-24-22)( )

a. Stock phosphate solution must be kept covered and disinfected by carrying approximately ten (10) mg/l free chlorine residual unless it is demonstrated to the satisfaction of the Department that the phosphate solution is not able to support bacterial growth and the phosphate solution is being fed from the covered shipping container or an approved disinfected tank. Phosphate solutions having a pH of two point zero (2.0) or less may also be exempted from this requirement by the Department. ( )

b. Polyphosphates ~~shall may~~ not be applied ahead of iron and manganese removal treatment. The

point of application ~~shall~~ must be prior to any aeration, oxidation or disinfection if no iron or manganese removal treatment is provided. (3-24-22)( )

**06. Sequestration by Sodium Silicates.** Sodium silicate sequestration of iron and manganese is allowed only for ground-water supplies prior to air contact. On-site pilot studies are required to determine the suitability of sodium silicate for the particular water and the minimum feed needed. Rapid oxidation of the metal ions such as by chlorine or chlorine dioxide must accompany or closely precede the sodium silicate addition. (3-24-22)( )

a. Sodium silicate addition is applicable to waters containing up to two (2) mg/l of iron, manganese or combination thereof. ( )

b. Chlorine residuals ~~shall~~ must be maintained throughout the distribution system to prevent biological breakdown of the sequestered iron. (3-24-22)( )

c. The amount of silicate added ~~shall~~ must be limited to twenty (20) mg/l as SiO<sub>2</sub>, but the amount of added and naturally occurring silicate ~~shall~~ may not exceed sixty (60) mg/l as SiO<sub>2</sub>. (3-24-22)( )

d. Sodium silicate ~~shall~~ must not be applied ahead of iron or manganese removal treatment. (3-24-22)( )

**07. Sampling Taps.** Smooth-nosed sampling taps ~~shall~~ must be provided for control purposes. Taps ~~shall~~ will be located on each raw water source, each treatment unit influent and each treatment unit effluent. The sample taps ~~shall~~ must satisfy the requirements of Subsection 501.09. (3-24-22)( )

**536. ~~FACILITY AND DESIGN STANDARDS:~~ DESIGN STANDARDS FOR FLUORIDATION.**

**01. Chemical Feed Equipment and Methods.** In addition to the requirements in Section 531, fluoride feed equipment ~~shall~~ must meet the following requirements: (3-24-22)( )

a. Scales, loss-of-weight recorders or liquid level indicators, as appropriate, accurate to within five (5) percent of the average daily change in reading ~~shall~~ will be provided for chemical feeds. (3-24-22)( )

b. The accuracy of chemical feeders used for fluoridation ~~shall~~ will be plus or minus five (5) percent of the intended dose. (3-24-22)( )

c. Unsealed storage units for fluorosilicic acid ~~shall~~ will be vented to the atmosphere at a point outside any building. (3-24-22)( )

d. Fluoride compound ~~shall~~ may not be added before lime-soda softening or ion exchange softening. (3-24-22)( )

e. The point of application of fluorosilicic acid, if into a horizontal pipe, ~~shall~~ will be in the lower half of the pipe. (3-24-22)( )

f. A fluoride solution ~~shall~~ will be applied by a positive displacement pump having a stroke rate not less than twenty (20) strokes per minute, and at a feed rate not less than twenty (20) percent of the rated capacity of the feed pump. (3-24-22)( )

g. A spring opposed diaphragm type anti-siphon device ~~shall~~ will be provided for all fluoride feed lines and dilution water lines. (3-24-22)( )

h. Except for constant flow systems, a device to measure the flow of water to be treated is required. ( )

i. The dilution water pipe ~~shall~~ will terminate at least two (2) pipe diameters above the solution tank. (3-24-22)( )

- j. Water used for sodium fluoride dissolution ~~shall will~~ be softened if hardness exceeds seventy-five (75) mg/l as calcium carbonate. (3-24-22)( )
- k. Fluoride solutions ~~shall will~~ be injected at a point of continuous positive pressure or a suitable air gap provided. (3-24-22)( )
- l. The electrical outlet used for the fluoride feed pump ~~shall will~~ be interconnected with the well or service pump. (3-24-22)( )
- m. Consideration ~~shall will~~ be given to providing a separate room for fluorosilicic acid storage and feed. (3-24-22)( )
02. **Secondary Controls.** Secondary control systems for fluoride chemical feed devices ~~shall must~~ be provided as a means of reducing the possibility for overfeed; these may include flow or pressure switches or other devices. (3-24-22)( )
03. **Dust Control.** Provision must be made for the transfer of dry fluoride compounds from shipping containers to storage bins or hoppers in such a way as to minimize the quantity of fluoride dust which may enter the room in which the equipment is installed. The enclosure ~~shall must~~ be provided with an exhaust fan and dust filter which places the hopper under a negative pressure. Air exhausted from fluoride handling equipment ~~shall must~~ discharge through a dust filter to the outside atmosphere of the building. (3-24-22)( )

537. ~~FACILITY AND DESIGN STANDARDS:~~ DESIGN STANDARDS FOR STABILIZATION.

Water that is unstable due either to natural causes or to subsequent treatment ~~shall must~~ be stabilized. The expected treated water quality ~~shall will~~ be evaluated to determine what, if any, treatment is necessary. (3-24-22)( )

01. **Carbon Dioxide Addition.** ( )
- a. Recarbonation basin design ~~shall must~~ provide the following: (3-24-22)( )
- i. A total detention time of twenty (20) minutes. ( )
- ii. A mixing compartment having a detention time of at least three (3) minutes. ( )
- iii. A reaction compartment. ( )
- iv. The mixing and reaction compartments ~~shall will~~ have a depth sufficient to provide a diffuser submergence of not less than seven and one-half (7.5) feet and no greater than the manufacturer's recommendation. (3-24-22)( )
- b. Where liquid carbon dioxide is used, adequate precautions must be taken to prevent carbon dioxide from entering the plant from the recarbonation process. ( )
- c. Recarbonation tanks ~~shall must~~ be located outside or be sealed and vented to the outside with adequate seals and adequate purge flow of air to ensure workers safety. (3-24-22)( )
- d. Provisions ~~shall must~~ be made for draining the recarbonation basin and removing sludge. (3-24-22)( )
02. **Phosphates.** The feeding of phosphates may be used for sequestering calcium, for corrosion control, and in conjunction with alkali feed following ion exchange softening. ( )
- a. Stock phosphate solution must be kept covered and disinfected by carrying approximately ten (10) mg/l free chlorine residual unless the phosphate is not able to support bacterial growth and the phosphate is being fed from the covered shipping container. Phosphate solutions having a pH of two point zero (2.0) or less are exempted from this requirement. ( )

b. Satisfactory chlorine residuals ~~shall~~ must be maintained in the distribution system when phosphates are used. (3-24-22)( )

03. **Split Treatment.** Raw water may be blended with lime-softened water to partially stabilize the water prior to secondary clarification and filtration. Treatment plants designed to utilize split treatment ~~shall~~ must also contain facilities for further stabilization by other methods. (3-24-22)( )

04. **Water Unstable Due to Biochemical Action in Distribution System.** Unstable water resulting from the bacterial decomposition of organic matter in water (especially in dead end mains), the biochemical action within tubercles, and the reduction of sulfates to sulfides ~~shall~~ must be prevented by the maintenance of a free or combined chlorine residual throughout the distribution system. (3-24-22)( )

538. – 539. (RESERVED)

540. ~~FACILITY AND DESIGN STANDARDS:~~ DESIGN STANDARDS FOR TREATMENT AND DISPOSAL OF TREATMENT PLANT WASTE RESIDUALS.

~~Provisions must be made for~~ PWS owners must provide proper disposal of water treatment plant waste such as sanitary, laboratory, clarification sludge, softening sludge, iron sludge, filter backwash water, and liquid concentrates. In locating waste disposal facilities, due consideration ~~shall~~ must be given to preventing potential contamination of the water supply. (3-24-22)( )

01. **Sanitary Waste.** The sanitary waste from water treatment plants, pumping stations, and other waterworks installations must receive treatment. Waste from these facilities ~~shall~~ must be discharged directly to a sanitary sewer system, when available and feasible, or to an adequate on-site waste treatment facility approved under the provisions of IDAPA 58.01.03, "Individual/Subsurface Sewage Disposal Rules." (3-24-22)( )

02. **Liquid Concentrates.** ( )

a. Waste from ion exchange plants, demineralization plants, reverse osmosis, on-site chlorine generators, red water filters, or other plants which produce liquid concentrates may be disposed of by the following methods: (3-24-22)( )

i. Liquid concentrates that contain radionuclides must be further treated to remove the radioactive constituents as sludge. See Subsection 540.03.e. for disposal requirements for sludge that contains radionuclides. The residual liquids from which radionuclides have been removed may be disposed of in accordance with Subsections 540.02.a.ii. through 540.02.a.iv. ( )

ii. ~~Controlled discharge to a stream or other receiving water body if adequate dilution is available. Such discharge will require a National Pollution Elimination System Permit from the U.S. Environmental Protection Agency, Region 10, 1200 Sixth Avenue, Seattle, WA 98101, Telephone (206) 553-1200. a surface water discharge permit has been issued by the applicable permitting authority and limits and conditions of discharge permit can be reasonably met.~~ (3-24-22)( )

iii. Liquid concentrates may be discharged to a sanitary sewer, if available and feasible. Acceptance of such waste must be approved by the sewer authority. ( )

iv. ~~Subsurface disposal, or land application of, or total containment lagoons may be considered for liquid concentrate when in compliance with IDAPA 58.01.16, "Wastewater Rules." Untreated~~ liquid concentrates may not be permitted, but only if such discharge meets the requirements of for subsurface or land application unless otherwise approved by the Department and in accordance with IDAPA 58.01.03, "Individual/Subsurface Sewage Disposal Rules" for subsurface disposal or the requirements of IDAPA 58.01.17, "Recycled Water Rules" for land application. (3-24-22)( )

b. ~~Should~~ If the nature of the liquid concentrate causes it to be ineligible for permitted discharge as described in Subsection 540.02.a., further onsite treatment of the liquid concentrate may be required in order to produce sludge and liquid waste that will meet the permit criteria for one (1) or more of the disposal options.



(3-24-22)( )

c. If sand filters are used to treat the waste filter wash water, red water, from iron and manganese removal plants, they must have the following features: ( )

i. Total filter area sufficient to adequately dewater applied solids. Unless the filter is small enough to be cleaned and returned to service in one (1) day, two (2) or more cells are required. ( )

ii. Sufficient capacity to contain, above the level of the sand, the entire volume of wash water produced by washing all of the production filters in the plant, unless the production filters are washed on a rotating schedule and the flow through the production filters is regulated by true rate of flow controllers. Sufficient volume will be provided to dispose of the wash water involved. ( )

iii. Provisions for covering the filters during winter months where freezing is a problem. ( )

**03. Sludge Waste.** Sludge is the solid waste resulting from coagulation, precipitation, or passive settling of liquid concentrates. Depending on composition, liquids remaining after sludge removal may be disposed of by methods described in Subsection 540.02, recycled through the treatment plant, or may be pure enough to be unregulated. The following methods of treatment and disposal apply to sludge: ( )

**a. Precipitative Softening Sludge.** ( )

i. At least two (2) temporary storage lagoons must be provided in order to give flexibility in operation. Provisions must be made for convenient cleaning. An acceptable means of final sludge disposal must be provided. ( )

ii. Liquid or dewatered precipitative softening sludge may be applied to farm land if heavy metals or other contaminants do not exceed the requirements of IDAPA 58.01.02, "Water Quality Standards." ( )

iii. Dewatered precipitative softening sludge may be disposed of in a sanitary landfill in accordance with the requirements of IDAPA 58.01.06, "Solid Waste Management Rules." Acceptance of such waste is at the discretion of the landfill authority. ( )

**b. Alum or Ferric Sludge.** ( )

i. Temporary storage lagoons must contain at least two (2) compartments to facilitate independent filling and dewatering operations. Mechanical concentration may be considered. If mechanical dewatering is used, it shall must be preceded by sludge concentration and chemical pre-treatment. A pilot plant study is required before the design of a mechanical dewatering installation. ~~See in accordance with~~ Subsection 501.19 ~~for general information on conducting pilot studies.~~ (3-24-22)( )

ii. Alum or ferric sludge may be discharged to a sanitary sewer if available and feasible. Acceptance of such waste must be approved by the sewer authority. ( )

iii. Dewatered alum or ferric sludge may be disposed of in a sanitary landfill in accordance with the requirements of IDAPA 58.01.06, "Solid Waste Management Rules." Acceptance of such waste is at the discretion of the landfill authority. ( )

iv. Alum or ferric sludge may be disposed of by land application if the permitting requirements of IDAPA 58.01.02, "Water Quality Standards," and IDAPA 58.01.17, "Recycled Water Rules," are met. ( )

v. Water removed from alum or ferric sludge may be disposed of in the same manner as liquid concentrates, as described in Subsection 540.02. ( )

~~e. Red Water. Red water is the waste filter wash water from iron and manganese removal plants.~~ (3-24-22)



- i. ~~If sand filters are used they shall have the following features:~~ (3-24-22)
- (1) ~~Total filter area shall be sufficient to adequately dewater applied solids. Unless the filter is small enough to be cleaned and returned to service in one (1) day, two (2) or more cells are required.~~ (3-24-22)
- (2) ~~The “red water” filter shall have sufficient capacity to contain, above the level of the sand, the entire volume of wash water produced by washing all of the production filters in the plant, unless the production filters are washed on a rotating schedule and the flow through the production filters is regulated by true rate of flow controllers. Then sufficient volume shall be provided to properly dispose of the wash water involved.~~ (3-24-22)
- (3) ~~Where freezing is a problem, provisions should be made for covering the filters during the winter months.~~ (3-24-22)
- (4) ~~“Red water” filters shall not have common walls with finished water.~~ (3-24-22)
- ii. ~~Subsurface infiltration lagoons may be permitted, but only if such discharge meets the requirements of IDAPA 58.01.03, “Individual/Subsurface Sewage Disposal Rules.”~~ (3-24-22)
- iii. ~~“Red water” may be discharged to a sanitary sewer if available and feasible. Acceptance of such waste must be approved by the sewer authority. Design shall prevent cross connections and there shall be no common walls between potable and non-potable fluid.~~ (3-24-22)
- dc.** Filter Backwash ~~Water~~ **Sludge.** (3-24-22)( )
- i. Recycling is permitted if the backwash waters are returned to the head of the treatment plant or another entry point if supported by engineering studies. Backwash water ~~shall~~ **will** be held for a sufficient time prior to recycling to allow solids to settle out. (3-24-22)( )
- ii. Dewatered sludge from backwash water clarification processes may be disposed of in a sanitary landfill in accordance with the requirements of IDAPA 58.01.06, “Solid Waste Management Rules.” Acceptance of such waste must be approved by the landfill authority. ( )
- ed.** ~~Radioactive Sludge.~~ Waste residuals containing radioactive substances, including, but not limited to granular activated carbon used for radon removal or ion-exchange regeneration waste from uranium removal, must be disposed of in accordance with IDAPA 58.01.10, “Rules Regulating the Disposal of Radioactive Materials Not Regulated Under The Atomic Energy Act of 1954, As Amended.” (3-24-22)( )
- i. The buildup of radioactive materials such as uranium or radon and its decay products ~~shall~~ **must** be considered and adequate shielding and safeguards ~~shall~~ **will** be provided for operators and visitors. (3-24-22)( )
- ii. Waste residuals containing naturally occurring radioactive materials that have been concentrated by human activities must be disposed of in an approved hazardous waste landfill (Class D), in accordance with the IDAPA 58.01.10, “Rules Regulating the Disposal of Radioactive Materials not Regulated Under the Atomic Energy Act of 1954, as Amended,” and IDAPA 58.01.06, “Solid Waste Management Rules.” ( )
- iii. Waste residuals containing greater than point zero five (.05) percent by weight of uranium are subject to licensing and disposal under the regulations of the U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, TX 76011, Phone 817-860-8299. ( )
- fe.** ~~Arsenic Sludge.~~ Solid waste residuals containing arsenic at a concentration less than five (5) mg/l may be disposed of at a sanitary landfill if permitted under IDAPA 58.01.06, “Solid Waste Management Rules.” Solid waste containing arsenic at a concentration greater than five (5) mg/l must be disposed of at an approved hazardous waste landfill. Liquid wastes generated by arsenic treatment processes are subject to the handling and disposal requirements for liquid concentrates, as discussed under Subsection 540.02. (3-24-22)( )
- 04. Spent Media.** Exhausted ion exchange media, adsorption media, disposable filters, and other components of treatment processes that contain concentrated contaminants ~~shall~~ **must** be disposed of in accordance

with IDAPA 58.01.06, “Solid Waste Management Rules,” ~~and~~/or IDAPA 58.01.10, “Rules Regulating the Disposal of Radioactive Materials not Regulated Under the Atomic Energy Act of 1954, as Amended.” (3-24-22)( )

**541. ~~FACILITY AND DESIGN STANDARDS-~~ PUMPING FACILITIES.**

Pumping facilities ~~shall~~ **must** be designed to maintain the sanitary quality of pumped water. (3-24-22)( )

**01. Pump Houses.** Unless otherwise approved by the Department ~~based on documentation provided by the design engineer~~, pump house components ~~shall~~ **must** be located above-grade. The following requirements apply to pump houses as defined in Section 003 unless it can be shown that some or all of these requirements are not needed to protect the combination of system components in a given structure: (3-24-22)( )

**a.** Pump houses ~~shall~~ **must** be readily accessible for operation, maintenance, and repair at all times and under all weather conditions unless permitted to be out of service for a period of inaccessibility. (3-24-22)( )

**b.** Pump houses ~~shall~~ **must** be protected from flooding and ~~shall~~ **must** be adequately drained. The ground surface ~~shall~~ **will** be graded so as to lead surface drainage away from the pump house. Unless otherwise approved by the Department ~~based on documentation provided by the design engineer~~, the floor surface ~~shall~~ **will** be at least six (6) inches above the final ground surface and pump house components ~~shall~~ **will** be located at least six (6) inches above the floor surface. (3-24-22)( )

**c.** Pump houses ~~shall~~ **must** be of durable construction, fire and weather resistant, and with outward-opening doors. All underground structures ~~shall~~ **must** be waterproofed. (3-24-22)( )

**d.** Provisions ~~shall~~ **must** be made for adequate heating for the comfort of the operator and the safe and efficient operation of the equipment. In pump houses not occupied by personnel, only enough heat need be provided to prevent freezing of equipment or treatment processes. (3-24-22)( )

**e.** Ventilation ~~shall~~ **must** conform to existing local and ~~or~~ state codes. Adequate ventilation ~~shall~~ **will** be provided for all pumping stations for operator comfort and dissipation of excess heat and moisture from the equipment. In all cases, measures must be taken to minimize corrosion of metallic and electrical components. (3-24-22)( )

**f.** Pump houses ~~shall~~ **must** be provided with a locking door or access to prohibit unauthorized entrance and ~~shall~~ **must** be protected to prevent vandalism and entrance by animals. Plans and specifications for pump houses must provide enough detail to enable the ~~reviewing engineer~~ **Department** to determine that the facility is secure, safe, accessible, and that it conforms to electrical and plumbing codes. (3-24-22)( )

**g.** Pump houses ~~shall~~ **must** be kept clean and in good repair and ~~shall~~ **may** not be used to store toxic or hazardous materials other than those materials required for treatment processes. (3-24-22)( )

**h.** A suitable outlet ~~shall~~ **must** be provided for drainage from pump glands without discharging onto the floor. (3-24-22)( )

**i.** Floor drains ~~shall~~ **may** not be connected to sewers, storm drains, chlorination room drains, or any other source of contamination unless otherwise approved by the Department ~~based on documentation provided by the design engineer~~. Gas chlorination room drains ~~shall~~ **may** not be connected to any other drainage system and ~~should~~ **must** terminate in a properly located below ground sump. Sumps for pump house floor drains ~~shall~~ **may** not be closer than thirty (30) feet from any well. (3-24-22)( )

**j.** Adequate space ~~shall~~ **must** be provided for the installation of potential additional units and for the safe and efficient servicing of all equipment. (3-24-22)( )

**k.** Suction basins ~~shall~~ **must** be watertight, have floors sloped to permit removal of water and settled solids, be covered or otherwise protected against contamination, and have two (2) pumping compartments or other means to allow the suction basin to be taken out of service for inspection maintenance or repair. (3-24-22)( )

l. Pump houses ~~shall~~ must be designed to allow efficient equipment servicing. Crain-ways, hoist beams, eyebolts, or other adequate facilities for servicing or removal of pumps, motors or other heavy equipment ~~shall~~ will be provided. Openings in floors, roofs or wherever else ~~shall~~ must be provided as needed for removal of heavy or bulky equipment. (3-24-22)( )

m. All remote controlled stations ~~shall~~ must be electrically operated and controlled and ~~shall~~ have signaling apparatus of proven performance. Signaling apparatus ~~shall~~ must report automatically when the station is out of service. (3-24-22)( )

n. Any threaded hose bib installed in the pump house must be equipped with an appropriate backflow prevention device. ( )

**02. Pumping Units.** At least two (2) pumping units ~~shall~~ must be provided for raw water and surface source pumps. Pumps using seals containing mercury ~~shall~~ may not be used in ~~public drinking water system~~ PWS facilities. With any pump out of service, the remaining pump or pumps ~~shall~~ must be capable of providing the peak hour demand of the ~~system~~ PWS or a minimum of the maximum day demand plus equalization storage. See Subsection 501.18 for general design requirements concerning fire flow capacity and Subsection 501.07 regarding reliability and emergency operation. The pumping units ~~shall~~ must meet the following requirements: (3-24-22)( )

a. The pumps ~~shall~~ have ample capacity to supply the maximum demand against the required pressure without dangerous overloading. (3-24-22)( )

b. The pumps ~~shall be~~ are driven by prime movers able to meet the maximum horsepower condition of the pumps. (3-24-22)( )

c. The pumps ~~shall be~~ are provided with readily available spare parts and tools. (3-24-22)( )

d. The pumps ~~shall~~ are to be served by control equipment that has proper heater and overload protection for air temperature encountered. (3-24-22)( )

e. Suction lift ~~shall be~~ is avoided if possible. When suction lift is used, it ~~shall~~ must be within the limits allowed by the manufacturer of the pumps, and provision ~~shall~~ will be made for priming the pumps. (3-24-22)( )

f. Prime water must not be of lesser sanitary quality than that of the water being pumped. Means ~~shall~~ will be provided to prevent either backpressure or backsiphonage backflow. When an air-operated ejector is used, the twenty-four (24) mesh or similar non-corrodible screened intake ~~shall~~ will draw clean air from a point at least ten (10) feet above the ground or other source of possible contamination, unless the air is filtered by an apparatus approved by the ~~reviewing authority~~ Department. Vacuum priming may be used. (3-24-22)( )

**03. Appurtenances.** The following appurtenances ~~shall~~ must be provided for all water pumps. Additional requirements specific to well pumps are provided in Section 511. (3-24-22)( )

a. Pumps ~~shall~~ must be protected against freezing and valved to permit satisfactory operation, maintenance, and repair of the equipment. If foot valves are necessary, they ~~shall~~ must have a net valve area of at least two and one-half (2.5) times the area of the suction pipe and ~~they shall~~ be screened. Each pump ~~shall~~ must have an accessible check valve on the discharge side between the pump and the shut-off valve or a combination valve that performs both control valve and check valve functions. Surge relief measures ~~shall~~ must be designed to minimize hydraulic transients. (3-24-22)( )

b. ~~In general, piping shall be designed so that it will have watertight joints, be protected against surge or water hammer, be provided with suitable restraints where necessary, be designed so that friction losses will be minimized, and not be subject to contamination.~~ Piping must be designed with watertight joints, friction losses minimized, protection against surge or water hammer, suitable restraints, and not be subject to contamination. (3-24-22)( )

**c.** Each pump ~~shall~~ **must** have an individual suction line or ~~the~~ **manifolded** suction lines ~~shall be manifolded~~ such that they will ensure similar hydraulic and operating conditions. (3-24-22)(    )

**d.** Each pump station ~~shall~~ **must** have a standard pressure gauge on its discharge line and suction line. (3-24-22)(    )

**e.** Water seals ~~shall~~ **may** not be supplied with water of a lesser sanitary quality than that of the water being pumped. Where pumps are sealed with potable water and are pumping water of lesser sanitary quality, the seal ~~shall~~ **must**: (3-24-22)(    )

i. Be provided with either an approved reduced pressure principle backflow preventer or a break tank open to atmospheric pressure, ( )

ii. Where a break tank is provided, have an air gap of at least six (6) inches or two (2) pipe diameters, whichever is greater, between the feeder line and the flood rim of the tank. ( )

**f.** Pumps, their prime movers, and accessories ~~shall~~ **must** be controlled in such a manner that they will operate at rated capacity without dangerous overload. Where two (2) or more pumps are installed, provision ~~shall~~ **must** be made for alternation. Provision ~~shall~~ **must** be made to prevent energizing the motor in the event of a backspin cycle. Equipment ~~shall~~ **will** be provided or other arrangements made to prevent surge pressures from activating controls which switch on pumps or activate other equipment outside the normal design cycle of operation. (3-24-22)(    )

**04. Booster Pumps.** In addition to other applicable requirements in Section 541, booster pumps must comply with the following: ( )

**a.** In-line booster pumps ~~shall~~ **must** maintain an operating pressure that is consistent with the requirements specified in Subsection 552.01, and ~~shall~~ be supplied with an automatic cutoff when intake pressure is less than or equal to five (5) psi. (3-24-22)(    )

**b.** Booster pumps with a suction line directly connected to any storage reservoirs ~~shall~~ **must** be protected by an automatic cutoff to prevent pump damage and avoid excessive reservoir drawdown. (3-24-22)(    )

**c.** Each booster pumping station ~~shall~~ **must** contain not less than two (2) pumps with capacities such that peak hour demand, or a minimum of the maximum day demand plus equalization storage, can be satisfied with any pump out of service. See Subsection 501.18 for general design requirements concerning fire flow capacity. (3-24-22)(    )

#### 542. ~~FACILITY AND DESIGN STANDARDS~~—DISTRIBUTION SYSTEM.

**01. Protection from Contamination.** The distribution system ~~shall~~ **must** be protected from contamination and be designed to prevent contamination by steam condensate or cooling water from engine jackets or other heat exchange devices. (3-24-22)(    )

**02. Installation of Water Mains.** Division 400 of “Idaho Standards for Public Works Construction,” referenced in Subsection 002.02, may be used as guidance for installation of water mains. In addition, the following provisions ~~shall~~ apply: (3-24-22)(    )

**a.** Installed pipe ~~shall~~ **must** be pressure tested and leakage tested in accordance with the applicable AWWA Standards, incorporated by reference into these rules at Subsection 002.01. (3-24-22)(    )

**b.** New, cleaned, and repaired water mains ~~shall~~ **must** be disinfected in accordance with AWWA Standard C651, incorporated by reference into these rules at Subsection 002.01. The specifications ~~shall~~ **must** include detailed procedures for the adequate flushing, disinfection, and microbiological testing of all water mains. (3-24-22)(    )

c. In areas where aggressive soil conditions are suspected or known to exist, analyses ~~shall~~ must be performed to determine the actual aggressiveness of the soil. If soils are found to be aggressive, action ~~shall~~ must be taken to protect metallic joint restraints and the water main, such as encasement in polyethylene, provision of cathodic protection, or use of corrosion resistant materials. (3-24-22)(    )

d. The Department must approve any interconnection between potable water ~~supplies~~ sources, taking into account differences in water quality between the two systems. (3-24-22)(    )

e. A continuous and uniform bedding ~~shall~~ must be provided in the trench for all buried pipe. Backfill material ~~shall~~ must be tamped in layers around the pipe and to a sufficient height above the pipe to adequately support and protect the pipe. Stones found in the trench ~~shall~~ must be removed for a depth of at least six (6) inches below the bottom of the pipe. (3-24-22)(    )

f. Water mains ~~shall~~ must be covered with sufficient earth or other insulation to prevent freezing. (3-24-22)(    )

g. All tees, bends, plugs and hydrants ~~shall~~ must be provided with reaction blocking, tie rods or joints designed to prevent movement. (3-24-22)(    )

**03. Pressure Relief Valves.** All pumps connected directly to the distribution system ~~shall~~ must be designed in conjunction with a water pressure relief valve of type, size, and material approved by the Department unless the Department approves another method that will prevent excessive pressure development. (3-24-22)(    )

**04. Flow Meter Required.** Unless otherwise approved by the Department ~~based on documentation provided by the design engineer~~, all source pumps and booster pumps connected directly to the distribution system ~~shall~~ must have an instantaneous and totalizing flow meter, equipped with nonvolatile memory, installed in accordance with manufacturer's specifications. (3-24-22)(    )

**05. Pipe and Jointing Materials.** Pipe and jointing materials comply with the standards set forth in Subsection 501.01. Pipe ~~shall~~ must be manufactured of materials resistant internally and externally to corrosion and not imparting tastes, odors, color, or any contaminant into the ~~system~~ PWS. Where distribution systems are installed in areas of ground-water contaminated by organic compounds: (3-24-22)(    )

a. Pipe and joint materials which do not allow permeation of the organic compounds ~~shall~~ must be used; and (3-24-22)(    )

b. Non-permeable materials ~~shall~~ must be used for all portions of the ~~system~~ PWS including pipe, joint materials, hydrant leads, and service connections. (3-24-22)(    )

**06. Size of Water Mains.** When fire hydrants are provided, they ~~shall~~ may not be connected to water mains smaller than six (6) inches in diameter, and fire hydrants ~~shall~~ may not be installed unless fire flow volumes are available. If fire flow is not provided, water mains ~~shall~~ will be no less than three (3) inches in diameter. Any departure from ~~this~~ these minimum standards ~~shall~~ must be supported by hydraulic analysis and detailed projections of water use. (3-24-22)(    )

**07. Separation of Potable, Non-Potable, and Raw Water Pipelines.** The requirements for the protection of potable ~~mains~~ pipelines from contamination by non-potable pipelines are described in Subsections 542.07.a. through 542.07.ed. For the purposes of Subsection 542.07, the term "pipeline" applies to both mains and services. The Department will use the Memorandum of Understanding with the Plumbing Bureau as guidance in determining the relative responsibilities for reviewing service lines. The conditions of Subsections 542.07.a. ~~and through~~ 542.07.bd. ~~shall~~ apply to all potable services constructed or reconstructed after April 15, 2007 and where the Department or the QLPE is the reviewing authority. Raw water pipelines must be protected from contamination from non-potable pipelines, and must not contaminate potable pipelines. They ~~shall therefore~~ must meet equivalent separation distances shown below from either potable or non-potable pipelines. (3-24-22)(    )

a. Alternative separation distances may be considered for Subsections 542.07.b through 542.07.c. on a case-by-case basis when considering constructability, public health risk, environmental risk, and cost. The design

engineer must submit data to the Department for review and approval showing that the proposed installation will be protective of public health and the environment. ( )

- ab.** Parallel installation requirements. ( )
  - i. Potable mains in relation to non-potable mains. ( )
    - (1) Greater than ten (10) feet separation: no additional requirements. ( )
    - (2) Ten (10) feet to six (6) feet separation: separate trenches, with the bottom of the potable main above the top of the non-potable main, and non-potable main constructed with potable water class pipe. ( )
    - ~~(3) Less than six (6) feet separation: design engineer to submit data to the Department for review and approval showing that this installation will protect public health and the environment, non-potable main to be constructed of potable water class pipe, and with the bottom of the potable main above the top of the non-potable main.~~ (3-24-22)
    - ~~(4) Non-potable mains are prohibited from being located in the same trench as potable mains.~~ ( )
    - ~~(5) Pressure wastewater mains or other pressurized mains or lines containing non-potable fluids shall be no closer horizontally than ten (10) feet from potable mains.~~ (3-24-22)
    - ii. ~~New p~~Potable services in relation to non-potable ~~services, new potable services in relation to non-potable mains, pipelines~~ and ~~new~~ non-potable services in relation to potable ~~mains pipelines~~. (3-24-22)( )
      - (1) Greater than six (6) feet separation: no additional requirements ~~based on separation distance~~. (3-24-22)( )
      - ~~(2) Less than six (6) feet separation: design engineer to submit data that this installation will protect public health and the environment and non-potable service constructed with potable water class pipe.~~ (3-24-22)
      - ~~(3) New p~~Potable services are prohibited from being located in the same trench as non-potable ~~mains or non-potable services pipelines~~. (3-24-22)( )
- bc.** Requirements for potable water ~~mains or services pipelines~~ crossing non-potable ~~water mains or services pipelines~~. Crossings must be perpendicular, unless otherwise approved by the Department. (3-24-22)( )
  - i. If there is eighteen (18) inches or more vertical separation with the potable water pipeline above the non-potable pipeline, then the potable pipeline joints must be as far as possible from the non-potable water pipeline. ( )
  - ii. If there is eighteen (18) inches or more vertical separation with the potable water pipeline below the non-potable pipeline, then the potable pipeline joints must be as far as possible from the non-potable pipeline, and the non-potable pipeline must be supported through the crossing to prevent settling. ( )
  - iii. Less than eighteen (18) inches vertical separation: ( )
    - (1) Potable pipeline joint ~~to~~ must be as far as possible from the non-potable pipeline; and either: (3-24-22)( )
      - (a) Non-potable pipeline must be constructed with potable water class pipe for a minimum of ten (10) feet either side of potable pipeline with a single twenty (20) foot section of potable water class pipe centered on the crossing; or (3-24-22)( )
      - (b) ~~Sleeve~~The non-potable or potable pipeline must be sleeved with potable water class pipe for ten (10) feet either side of crossing. Use of hydraulic cementitious materials such as concrete, controlled density fill, and concrete slurry encasement is not allowed as a substitute for sleeving. (3-24-22)( )



(2) If potable pipeline is below non-potable pipeline, the non-potable pipeline must also be supported through the crossing to prevent settling. ( )

~~iv. Pressure wastewater mains or other pressurized mains or lines containing non-potable fluids shall be no closer vertically than eighteen (18) inches from potable mains. (3-24-22)~~

~~e. Existing potable services in relation to new non-potable mains, existing non-potable services in relation to new potable mains, and existing potable services in relation to new non-potable services shall meet the requirements of Subsection 542.07.b., where practical, based on cost, construction factors, and public health significance. If the Department determines that there are significant health concerns with these services, such as where a large existing service serves an apartment building or a shopping center, then the design shall conform with Subsection 542.07.b. (3-24-22)~~

~~c. Non-potable pressure pipelines must not be: ( )~~

~~i. Closer horizontally than ten (10) feet from potable mains. ( )~~

~~ii. Closer vertically than eighteen (18) inches from potable pipelines. ( )~~

**08. Separation from Subsurface Wastewater Systems and Other Sources of Contamination.** A minimum horizontal distance of twenty-five (25) feet ~~shall must~~ be maintained between any potable water pipe and a septic tank or subsurface wastewater disposal system. Guidance on separation from other potential sources of contamination, such as stormwater facilities, may be found on the ~~DEQ Department~~ website <http://www.deq.idaho.gov>. (3-24-22)( )

**09. Dead End Mains.** All dead end water mains ~~shall must~~ be equipped with a means of flushing ~~and shall be flushed at least semiannually~~ at a water velocity of two and one-half (2.5) feet per second. (3-24-22)( )

a. Dead ends ~~shall must~~ be minimized by ~~making appropriate tie-ins~~ looping whenever practical in order to provide increased reliability of service and reduce head loss. (3-24-22)( )

b. Flushing ~~shall must~~ be ~~performed~~ designed in such a way as to minimize any erosion of unprotected areas and, if applicable, ~~shall~~ be coordinated with the owner of the receiving system. No water main flushing device ~~shall may~~ be directly connected to any sewer. (3-24-22)( )

c. Stub outs for future main connections ~~shall must~~ meet all requirements for dead end mains listed in Subsection 542.09 as determined by the Department. Flushing devices may be temporary in nature. (3-24-22)( )

**10. Repair of Leaks.** Leaking water mains ~~shall must~~ be repaired or replaced upon discovery and disinfected in accordance with American Water Works Association (AWWA) Standards, incorporated by reference into these rules at Subsection 002.01. (3-24-22)( )

**11. Separation from Structures.** Water mains ~~shall must~~ be separated by at least five (5) feet from buildings, industrial facilities, and other permanent structures. (3-24-22)( )

**12. Meter Vault Shut-Off Valve Required.** All new ~~public water systems~~ PWSs, and portions of existing systems undergoing material modification of distribution or transmission lines, must include an accessible and lockable shut-off valve-meter vault at each service connection in the section of distribution or transmission line that is being constructed or modified within the project. ~~A lockable s~~ Shut-off valves ~~shall may~~ be installed in ~~the a~~ meter vault. ~~This requirement shall also apply to extensions of the distribution system of existing public water systems.~~ (3-24-22)( )

**13. Minimum Pressure at Building Sites.** Any ~~public water system~~ PWS constructed or undergoing material modification where topographical relief may affect water pressure at the customers' premises ~~shall must~~ provide the Department with an analysis which demonstrates that the pressure at each designated building site will be at least forty (40) psi, based on dynamic pressure in the main, as set forth in Subsections 552.01.b.i. and 552.01.b.v.,

plus a static compensation from the elevation of the main to the elevation of each building site. (3-24-22)( )

a. If forty (40) psi cannot be provided at each designated building site, the Department may require that reasonable effort be made to provide notification to existing and potential customers of the expected pressure. ( )

b. The Department will not authorize a service connection at any designated building site where analysis indicates that pressure will be less than twenty (20) psi ~~static~~ dynamic pressure (or twenty-six point five (26.5) psi for two (2) story buildings). (3-24-22)( )

14. **Isolation Valves.** A sufficient number of valves ~~shall~~ must be provided on water mains to minimize inconvenience and sanitary hazards during repairs. (3-24-22)( )

15. **Air Valves.** At high points in water mains where air can accumulate, provisions ~~shall~~ must be made to remove the air by means of air release and vacuum relief valves or combination air release/vacuum relief valves. Air release valves, vacuum relief valves, or combination air release/vacuum relief valves may not be required if vacuum relief and air release functions in the pipeline can be adequately handled by approved appurtenances such as fire hydrants. (3-24-22)( )

a. The open end of an air valve ~~shall~~ must be extended to at least one (1) foot above grade and provided with a twenty-four (24) mesh or similar non-corrodible screened, downward-facing elbow. When the air vent on an air relief valve cannot be practically installed above ground, the vent may be below grade provided ~~that the valve is manually operated and~~ the air vent is extended to the top of the valve vault and provided with a twenty-four (24) mesh or similar non-corrodible screened, downward-facing elbow. In addition, for below ground vents, the valve vault must be rated for appropriate traffic loading in traffic areas and the vault drained to daylight or provided with adequate drainage to prevent flooding of the vault. (3-24-22)( )

b. Discharge piping from air valves or combination air release/vacuum relief valves ~~shall~~ may not connect directly to any storm drain, storm sewer, or sanitary sewer. (3-24-22)( )

16. **Backflow Protection.** Automatic air relief valves ~~shall~~ must be equipped with a means of backflow protection. (3-24-22)( )

17. **Surface Water Crossings.** For the purposes of Subsection 542.17, surface water is defined as all surface accumulations of water, natural or artificial, public or private, or parts thereof which are wholly or partially within, which flow through or border upon the state. This includes, but is not limited to, rivers, streams, canals, ditches, lakes, and ponds. Surface water crossings, whether over or under water, ~~shall~~ must be constructed as follows: (3-24-22)( )

a. ~~Above water crossings: the pipe shall~~ Pipe used in above water crossings must be adequately supported and anchored, protected from damage and freezing, and ~~shall~~ be accessible for repair or replacement. (3-24-22)( )

b. ~~Under water crossings: A~~ Pipe used in under water crossings must have a minimum cover of two (2) feet ~~shall be provided over the pipe~~. When crossing a water course that is greater than fifteen (15) feet in width, the following ~~shall~~ must be provided: (3-24-22)( )

i. The pipe ~~shall~~ will be of special construction, having flexible, restrained, or welded water-tight joints; and (3-24-22)( )

ii. Valves ~~shall are to~~ be provided at both ends of water crossings so that the section can be isolated for testing or repair; the valves ~~shall~~ will be easily accessible and not subject to flooding; and (3-24-22)( )

iii. Permanent taps or other provisions to allow insertion of a small meter to determine leakage and obtain water samples ~~shall~~ will be made on each side of the valve closest to the supply source. (3-24-22)( )

543. ~~FACILITY AND DESIGN STANDARDS: CROSS CONNECTION CONTROL.~~



There ~~shall~~ **must** be no connection between the distribution system and any pipes, pumps, hydrants, water loading stations, or tanks whereby unsafe water or other contaminating materials may be discharged or drawn into a ~~PWS, public water system. The water purveyor is responsible through its cross connection control program to take reasonable and prudent measures to protect the water system against contamination and pollution from cross connections through premises isolation or containment, internal or in plant isolation, fixture protection, or some combination of premises isolation, internal isolation, and fixture protection.~~ **Community PWS owners must meet the cross connection control program requirements in Subsection 552.06.** (3-24-22)( )

**01. Testable Assemblies.** All double check valve backflow prevention assemblies, reduced pressure principle backflow prevention assemblies, spill resistant vacuum breakers, and pressure vacuum breakers used must pass a performance test conducted by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research (USC Foundation) and be included on the USC Foundation “List of Approved Assemblies-” **for the application and orientation for which they are installed.** (3-24-22)( )

**02. Atmospheric Vacuum Breakers.** All atmospheric vacuum breakers used ~~shall~~ **must** be marked approved either by the International Association of Plumbing and Mechanical Officials (IAPMO) or by the American Society of Sanitation Engineers (ASSE). (3-24-22)( )

**03. Replacement Parts and Components.** All replacement parts and components, including resilient seated shutoff valves, ~~shall~~ **must** meet original manufacturer’s specifications or otherwise be approved by the USC Foundation as replacement parts or components for use on double check valve backflow prevention assemblies, reduced pressure principle backflow prevention assemblies, pressure vacuum breakers, and spill resistant pressure vacuum breakers. The design, material, or operational characteristics of any assembly must not be altered during maintenance or repair. (3-24-22)( )

**04. Assembly Selection.** Appropriate and adequate backflow prevention assembly types for various facilities, fixtures, equipment, and uses of water ~~should~~ **must** be selected from the ~~AWWA Pacific Northwest Section Cross Connection Control Manual, the Uniform Plumbing Code, the~~ AWWA Recommended Practice for Backflow Prevention and Cross Connection Control (M14), the USC Foundation Manual of Cross Connection Control, or other sources deemed acceptable by the Department. The selected assembly manufacturer model number must be included on the USC Foundation “List of Approved Assemblies” and must comply with local ordinances. (3-24-22)( )

**544. ~~FACILITY AND DESIGN STANDARDS: GENERAL DESIGN OF FINISHED WATER STORAGE.~~** The materials and designs used for finished water storage structures ~~shall~~ **must** provide stability and durability as well as protect the quality of the stored water. Finished water storage structures ~~shall~~ **must** be designed to maintain water circulation and prevent water stagnation. Steel structures and facilities such as steel tanks, standpipes, reservoirs, and elevated tanks ~~shall~~ **must** be designed and constructed in accordance with applicable AWWA Standards, incorporated by reference into these rules at Subsection 002.01. Other materials of construction are acceptable when properly designed to meet the requirements of Section 544. (3-24-22)( )

**01. Sizing and Isolation Requirements.** ( )

**a.** Storage facilities ~~shall~~ **must** have sufficient capacity, as determined from engineering studies that consider peak flows, fire flow capacity, and analysis of the need for various components of finished storage as defined under the term “Components of Finished Water Storage” in Section 003. The requirement for storage may be reduced when the source and treatment facilities have sufficient capacity with standby power to supply peak demands of the ~~system~~ **PWS.** (3-24-22)( )

**b.** All storage structures which provide pressure directly to the distribution system, such as elevated storage structures or ground level storage structures with associated pumping systems, ~~shall~~ **must** be designed so they can be isolated and drained for cleaning or maintenance without causing a loss of pressure in the distribution system. (3-24-22)( )

**02. Location.** Storage facilities ~~shall~~ **must** be located in a manner that protects against contamination, ensures structural stability, protects against flooding, and provides year-round access by vehicles and equipment needed for repair and maintenance. (3-24-22)( )

a. If the bottom elevation of a storage reservoir must be below normal ground surface, it ~~shall~~ **must** be placed above the seasonal high ground-water table. The top of a partially buried storage structure may not be less than two (2) feet above normal ground surface. (3-24-22)(    )

b. ~~Non-potable mains and services, standing water, and similar sources of possible contamination must be kept at least fifty (50) feet from any partially buried or below-ground storage structure or facility, except that non-potable mains and services constructed of potable water class pipe are allowed as close as twenty (20) feet from a partially buried or below-ground storage structure or facility. Partially buried or below-ground storage structures or facilities shall be located a minimum of fifty (50) feet from the nearest property line. Minimum separation distances from storage facilities must meet the following requirements:~~ (3-24-22)(    )

~~e. No public water supply storage tank shall be located within five hundred (500) feet of any municipal or industrial wastewater treatment plant or any land which is spray irrigated with wastewater or used for sludge disposal.~~ (3-24-22)

~~d. The top of a partially buried storage structure shall not be less than two (2) feet above normal ground surface.~~ (3-24-22)

~~e. Ground-level or above-ground storage structures or facilities shall be located a minimum of twenty (20) feet from the nearest property line and a minimum of twenty (20) feet from any potential source of contamination.~~

<b>Minimum Separation Distances From Storage Facilities (feet)</b>				
<b>Feature of Concern</b>	<b>Storage Facility Type</b>			
	<b>Below Ground</b>	<b>Partially Buried</b>	<b>Ground Level</b>	<b>Above Ground</b>
<u>Non-Potable Pipelines</u>	<u>50</u>	<u>50</u>		
<u>Non-Potable Pipelines Constructed of Water Class Pipe</u>	<u>20</u>	<u>20</u>		
<u>Standing Water</u>	<u>50</u>	<u>50</u>	<u>50</u>	
<u>Possible Sources of Contamination</u>	<u>50</u>	<u>50</u>	<u>20</u>	<u>20</u>
<u>Nearest Property Line</u>	<u>50</u>	<u>50</u>	<u>20</u>	<u>20</u>
<u>Municipal or Industrial Wastewater Treatment Plant</u>	<u>500</u>	<u>500</u>	<u>500</u>	<u>500</u>
<u>Land Which is Spray Irrigated With Wastewater or Used for Sludge Disposal</u>	<u>500</u>	<u>500</u>	<u>500</u>	<u>500</u>

(3-24-22)(    )

**03. Protection from Contamination.** All finished water storage structures ~~shall~~ **must** have suitable watertight roofs which exclude birds, animals, insects, and excessive dust. The installation of appurtenances, such as antennas, ~~shall~~ **must** be done in a manner that ensures no damage to the tank, coatings or water quality, or corrects any damage that occurred. (3-24-22)(    )

**04. Protection from Trespassers.** Fencing, locks on access manholes, and other necessary precautions ~~shall~~ **must** be provided to prevent trespassing, vandalism, and sabotage. (3-24-22)(    )

05. **Drains.** No drain on a water storage structure may have a direct connection to a sewer or storm drain. The design ~~shall~~ **must** allow draining the storage facility for cleaning or maintenance without causing loss of pressure in the distribution system. (3-24-22)( )

06. **Overflow.** Overflow pipes of any storage structure or facility ~~shall~~ **must** discharge to daylight in a way that will preclude the possibility of backflow to the reservoir and, where practical, be provided with an expanded metal screen installed within the pipe that will exclude rodents and deter vandalism. The overflow pipe ~~shall~~ **must** be of sufficient diameter to permit waste of water in excess of the filling rate **and be designed to mitigate blockage or freezing (see Subsection 544.11)**. The overflow ~~shall~~ **must** discharge over a drainage inlet structure or a splash plate and, when practical, discharge at an elevation between twelve (12) and twenty-four (24) inches above the receiving surface. (3-24-22)( )

a. When an internal overflow pipe is used on above-ground tanks, it ~~shall~~ **must** be located in the access tube. (3-24-22)( )

b. The overflow for ground-level, partially buried, or below-ground storage structures or facilities ~~shall~~ **must** have a vertical section of pipe at least two (2) pipe diameters in length and ~~either:~~ (3-24-22)

i. ~~B~~ **be** screened with a twenty-four (24) mesh non-corrodible screen installed within the pipe when practical or an expanded metal screen installed within the pipe plus a weighted flapper valve or check; ~~or unless otherwise approved by the Department.~~ (3-24-22)( )

ii. ~~Be an equivalent system acceptable to the Department.~~ (3-24-22)

07. **Access.** Finished water storage structures ~~shall~~ **must** be designed with reasonably convenient access to the interior for cleaning and maintenance. At least two (2) manholes ~~shall~~ **will** be provided above the waterline at each water compartment where space permits, as determined by the Department. One (1) manhole may be allowed on smaller tanks on a case-by-case basis. (3-24-22)( )

a. The following access requirements apply to above-ground and ground-level storage structures. Each access manhole ~~shall~~ **must** be framed a minimum of four (4) inches above the surface of the roof at the opening. The actual height above the surface of the roof must be sufficient to prevent incidental contamination from snow accumulation, storm water runoff or accumulation, irrigation water, or other potential sources of contamination. (3-24-22)( )

b. The following access requirements apply to, partially buried or below-ground storage structures. Each access manhole ~~shall~~ **must** be elevated a minimum of twenty-four (24) inches above the surface of the roof or the ground level, whichever is higher. The actual height above the surface of the roof or the ground level must be sufficient to prevent incidental contamination from snow accumulation, storm water runoff or accumulation, irrigation water, or other potential sources of contamination. (3-24-22)( )

c. Each manhole ~~shall~~ **must** be fitted with a solid water tight cover designed to prevent the entrance of contaminants. Each cover ~~shall~~ **may** be hinged only on one (1) side and ~~shall~~ have a locking device. Unless otherwise approved by the Department ~~based on documentation provided by the design engineer~~, each cover ~~shall~~ **will** have a framed opening with the lid extending down around the frame at least two (2) inches, and the frame ~~shall~~ **will** be at least four (4) inches high. (3-24-22)( )

08. **Vents.** Finished water storage structures ~~shall~~ **must** be vented. The overflow pipe ~~shall~~ **may** not be considered a vent. Open construction between the sidewall and roof is not permissible. Vents ~~shall~~ **must**: (3-24-22)( )

a. Prevent the entrance of surface water and rainwater and extend twelve (12) inches above the roof. ( )

b. Exclude birds and animals. ( )

c. Exclude insects and dust, as much as this function can be made compatible with effective venting ~~and be designed to mitigate blockage or freezing (see Subsection 544.11).~~ (3-24-22)( )

d. On ground-level, partially buried, or below-ground structures, open downward with the opening at least twenty-four (24) inches above the roof or the ground level and covered with twenty-four (24) mesh non-corrodible screen ~~or similar non-corrodible screen~~. The screen ~~shall is to~~ be installed within the pipe at a location least susceptible to vandalism. (3-24-22)( )

e. On above-ground tanks and standpipes, open downward, and be fitted with twenty-four (24) mesh or similar non-corrodible screen. (3-24-22)

**09. Roof and Sidewall.** The roof and sidewalls of all water storage structures must be watertight with no openings except properly constructed vents, manholes, overflows, risers, drains, pump mountings, control ports, or piping for inflow and outflow. Particular attention ~~shall is to~~ be given to the sealing of roof structures which are not integral to the tank body. (3-24-22)( )

a. Any pipes running through the roof or sidewall of a metal storage structure must be welded, or properly gasketed. In concrete tanks, these pipes ~~shall must~~ be connected to standard wall castings which were poured in place during the forming of the concrete. (3-24-22)( )

b. Openings in the roof of a storage structure designed to accommodate control apparatus or pump columns ~~shall must~~ be curbed and sleeved with proper additional shielding to prevent contamination from surface or floor drainage. (3-24-22)( )

c. The roof of the storage structure ~~shall must~~ be sloped to facilitate drainage. Downspout pipes ~~shall may~~ not enter or pass through the reservoir. Parapets, or similar construction which ~~would tends~~ to hold water and snow on the roof, will not be approved unless adequate waterproofing and drainage are provided. (3-24-22)( )

d. Reservoirs with pre-cast concrete roof structures must be made watertight with the use of a waterproof membrane or similar product. ( )

**10. Construction Materials.** Materials used in storage facility construction ~~shall must~~ meet the requirements for water contact surfaces set forth in Subsection 501.01. Porous materials such as wood or concrete block are not acceptable for use in storage construction. (3-24-22)( )

**11. Protection from Freezing.** Finished water storage structures and their appurtenances, especially the riser pipes, overflows, and vents, ~~shall must~~ be designed to prevent freezing ~~which will interfere with proper functioning~~. (3-24-22)( )

**12. Internal Catwalk.** Every catwalk over finished water in a storage structure ~~shall must~~ have a solid floor with sealed raised edges, designed to prevent contamination ~~from shoe scrapings and dirt~~. (3-24-22)( )

**13. Silt Stops.** Removable silt stops ~~shall must~~ be provided to prevent sediment from entering the reservoir discharge pipe. (3-24-22)( )

**14. Grading.** The area surrounding a ground-level, partially buried, or below-ground structures ~~shall must~~ be graded in a manner that will prevent surface water from standing ~~within fifty (50) feet of it~~. (3-24-22)( )

**15. Coatings and Cathodic Protection.** Proper protection ~~shall must~~ be given to metal surfaces by paints or other protective coatings, by cathodic protective devices, or by both. (3-24-22)( )

**16. Disinfection.** Storage facilities ~~shall must~~ be disinfected in accordance with AWWA Standard C652, incorporated by reference into these rules at Subsection 002.01. Two (2) or more successive sets of samples, taken at twenty-four (24) hour intervals, ~~shall must~~ indicate microbiologically satisfactory water before the facility is placed into operation. (3-24-22)( )

**17. Abandonment.** All unused subsurface storage tanks ~~shall must~~ be removed and backfilled, or

abandoned by extracting residual fluids and filling the structure with sand or fine gravel. (3-24-22)( )

**545. ~~FACILITY AND DESIGN STANDARDS:~~ TREATMENT PLANT STORAGE FACILITIES.**

The design standards of Section 544 ~~shall~~ apply to treatment plant storage. (3-24-22)( )

**01. Filter Wash Water.** Filter wash water tanks ~~shall~~ **must** be sized, in conjunction with available pump units and finished water storage, to provide the backwash water required by Section 521. Consideration must be given to the backwashing of several filters in rapid succession. (3-24-22)( )

**02. Clearwell.** When finished water storage is used to provide disinfectant contact time special attention must be given to tank size and baffling. An overflow and vent ~~shall~~ **must** be provided. A minimum of two (2) clearwell compartments ~~shall~~ **must** be provided to allow for cleaning or maintenance. Clearwells constructed under filters may be exempt from the requirements set out in Subsection 544.02.d. when the design provides adequate protection from contamination. (3-24-22)( )

**03. Adjacent Storage.** Finished or treated water must not be stored or conveyed in a compartment adjacent to untreated or partially treated water when the two (2) compartments are separated by a single wall, unless approved by the ~~reviewing authority~~ **Department**. (3-24-22)( )

**04. Other Treatment Plant Storage Tanks.** Unless otherwise allowed by the ~~reviewing authority~~ **Department**, other treatment plant storage tanks/basins such as detention basins, backwash reclaim tanks, receiving basins, and pump wet-wells for finished water ~~shall~~ **must** be designed as finished water storage structures. In addition, these tanks/basins ~~shall~~ **must** be designed to allow for cleaning or maintenance through temporary tanks, standby pumping capabilities, or other means approved by the Department. (3-24-22)( )

**546. ~~FACILITY AND DESIGN STANDARDS:~~ DISTRIBUTION SYSTEM STORAGE FACILITIES.**

**01. Design.** The applicable design standards of Section 544 ~~shall be followed for~~ **apply to** distribution system storage. (3-24-22)( )

**02. Isolation.** Finished water storage structures which provide pressure directly to the distribution system ~~shall~~ **must** be designed so they can be isolated from the distribution system and drained for cleaning or maintenance without causing a loss of pressure in the distribution system. This requirement may be met through available temporary tanks, redundant pumping capabilities, or other temporary means approved by the Department. If the finished water storage structure provides fire flow for the ~~water system PWS~~, the ~~water system PWS~~ owner ~~shall~~ **must** provide the local fire authority advance notification of cleaning or maintenance events which isolate the structure from the distribution system and reduce available fire flow to less than the minimum required by the local fire authority. (3-24-22)( )

**03. Drain.** Drains ~~shall~~ **must** discharge to daylight in a way that will preclude the possibility of backflow to the reservoir and, where practical, be provided with an expanded metal screen installed within the pipe that will exclude rodents and deter vandalism. The drain ~~shall~~ **will**, when practical, discharge at an elevation between twelve (12) and twenty-four (24) inches above the receiving surface, and discharge over a drainage inlet structure or a splash plate. (3-24-22)( )

**04. Level Controls.** Adequate controls ~~shall~~ **must** be provided to maintain levels in distribution system storage structures. Level indicating devices ~~shall~~ **must** be provided at a central location. (3-24-22)( )

**547. ~~FACILITY AND DESIGN STANDARDS:~~ HYDROPNEUMATIC TANK SYSTEMS.**

Hydropneumatic tanks ~~use compressed air~~ **may be used** to regulate pump cycling and to absorb pressure surges (water hammer). ~~These tanks do not provide true storage. Systems serving more than one hundred fifty (150) homes are generally better served by providing reservoir storage, as set forth in Sections 544, 545 and 546. Hydropneumatic tanks may not be used for storage for PWSs serving more than one hundred fifty (150) connections unless otherwise approved by the Department.~~ (3-24-22)( )

**01. ~~General~~ Design of Hydropneumatic Systems. ~~Tanks must:~~** (3-24-22)( )

- a. ~~Tanks shall be~~ Be located above normal ground surface and be completely housed. (3-24-22)( )
- b. ~~Tanks shall have~~ Have bypass piping to permit operation of the ~~system~~ PWS while the tank is being repaired or painted. Exterior surfaces and accessible interior surfaces ~~shall are to~~ be provided with protective coatings and shall be maintained in good condition. Supports beneath tanks ~~shall must~~ be structurally sound. (3-24-22)( )
- c. ~~Tanks shall be~~ Be sized to limit pump cycles to not more than six (6) per hour unless a pump manufacturer's warranty specifically supports more frequent cycling. The number of pump cycles may be increased in ~~systems~~ PWSs with multiple pumps if a means to automatically alternate pumps is provided. The Franklin Electric AIM manual, referenced in Subsection 002.02, Chapter 11 of the Washington State Department of Health Water System Design Manual, referenced in Subsection 002.02, or manufacturer's recommendations may be used as guidance in calculating the size of hydropneumatic tanks. (3-24-22)( )
- d. ~~Tanks of greater than one hundred twenty (120) gallons volume shall~~ Conform with the American Society of Mechanical Engineers (ASME) specifications code for unfired pressure vessels when they are of greater than one hundred twenty (120) gallons volume. Tanks of less than one hundred twenty (120) gallons volume ~~shall must~~ meet the ASME code or be certified by a nationally recognized testing agency to be capable of withstanding twice the maximum allowable working pressure. (3-24-22)( )

**02. Requirements Specific to Conventional Hydropneumatic Tanks.** Conventional tanks are those ~~that have~~ with a direct air to water interface and require periodic air recharge to compensate for absorption of air into the water. (3-24-22)( )

- a. Each tank ~~shall must~~ have an access manhole, a drain, and control equipment consisting of a pressure gauge, water sight glass, automatic or manual air blow-off, means for adding air that is filtered or otherwise protected from contamination, and pressure operated start-stop controls for the pumps. If tank size allows, the access manhole ~~shall will~~ be at least twenty-four (24) inches in diameter. (3-24-22)( )
- b. The gross volume of tanks in ~~systems~~ PWSs served by variable speed pumps may be less than that required for ~~systems~~ PWSs served by constant speed pumps. Design volumes ~~shall will~~ be approved by the Department on a site-specific basis. (3-24-22)( )

**03. Requirements Specific to Bladder Tanks.** Bladder tanks have a membrane that separates air and water inside the tank. ( )

- a. Bladder tanks must be pre-charged with air to a pressure of five (5) psi below the setting at which the pump turns on (the low operating pressure for the ~~system~~ PWS). (3-24-22)( )
- b. Each manifold assembly ~~shall must~~ have a pressure gauge and pressure operated start-stop controls for the pumps. (3-24-22)( )
- c. The procedure for sizing bladder tanks is to determine the number of a selected size of tanks that are needed to provide pump protection. Reduced tank volume in ~~systems~~ PWSs served by variable speed pumps ~~shall will~~ be approved by the Department on a site-specific basis. (3-24-22)( )

**548. ~~FACILITY AND DESIGN STANDARDS: DISINFECTION OF FACILITIES PRIOR TO USE.~~**

Any supplier of water for a ~~public water system shall~~ PWS must ensure that new construction or modifications to an existing ~~system shall be~~ PWS are flushed and disinfected in accordance with American Water Works Association (AWWA) Standards, incorporated by reference into these rules at Subsection 002.01, prior to being placed into service. (3-24-22)( )

549. -- 551. (RESERVED)

**552. OPERATING CRITERIA FOR PUBLIC WATER SYSTEMS.**

**01. Quantity and Pressure Requirements.** Design requirements regarding pressure analysis are found in Section 542.13. (3-24-22)



a. ~~Minimum Capacity.~~ The minimum capacity of a ~~public drinking water system shall~~ PWS must be at least eight hundred (800) gallons per day per residence. (3-24-22)(    )

i. The minimum capacity of eight hundred (800) gallons per day ~~shall be~~ is the design maximum day demand rate exclusive of irrigation and fire flow requirements. (3-24-22)(    )

ii. The minimum capacity of eight hundred (800) gallons per day is only acceptable if the ~~public drinking water system PWS~~ PWS has equalization storage of finished water in sufficient quantity to compensate for the difference between a ~~water system's PWS's~~ PWS's maximum pumping capacity and peak hour demand. (3-24-22)(    )

iii. The design capacity of a ~~public drinking water system PWS~~ PWS for material modifications may be less than eight hundred (800) gallons per day ~~per residence~~ if the ~~water system PWS~~ PWS owner provides information that demonstrates to the Department's satisfaction the maximum day demand for the ~~system PWS~~ PWS, exclusive of irrigation and fire flows, is less than eight hundred (800) gallons per day per residence. (3-24-22)(    )

b. ~~Pressure.~~ All ~~public water systems shall~~ PWS owners must meet the following pressure requirements: (3-24-22)(    )

i. ~~Any public water system shall b~~ Be capable of providing sufficient water during maximum day demand conditions, including fire flow where provided, to maintain a minimum pressure of twenty (20) psi throughout the distribution system, at ground level, as measured at the service connection or along the property line adjacent to the consumer's premises. (3-24-22)(    )

~~ii. Public Notification.~~ (3-24-22)

~~(1) During unplanned or emergency situations, when water pressure within the system is known to have fallen below twenty (20) psi, the water supplier must notify the Department, provide public notice to the affected customers within twenty four (24) hours, and disinfect or flush the system as appropriate. When sampling and corrective procedures have been conducted and after determination by the Department that the water is safe, the water supplier may re-notify the affected customers that the water is safe for consumption. The water supplier shall notify the affected customers if the water is not safe for consumption.~~ (3-24-22)

~~(2) During planned maintenance or repair situations, when water pressure within the system is expected to fall below twenty (20) psi, the water supplier must provide public notice to the affected customers prior to the planned maintenance or repair activity and shall ensure that the water is safe for consumption.~~ (3-24-22)

iii. If an initial investigation by the water supplier fails to discover the causes of inadequate or excessive pressure, the Department may require the water supplier to conduct a local pressure monitoring study to diagnose and correct pressure problems. Compliance with these requirements by ~~water systems PWSs~~ PWSs that do not have a meter vault or other point of access at the service connection or along the property line adjacent to the consumer's premises where pressure in the distribution system can be reliably measured ~~shall~~ must be determined by measurements within the consumer's premises, or at another representative location acceptable to the Department. (3-24-22)(    )

~~iv~~ iii. Copies of pressure monitoring study reports required under Subsection 552.01.b.iii. detailing study results and any resulting corrective actions planned or performed by the ~~public water system shall~~ PWS owner must be submitted to the Department in accordance with these rules. (3-24-22)(    )

~~iv~~ iv. The following ~~public water systems PWSs~~ PWSs or service areas of ~~public water systems shall~~ PWSs must maintain a minimum pressure of forty (40) psi throughout the distribution system, during peak hour demand conditions, excluding fire flow, measured at the service connection or along the property line adjacent to the consumer's premises. (3-24-22)(    )

(1) Any ~~public water system PWS~~ PWS constructed or substantially modified after July 1, 1985. (3-24-22)(    )

- (2) Any new service areas. ( )
- (3) Any ~~public water system~~ PWS that is undergoing material modification where it is feasible to meet the pressure requirements as part of the material modification. (3-24-22)( )
- vi. Any ~~public water system shall~~ newly constructed PWSs, or portions of existing systems that are materially modified after July 1, 2024, must keep static pressure within the distribution system below ~~one hundred eighty (10080) psi and should ordinarily keep static pressure below eighty (80) psi~~. Pressures above ~~one hundred eighty (10080) psi shall must~~ be controlled by pressure reducing valve stations installed in the distribution main. In areas where failure of installed pressure reducing valve stations ~~would~~ result in extremely high pressure, pressure relief valves may be required. The Department may approve the use of pressure reducing devices at individual service connections on a case-by-case basis, if it can be demonstrated that higher pressures in portions of the distribution system are required for efficient ~~system~~ PWS operation. If ~~system~~ PWS modification will cause pressure to routinely exceed eighty (80) psi, or if a check valve or an individual pressure reducing device is added to the service line, the ~~water system~~ PWS owner ~~shall must~~ notify affected customers. Notification may include reasons for the elevated pressure, problems or damage that elevated pressure can inflict on appliances or plumbing systems, and suggested procedures or mitigation efforts affected property owners may initiate to minimize problems or damage. (3-24-22)( )
- vii. The Department may allow the installation of booster pump systems at individual service connections on a case-by-case basis. However, such an installation may only occur with the full knowledge and agreement of the ~~public water system~~ PWS owner, including assurance by the ~~water system~~ PWS that the individual booster pump will cause no adverse effects on ~~system~~ PWS operation. (3-24-22)( )
- viii. For elevated storage tanks, pressure calculations during peak hour demand ~~shall be~~ are based on the lowest water level after both operational storage and equalization storage have been exhausted. Pressure calculations during fire flow demands ~~shall be~~ are based on the lowest water level after operational storage, equalization storage, and fire suppression storage have been exhausted. (3-24-22)( )
- ix ~~viii~~. For hydropneumatic tanks, pressure calculations ~~shall be~~ are based on the lowest pressure of the pressure cycle and this requirement ~~shall must~~ be noted in the operation and maintenance manual. (3-24-22)( )
- c. Fire Flows. Any ~~public water system~~ PWS designed to provide fire flows ~~shall must~~ ensure that such flows are compatible with the water demand of existing and planned fire-fighting equipment and fire fighting practices in the area served by the ~~system~~ PWS. (3-24-22)( )
- d. Irrigation Flows. ( )
- i. Any ~~public water system~~ PWS constructed after November 1, 1977, ~~shall must~~ be capable of providing water for uncontrolled, simultaneous foreseeable irrigation demand, which ~~shall~~ includes all acreage that the ~~system~~ PWS is designed to irrigate. (3-24-22)( )
- (1) The Department must concur with assumptions regarding the acreage to be irrigated. In general, an assumption that no outside watering will occur is considered unsound and is unlikely to be approved. ( )
- (2) An assumption of minimal outside watering, as in recreational subdivisions, may be acceptable if design flows are adequate for maintenance of “green zones” for protection against wildland fire. ( )
- ii. The Department may modify the requirement of Subsection 552.01.d.i. ~~may be modified by the Department~~ if: (3-24-22)( )
- (1) A separate irrigation system is provided; or ( )
- (2) The supplier of water can regulate the rate of irrigation through its police powers, and the ~~water system~~ PWS is designed to accommodate a regulated rate of irrigation flow. The Department may require the ~~water system~~ PWS to submit a legal opinion addressing the enforceability of such police powers. (3-24-22)( )



iii. If a separate non-potable irrigation system is provided for the consumers, all mains, hydrants and appurtenances ~~shall~~ **must** be easily identified as non-potable. The Department must concur with a plan to ensure that each new potable water service is not cross-connected with the irrigation system. (3-24-22)( )

**02. Ground-Water.** (3-24-22)( )

a. ~~Public water systems constructed after July 1, 1985, and~~ PWSs supplied by ground-water, ~~shall~~ **must** treat water within the ~~system~~ PWS by disinfection if the ground-water source is not protected from contamination. (3-24-22)( )

b. The Department may, ~~in its discretion,~~ require disinfection for any existing ~~public water system~~ PWS supplied by ground-water if the ~~system~~ PWS has repeated ~~coliform present samples or~~ E.coli MCL exceedances, and if the ~~system~~ PWS does not appear adequately protected from contamination. Adequate protection will be determined based upon at least the following factors: (3-24-22)( )

- i. Location of possible sources of contamination; ( )
- ii. Size of the well lot; ( )
- iii. Depth of the source of water; ( )
- iv. Bacteriological quality of the aquifer; ( )
- v. Geological characteristics of the area; and ( )
- vi. Adequacy of development of the source. ( )

**03. Operating Criteria.** The operating criteria for ~~systems~~ PWSs that provide filtration ~~shall be~~ **are** as follows: (3-24-22)( )

a. A project specific operation and maintenance manual ~~shall~~ **must** be provided as required in Subsection 501.12. See definition of Operation and Maintenance Manual in Section 003 for the typical contents of an operation and maintenance manual and the included operations plan. For the operations plan in the operation and maintenance manual, additional guidance for several types of filtration systems can be found in the Department's SWTR Compliance Guidance referenced in Subsection 002.02. (3-24-22)( )

b. The ~~system shall~~ PWS **must** conduct monitoring specified by the Department before serving water to the public in order to protect the health of consumers served by the ~~system~~ PWS. (3-24-22)( )

c. New treatment facilities ~~shall~~ **must** be operated in accordance with Subsection 552.03.a., and the ~~system shall~~ PWS **must** conduct monitoring specified by the Department for a trial period specified by the Department before serving water to the public in order to protect the health of consumers served by the ~~system~~ PWS. (3-24-22)( )

**04. Chlorination/Disinfection.** ~~Systems~~ PWSs that regularly ~~add chlorine to~~ **disinfect** their water **using chlorine** are subject to the provisions of Section 320. ~~Systems~~ PWSs using surface water or ground-water under the direct influence of surface water, are subject to the disinfection requirements of Sections 300 and 518. **PWSs using chlorine, ozone, chlorine dioxide, or other disinfecting agents for the purposes of disinfection must meet the facility and design standards of Sections 530 and 531. PWSs using ultraviolet light for the purposes of disinfection must meet the facility and design standards of Section 529.** (3-24-22)( )

a. ~~Systems~~ PWSs using only ~~ground water that add~~ **chlorine a disinfectant** for the purpose of disinfection, as defined in Section 003, are subject to the following requirements: (3-24-22)( )

i. ~~Chlorinator and chlorine contact tank capacity shall be such that the system is able to~~ **The PWS must** demonstrate that it is routinely achieving four (4) logs (ninety-nine point ninety-nine percent) (99.99%) inactivation/removal of viruses. The required effective contact time ~~will be specified~~ **must be approved** by the

Department. This condition must be attainable even when the ~~plant~~ design capacity coincides with anticipated maximum ~~chlorine disinfectant~~ demands. (3-24-22)( )

ii. A detectable ~~chlorine disinfectant~~ residual ~~shall must~~ be maintained throughout the distribution system. ~~PWSs disinfecting through ultraviolet light will need to maintain a supplemental disinfectant capable of maintaining a detectable disinfectant residual.~~ (3-24-22)( )

~~iii. Automatic proportioning chlorinators are required where the rate of flow or chlorine demand is not reasonably constant.~~ (3-24-22)

~~iv.iii.~~ Analysis for ~~free chlorine disinfectant~~ residual ~~shall must~~ be conducted at a location at or prior to the first service connection at least daily and records of these analyses ~~shall are to~~ be kept by the supplier of water for at least one (1) year. A report of all daily chlorine residual measurements for each calendar month ~~shall must~~ be submitted to the Department no later than the tenth day of the following month. The frequency of measuring ~~free chlorine disinfectant~~ residuals ~~shall must~~ be sufficient to detect variations in ~~chlorine~~ demand or changes in water flow. (3-24-22)( )

~~v. If gas chlorination equipment is provided, a separate and ventilated room is required.~~ (3-24-22)

~~vi.iv.~~ The Department may, in its discretion, require a treatment rate higher than that specified in Subsection 552.04.a.i. ( )

~~vii. When chlorine gas is used, chlorine leak detection devices and safety equipment shall be provided and equipped with both an audible alarm and a warning light.~~ (3-24-22)

~~viii. The Department may require redundant chlorine pumping capabilities with automatic switchover for systems with documented source water contamination problems and that lack adequate storage to supply the system during a pump failure.~~ (3-24-22)

b. ~~Systems PWSs~~ using only ground ~~water~~ that add ~~chlorine disinfectant~~ for the purpose of maintaining a disinfectant residual in the distribution system, when the source(s) is not at risk of microbial contamination, are subject to ~~the following requirements:~~ (3-24-22)( )

~~i. Automatic proportioning chlorinators are required where the rate of flow or chlorine demand is not reasonably constant.~~ (3-24-22)

~~ii. A analysis for free chlorine disinfectant residual shall be made at a frequency that is sufficient to detect variations in chlorine demand or changes in water flow.~~ (3-24-22)( )

c. ~~Systems PWSs~~ using only ground ~~water~~ that add chlorine for other purposes, such as oxidation of metals or taste and odor control, when the source(s) is known to be free of microbial contamination, must ensure that chlorine residual entering the distribution system after treatment is less than four (4.0) mg/L. The requirements in Subsection 552.04.b.ii. also apply if the ~~system PWS~~ maintains a chlorine residual in the distribution system. (3-24-22)( )

## 05. Fluoridation. ( )

a. Commercial sodium fluoride, sodium silico fluoride and hydrofluosilicic acid which conform to the applicable American Water Works Association (AWWA) Standards, incorporated by reference into these rules at Subsection 002.01, are acceptable. Use of other chemicals ~~shall must~~ be specifically approved by the Department. (3-24-22)( )

b. Fluoride compounds ~~shall are to~~ be stored in covered or unopened shipping containers. (3-24-22)( )

c. Provisions ~~shall must~~ be made to minimize the quantity of fluoride dust. Empty bags, drums, or barrels ~~shall are to~~ be disposed of in a manner that will minimize exposure to fluoride dusts. (3-24-22)( )

d. Daily records of flow and amounts of fluoride added ~~shall~~ must be kept. An analysis for fluoride in finished water ~~shall~~ must be made at least weekly. Records of these analyses ~~shall~~ are to be kept by the supplier of water for five (5) years. (3-24-22)( )

**06. Cross Connection Control Program - Community Water Systems.** The water purveyor is responsible through its cross connection control program to take reasonable and prudent measures to protect the ~~water system~~ PWS against contamination and pollution from cross connections through premises isolation, internal or in-plant isolation, fixture protection, or some combination of premises isolation, internal isolation, and fixture protection. Pursuant to Section 543, all suppliers of water for community ~~water systems~~ shall PWSs must implement a cross connection control program to prevent the entrance to the ~~system~~ PWS of materials known to be toxic or hazardous. The water purveyor is responsible to enforce the ~~system's~~ PWS's cross connection control program. The program will at a minimum include: (3-24-22)( )

a. An inspection program to locate cross connections and determine required suitable protection. For new connections, PWS owners must verify suitable protection ~~must be~~ was installed prior to providing water service. (3-24-22)( )

b. Required installation and operation of adequate backflow prevention assemblies. Appropriate and adequate backflow prevention assembly types for various facilities, fixtures, equipment, and uses of water ~~should~~ must be selected from the ~~AWWA Pacific Northwest Section Cross Connection Control Manual, the~~ Uniform Plumbing Code, the AWWA Recommended Practice for Backflow Prevention and Cross Connection Control (M14), the USC Foundation Manual of Cross Connection Control, or other sources deemed acceptable by the Department. The assemblies must meet the requirements of Section 543 and comply with local ordinances. (3-24-22)( )

c. Annual inspections and testing of all installed backflow prevention assemblies by a tester licensed by a licensing authority recognized by the Department. Testing ~~shall~~ must be done in accordance with the test procedures published by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research. See the USC Foundation Manual of Cross-Connection Control referenced in Subsection 002.02. (3-24-22)( )

d. Discontinuance of service to any structure, facility, or premises where suitable backflow protection has not been provided for a cross connection. ( )

e. Assemblies that cannot pass annual tests or those found to be defective ~~shall~~ are to be repaired, replaced, or isolated within ten (10) business days. If the failed assembly cannot be repaired, replaced, or isolated within ten (10) business days, water service to the failed assembly ~~shall~~ must be discontinued. (3-24-22)( )

**07. Cross Connection Control - Non-Community Water Systems.** All suppliers of water for non-community water systems ~~shall~~ must ensure that cross connections do not exist or are isolated from the potable water system by an approved backflow prevention assembly. Backflow prevention assemblies ~~shall~~ must be inspected and tested annually for functionality by an Idaho licensed tester, as specified in Subsections 552.06.c. and 552.06.e. (3-24-22)( )

**08. Start-up Procedures For Seasonal Systems Subject To Subsections 100.01.a., c., and d.** ( )

a. All seasonal ~~system~~ PWS owners ~~and operators~~ must demonstrate completion of a Department approved start-up procedure, including start-up sampling, prior to serving water to the public. The ~~system~~ PWS owner ~~or operator~~ must submit information on a Department provided or approved form that includes a statement certifying that the ~~system~~ PWS owner or operator followed proper start-up procedures. The form ~~shall~~ must be submitted to the Department within 30 (thirty) days following the ~~system's~~ PWS's start-up date. Start-up sampling must include total coliform samples submitted to a certified laboratory demonstrating the absence of total coliform within thirty (30) days prior to serving water to the public. (3-24-22)( )

b. The Department may exempt any seasonal ~~system~~ PWS from Subsection 552.08.a. if the entire distribution system remains pressurized during the entire period that the ~~system~~ PWS is not operating, except that the

~~systems~~ PWSs that monitor less frequently than monthly must still monitor during the vulnerable period designated by the Department. The Department may exempt a seasonal ~~system~~ PWS from Subsection 552.08.a. if the owner or operator of the ~~system~~ PWS meets all of the following conditions: (3-24-22)( )

- i. Requests an exemption in writing to the Department for approval; ( )
- ii. Demonstrates a clean compliance history as defined in Section 003 for a minimum of five (5) years; ( )
- iii. Has no uncorrected significant deficiencies from the most recent sanitary survey; and ( )
- iv. Total coliform samples submitted to a certified laboratory within 30 (thirty) days prior to serving water to the public demonstrate the absence of total coliform. ( )

### 553. CLASSIFICATION OF WATER SYSTEMS.

**01. System Classification Required.** The Department ~~shall~~ will classify community, non-transient non-community, and surface water ~~systems~~ PWSs based on indicators of potential health risks. (3-24-22)( )

~~a. The owner or designee of every community and nontransient noncommunity public water system shall submit proof of the current conditions related to the classification of the system every five (5) years or more frequently if required by the Department.~~ (3-24-22)

~~b. The owner or designee of all surface water systems shall submit proof of the current conditions related to the classification of the system every five (5) years or more frequently if required by the Department.~~ (3-24-22)

**02. Classification Criteria.** ~~Systems shall be~~ PWSs are classified under a system that uses the following criteria: (3-24-22)( )

- a. Complexity, size, and type of source water for treatment facilities. ( )
- b. Complexity and size of distribution systems. ( )
- c. Other criteria deemed necessary to completely classify ~~systems~~ PWSs. (3-24-22)( )
- d. The Department ~~shall~~ will develop guidelines for applying the criteria set forth in Section 553. (3-24-22)( )

**03. Classification Review.** The Department will review PWS classifications on a minimum five (5) year frequency. ( )

### 554. LICENSED OPERATOR REQUIREMENTS.

**01. Licensed Operator Required.** (3-24-22)

~~a. Owners of all community, and non-transient non-community, public drinking water systems and surface water or groundwater sources directly influenced by surface water must place the direct supervision of their drinking water system, including each treatment facility and distribution system, PWS under the responsible charge of a properly licensed operator at all times. When the responsible operator is not available, the PWS owner must designate a substitute responsible operator.~~ (3-24-22)( )

~~b. Owners of all surface water systems must place the direct supervision of their public drinking water system under the responsible charge of a properly licensed operator.~~ (3-24-22)

**02. Responsible Charge Operator License Requirement.** An operator in responsible charge of a ~~public drinking water system~~ PWS must hold a valid Idaho license equal to or greater than the classification of the

~~public water system~~ PWS where the responsible charge operator is in ~~responsible~~ charge as defined in Section 003. Responsible charge means active, daily on site or on call responsibility for the performance of operations or active, on-going, on-site, or on-call direction of employees and assistants. (3-24-22)(    )

~~03. Substitute Responsible Charge Operator License Requirement.~~ At such times as the responsible charge operator is not available, a substitute responsible charge operator shall be designated to replace the responsible charge operator. A substitute responsible charge operator of a public water system must hold a valid license equal to or greater than the classification of the public water system where the substitute responsible charge operator is in responsible charge. (3-24-22)

~~04. Shift Operator Requirement.~~ Any public drinking water system subject to these requirements with multiple operating shifts must have a designated properly licensed operator available for each operating shift. An on-duty designated shift operator does not replace the requirements in Subsections 554.01 and 554.03 for responsible charge operator coverage during all operating shifts. (3-24-22)

~~053. Water Operator License Requirement.~~ All operating personnel at ~~public drinking water systems~~ PWSs subject to these requirements making process control/ system integrity decisions about water quality or quantity that can affect public health must hold a valid Idaho and current license. (3-24-22)(    )

04. Water Operator License Upgrade Allowance. A twelve (12) month period will be provided to meet increased drinking water distribution system operator licensure requirements when a higher licensure level is required based on a population increase if the following requirements are met: (    )

a. The licensure increase is triggered solely by a population increase; and (    )

b. The responsible charge operator of the PWS at the time the distribution licensure requirement increases remains the responsible charge operator throughout the twelve (12) month timeframe. (    )

555. -- 559. (RESERVED)

**560. CONTRACTING FOR SERVICES.**

~~Public water systems may~~ PWS owners who contract with persons to provide responsible charge operators and substitute responsible charge operators; need to submit P proof of such contract ~~shall be submitted~~ to the Department prior to the contracted person performing any services at the ~~public water system~~ PWS. (3-24-22)(    )

561. -- 562. (RESERVED)

**563. ADVISORY GROUP.**

~~Stakeholder Involvement.~~ Ongoing stakeholder involvement will be provided through the existing drinking water advisory committee at the Department. (3-24-22)(    )

564. -- ~~8999~~. (RESERVED)

**900. TABLES.**

~~01. Table 1—Minimum Distances From a Public Water System Well.~~

<del>Minimum Distances from a Public Water System Well</del>	
<del>Gravity wastewater line</del>	50 feet
<del>Any potential source of contamination</del>	50 feet
<del>Pressure wastewater line</del>	100 feet
<del>Class A Municipal Reclaimed Wastewater Pressure distribution line</del>	50 feet

<b>Minimum Distances from a Public Water System Well</b>	
Individual home septic tank	400 feet
Individual home disposal field	400 feet
Individual home seepage pit	400 feet
Privies	400 feet
Livestock	50 feet
Drainfield—standard subsurface disposal module	400 feet
Absorption module—large soil absorption system	150—300 feet, see IDAPA 58.01.03
Canals, streams, ditches, lakes, ponds and tanks used to store non-potable substances	50 feet
Storm water facilities disposing storm water originating off the well lot	50 feet
Municipal or industrial wastewater treatment plant	500 feet
Reclamation and reuse of municipal and industrial wastewater sites	See IDAPA 58.01.17
Biosolids application site	1,000 feet

(3-24-22)

02. **Table 2—Well Casing Standards for Public Water System Wells.**

<b>STEEL PIPE</b>					
			WEIGHT PER FOOT (pounds)		
DIAMETER (inches)			THICKNESS (inches)	Plain Ends	With Threads and Couplings
SIZE	External	Internal		(calculated)	(nominal)
6 (id)*	6.625	6.065	0.280	18.97	19.18
8	8.625	7.981	0.322	28.55	29.35
10	10.750	10.020	0.365	40.48	41.85
12	12.750	12.000	0.375	49.56	51.15
14 (od)*	14.000	13.250	0.375	54.57	57.00
16	16.000	15.250	0.375	62.58	
18	18.000	17.250	0.375	70.59	
20	20.000	19.250	0.375	78.60	
22	22.000	21.000	0.500	114.81	
24	24.000	23.000	0.500	125.49	

<b>STEEL PIPE</b>					
<del>26</del>	<del>26.000</del>	<del>25.000</del>	<del>0.500</del>	<del>136.17</del>	
<del>28</del>	<del>28.000</del>	<del>27.000</del>	<del>0.500</del>	<del>146.85</del>	
<del>30</del>	<del>30.000</del>	<del>29.000</del>	<del>0.500</del>	<del>157.53</del>	
<del>32</del>	<del>32.000</del>	<del>31.000</del>	<del>0.500</del>	<del>168.21</del>	
<del>34</del>	<del>34.000</del>	<del>33.000</del>	<del>0.500</del>	<del>178.89</del>	
<del>36</del>	<del>36.000</del>	<del>35.000</del>	<del>0.500</del>	<del>189.57</del>	

\* id = inside diameter  
 od = outside diameter

(3-24-22)

~~901. — 999.~~ (RESERVED)

## **IDAPA 58 – DEPARTMENT OF ENVIRONMENTAL QUALITY**

### **58.01.25 – RULES REGULATING THE IDAHO POLLUTANT DISCHARGE ELIMINATION SYSTEM PROGRAM**

**DOCKET NO. 58-0125-2301 (ZBR CHAPTER REWRITE, FEE RULE)**

#### **NOTICE OF RULEMAKING – ADOPTION OF PENDING RULE**

**[LINK: LSO Rules Analysis Memo, Incorporation By Reference Synopsis \(IBRS\), & Cost/Benefit Analysis \(CBA\)](#)**

**EFFECTIVE DATE:** This rule has been adopted by the Idaho Board of Environmental Quality (Board) and is now pending review by the 2024 Idaho State Legislature for final approval. Pursuant to Section 67-5224(2)(d), Idaho Code, this pending fee rule shall not become final and effective unless affirmatively approved by concurrent resolution of the Legislature. Pursuant to Section 67-5291(2), Idaho Code, all temporary, pending, and final rules of any nature may be approved or rejected by a concurrent resolution of the Legislature. The concurrent resolution shall state the effective date of the approval or rejection.

**AUTHORITY:** In compliance with Section 67-5224, Idaho Code, notice is hereby given that the Board has adopted a pending rule. This action is authorized by Sections 39-105, 39-107, and 39-175C, Idaho Code.

**DESCRIPTIVE SUMMARY:** A detailed summary of the reason for adopting the rule is set forth in the initial proposal published in the Idaho Administrative Bulletin, September 6, 2023, [Vol. 23-9, pages 786 through 908](#).

No comments were received, and the rule has been adopted as initially proposed. The board meeting documents are available at <https://www.deq.idaho.gov/ipdes-docket-no-58-0125-2301/>.

**FEE SUMMARY:** This rulemaking does not impose or increase a fee beyond what was previously submitted to and reviewed by the Idaho Legislature in prior rules. Fees included in this rule chapter are authorized by Idaho Code § 39-175C.

**FISCAL IMPACT STATEMENT:** The following is a specific description, if applicable, of any negative fiscal impact on the state General Fund greater than ten thousand dollars (\$10,000) during the fiscal year: Not applicable.

**ASSISTANCE ON TECHNICAL QUESTIONS:** For assistance on questions concerning the rulemaking, contact the undersigned.

Dated this 6th day of December, 2023.

Kristin Ryan  
Deputy Director  
Department of Environmental Quality  
1410 N. Hilton Street  
Boise, Idaho 83706  
208-373-0194  
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**THE FOLLOWING NOTICE PUBLISHED WITH THE PROPOSED RULE**

**AUTHORITY:** In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking. This action is authorized by Sections 39-105, 39-107, and 39-175C, Idaho Code.

**PUBLIC HEARING SCHEDULE:** No hearings have been scheduled. Pursuant to Section 67-5222(2), Idaho Code, a public hearing will be held if requested in writing by twenty-five (25) persons, a political subdivision, or an agency. Written requests for a hearing must be received by the undersigned on or before September 22, 2023. If no such written request is received, a public hearing will not be held. Two public meetings were held during the negotiated rulemaking process.

**DESCRIPTIVE SUMMARY:** DEQ initiated this rulemaking in compliance with [Executive Order No. 2020-01, Zero-Based Regulation \(EO 2020-01\)](#), issued by Governor Little on January 16, 2020. Pursuant to EO 2020-01, each rule chapter effective on June 30, 2020, shall be reviewed by the agency that promulgated the rule. The review will be conducted according to a schedule established by the Division of Financial Management, Office of the Governor (DFM), posted at [https://adminrules.idaho.gov/forms\\_menu.html](https://adminrules.idaho.gov/forms_menu.html). This is one of the DEQ rule chapters up for review in 2023. The goal of the rulemaking is to perform a critical and comprehensive review of the entire chapter in an attempt to reduce overall regulatory burden, streamline various provisions, increase clarity and ease of use, and maintain state program approval.

This rulemaking also updates federal regulations incorporated by reference with the July 1, 2023 Code of Federal Regulations (CFR) effective date. The July 1, 2023 CFR is a codification of federal regulations published in the Federal Register as of July 1, 2023. Adoption of federal regulations is necessary to maintain program primacy. Incorporation by reference allows DEQ to keep its rules up to date with federal regulations and simplifies compliance for the regulated community.

Citizens of the state of Idaho; environmental groups; major and minor municipal dischargers; industrial dischargers; facilities, organizations and individuals seeking coverage under a general permit; facilities that currently have or will have a pretreatment permit to a wastewater facility; and others interested in point source discharges to Idaho's surface waters may be interested in commenting on this proposed rule. The rule is expected to be final and effective upon the conclusion of the 2024 legislative session if adopted by the Board and approved by the Idaho Legislature.

**FEE SUMMARY:** This rulemaking does not impose or increase a fee beyond what was previously submitted to and reviewed by the Idaho Legislature in prior rules. Fees included in this rule chapter are authorized by Idaho Code § 39-175C.

**FISCAL IMPACT:** The following is a specific description, if applicable, of any negative fiscal impact on the state General Fund greater than ten thousand dollars (\$10,000) during the fiscal year resulting from this rulemaking: Not applicable.

**NEGOTIATED RULEMAKING:** On April 5, 2023, the notice of negotiated rulemaking was published in the Idaho Administrative Bulletin and on April 7, 2023, a preliminary draft rule was posted on DEQ's website. Meetings were held on April 20 and June 1, 2023. Stakeholders and members of the public participated by receiving email notifications, attending the meetings, reviewing DEQ's presentations, and submitting comments. Key information was posted on DEQ's website and distributed to persons who participated in the negotiated rulemaking.

All comments received during the negotiated rulemaking process were considered by DEQ when making decisions regarding the development of the rule. At the conclusion of the negotiated rulemaking process, DEQ submitted the draft rule to the Division of Financial Management for review. DEQ formatted the draft for publication as a proposed rule and is now seeking public comment. The negotiated rulemaking record, which includes the negotiated rule drafts, documents distributed during the negotiated rulemaking process, and the negotiated rulemaking summary, is available at <https://www.deq.idaho.gov/ipdes-docket-no-58-0125-2301/>.

**INCORPORATION BY REFERENCE:** Pursuant to Section 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the materials cited are being incorporated by reference into this rule:

Adoption of federal regulations is necessary to maintain program primacy, allows DEQ to keep its rules up to date with federal regulation changes, and simplifies compliance for the regulated community. Information for obtaining a copy of the federal regulations is included in the rule.

In compliance with Idaho Code 67-5223(4), DEQ prepared a brief synopsis detailing the substantive differences between the previously incorporated material and the latest revised edition or version of the incorporated material being proposed for incorporation by reference. The Overview of Incorporations by Reference is available at <https://www.deq.idaho.gov/ipdes-docket-no-58-0125-2301/>

**IDAHO CODE SECTION 39-107D STATEMENT:** This proposed rule does not regulate an activity not regulated by the federal government, nor is it broader in scope or more stringent than federal regulations.

**ASSISTANCE ON TECHNICAL QUESTIONS:** For assistance on questions concerning this proposed rulemaking, contact Mary Anne Nelson at [mary.anne.nelson@deq.idaho.gov](mailto:mary.anne.nelson@deq.idaho.gov) or (208) 373-0291.

**SUBMISSION OF WRITTEN COMMENTS:** Anyone may submit written comments regarding this proposed rule. The Department will consider all written comments received on or before October 6, 2023. Submit written comments to:

Mary Anne Nelson  
Department of Environmental Quality  
1410 N. Hilton, Boise, ID 83706  
[mary.anne.nelson@deq.idaho.gov](mailto:mary.anne.nelson@deq.idaho.gov)

Dated this 6th day of September, 2023

**THE FOLLOWING IS THE TEXT OF ZBR DOCKET NO. 58-0125-2301**

**58.01.25 – IDAHO POLLUTANT DISCHARGE  
ELIMINATION SYSTEM RULES**

**000. LEGAL AUTHORITY.**

Sections 39-105, 39-107, and 39-175C, Idaho Code. ( )

**001. SCOPE.**

These rules establish the procedures and requirements for issuing and maintaining IPDES permits for facilities or activities required by Idaho Code and the Clean Water Act (CWA) to obtain authorization to discharge pollutants to waters of the United States. ( )

**002. CONFIDENTIALITY OF RECORDS.**

Information obtained by the Department under these rules is subject to public disclosure under the provisions of Chapter 1, Title 74, Idaho Code, and IDAPA 58.01.23, “Contested Case Rules and Rules for Protection and Disclosure of Records.” In accordance with Sections 74-101 through 74-119, Idaho Code, information submitted to the Department under these rules may be claimed as confidential by the submitter. The submitter must claim confidentiality on each page or on another portion of the information when submitted and has the burden to demonstrate that the information is confidential. ( )

**003. INCORPORATION BY REFERENCE OF FEDERAL REGULATIONS.**

- 01. Incorporation by Reference.** ( )
- a.** 40 CFR 122.21(r), revised as of July 1, 2023 (Application Requirements for Facilities with Cooling Water Intake Structures); ( )
- b.** 40 CFR 122.23, revised as of July 1, 2023 (Concentrated Animal Feeding Operations); ( )
- c.** 40 CFR 122.24, revised as of July 1, 2023 (Concentrated Aquatic Animal Production Facilities); ( )
- d.** 40 CFR 122.25, revised as of July 1, 2023 (Aquaculture Projects); ( )
- e.** 40 CFR 122.26(a) through (b) and 40 CFR 122.26(e) through (g), revised as of July 1, 2023 (Storm Water Discharges); ( )
- f.** 40 CFR 122.27, revised as of July 1, 2023 (Silvicultural Activities); ( )
- g.** 40 CFR 122.29(d), revised as of July 1, 2023 (Effect of Compliance with New Source Performance Standards); ( )
- h.** 40 CFR 122.30 and 40 CFR 122.32 through 40 CFR 122.37, revised as of July 1, 2023 (Requirements and Guidance for Small Municipal Separate Storm Sewer Systems); ( )
- i.** 40 CFR 122.42(e), revised as of July 1, 2023 (Additional Conditions Applicable to NPDES Permits for Concentrated Animal Feeding Operations); ( )
- j.** Appendix A to 40 CFR 122, revised as of July 1, 2023 (NPDES Primary Industry Categories); ( )
- k.** Appendix C to 40 CFR 122, revised as of July 1, 2023 (Criteria for Determining a Concentrated Aquatic Animal Production Facility); ( )
- l.** Appendix D to 40 CFR 122, revised as of July 1, 2023 (NPDES Permit Application Testing Requirements); ( )
- m.** Appendix J to 40 CFR 122, revised as of July 1, 2023 (NPDES Permit Testing Requirements for Publicly Owned Treatment Works); ( )
- n.** 40 CFR 125.1 through 40 CFR 125.3 (Subpart A), revised as of July 1, 2023 (Criteria and Standards for Imposing Technology-Based Treatment Requirements Under Sections 301(b) and 402 of the Clean Water Act); ( )
- o.** 40 CFR 125.10 through 40 CFR 125.11 (Subpart B), revised as of July 1, 2023 (Criteria for Issuance of Permits to Aquaculture Projects); ( )
- p.** 40 CFR 125.30 through 40 CFR 125.32 (Subpart D), revised as of July 1, 2023 (Criteria and Standards for Determining Fundamentally Different Factors Under Sections 301(b)(1)(A) and 301(b)(2)(A) and (E) of the Clean Water Act); ( )
- q.** 40 CFR 125.70 through 40 CFR 125.73 (Subpart H), revised as of July 1, 2023 (Criteria for Determining Alternative Effluent Limitations Under Section 316(a) of the Clean Water Act); ( )
- r.** 40 CFR 125.80 through 40 CFR 125.89 (Subpart I), revised as of July 1, 2023 (Requirements Applicable to Cooling Water Intake Structures for New Facilities Under Section 316(b) of the Clean Water Act); ( )

- ( )
- s. [40 CFR 125.90 through 40 CFR 125.99](#) (Subpart J), revised as of July 1, 2023 (Requirements Applicable to Cooling Water Intake Structures for Phase II Existing Facilities Under Section 316(b) of the Clean Water Act); ( )
  - t. [40 CFR 127.11 through 40 CFR 127.16](#) (Subpart B), revised as of July 1, 2023 (Electronic Reporting of NPDES Information from NPDES-Regulated Facilities); ( )
  - u. [40 CFR 129.1 through 40 CFR 129.105](#) (Subpart A), revised as of July 1, 2023 (Toxic Pollutant Effluent Standards and Prohibitions); ( )
  - v. [40 CFR 133.100 through 40 CFR 133.105](#), revised as of July 1, 2023 (Secondary Treatment Regulation); ( )
  - w. [40 CFR Part 136](#), revised as of July 1, 2023 (Guidelines Establishing Test Procedures for the Analysis of Pollutants, including Appendices A, B, C, and D); ( )
  - x. [40 CFR Part 401](#), revised as of July 1, 2023 (General Provisions); ( )
  - y. [40 CFR 403.1 through 40 CFR 403.3](#); [40 CFR 403.5 through 40 CFR 403.18](#), revised as of July 1, 2023 (General Pretreatment Regulations for Existing and New Sources of Pollution, including Appendices D, E, and G); ( )
  - z. [40 CFR Part 405 through 40 CFR Part 471](#), revised as of July 1, 2023 (Effluent Limitations and Guidelines); and ( )
  - aa. [40 CFR 503.2 through 40 CFR 503.48](#), revised as of July 1, 2023 (Sewage Sludge, including Appendices A and B). ( )
  - bb. The term “Waters of the United States or waters of the U.S.,” as defined in 84 Federal Register 56626, 56669, October 22, 2019 (effective December 23, 2019). ( )
- 02. Term Interpretation.** For the federal regulations incorporated by reference into these rules, unless the context in which a term is used clearly requires a different meaning, terms in this section mean: ( )
- a. Administrator or Regional Administrator means the EPA Region 10 Administrator; ( )
  - b. Approval Authority means the Department of Environmental Quality; ( )
  - c. Approved POTW Pretreatment Program or Program or POTW Pretreatment Program means a program administered by a POTW that meets the criteria established in 40 CFR 403.8 and 403.9, and has been approved by the Department in accordance with 40 CFR 403.1; ( )
  - d. Control Authority means the POTW for a facility with a Department-approved pretreatment program and the Department for a POTW without a Department-approved pretreatment program; ( )
  - e. Director, State Director, or State Program Director, means the Director of the Department of Environmental Quality with an NPDES permit program approved pursuant to CWA Section 402(b); ( )
  - f. National Pollutant Discharge Elimination System (NPDES) means the Idaho Pollutant Discharge Elimination System (IPDES); ( )
  - g. National Pretreatment Standard, Pretreatment Standard, or Standard means a regulation containing pollutant discharge limits promulgated by the EPA in accordance with CWA Sections 307 (b) and (c), which applies to Industrial Users. This term includes prohibited discharge limits established under 40 CFR 403.5 or following procedures outlined in 40 CFR 403.8; ( )

**h.** Permitting Authority (preceded by NPDES or State) means the Department of Environmental Quality with an NPDES permit program approved pursuant to CWA Section 402(b); and ( )

**i.** Water Management Division Director means a Director of the Water Management Division within the US Environmental Protection Agency Region 10 office or this person’s delegated representative. ( )

**004. ADMINISTRATIVE PROVISIONS.**

Persons may be entitled to appeal final IPDES permit decisions under Section 204. ( )

**005. -- 009. (RESERVED)**

**010. DEFINITIONS.**

Terms not in this section are defined in IDAPA 58.01.02, “Water Quality Standards,” or IDAPA 58.01.16, “Wastewater Rules.” ( )

**01. Animal Feeding Operation.** As defined in 40CFR 122.23. ( )

**02. Applicable Standards and Limitations.** State, interstate, and federal standards and limitations to which a discharge, sewage sludge use or disposal practice, or related activity is subject under the CWA, including effluent limitations, water quality standards, standards of performance, toxic effluent standards or prohibitions, best management practices (BMP), pretreatment standards, and standards for sewage sludge use or disposal under CWA Sections 301, 302, 303, 304, 306, 307, 308, 402, and 405. ( )

**03. Application.** IPDES forms for applying for a permit or the EPA equivalent forms when deemed acceptable by the Department, including additions, revisions, or modifications to the forms. ( )

**04. Approved Program or Approved State.** A state or interstate program approved or authorized by EPA under 40 CFR Part 123. ( )

**05. Aquaculture Project.** As defined in CFR 122.25. ( )

**06. Average Monthly Discharge Limitation.** The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. ( )

**07. Average Weekly Discharge Limitation.** The highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. ( )

**08. Background.** The biological, chemical or physical condition of waters measured at a point immediately upstream (up-gradient) of the influence of an individual point or nonpoint source discharge. If several discharges to the water exist or if an adequate upstream point of measurement is absent, the Department will determine where background conditions will be measured. ( )

**09. Best Management Practices (BMP).** Scheduled activities, prohibited practices, maintenance procedures, and other management practices which prevent or reduce the pollution of waters of the United States. BMPs include treatment requirements; operating procedures; and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. ( )

**10. Biochemical Oxygen Demand (BOD).** As defined in IDAPA 58.01.16. ( )

**11. Biological Monitoring or Biomonitoring.** As defined in IDAPA 58.01.02. ( )

**12. Bypass.** The intentional diversion of wastewater from any portion of a treatment facility. ( )

**13. Chemical Oxygen Demand (COD).** A bulk parameter that measures the oxygen-consuming ( )

capacity of organic and inorganic matter present in water or wastewater, expressed as the amount of oxygen consumed from a chemical oxidant in a specific test. ( )

**14. Class I Sludge Management Facility.** A POTW, identified under 40 CFR 403.8(a), required to have an approved pretreatment program (including POTWs for which the Department has assumed local program responsibilities under 40 CFR 403.10(e)) and any other treatment works treating domestic sewage (TWTDS) classified as a Class I sludge management facility by the Department, because of the potential for its sludge use or disposal practices to adversely affect public health and the environment. ( )

**15. Clean Water Act (CWA).** Formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972. Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483 and Public Law 97-117, 33 U.S.C. 1251 et seq. ( )

**16. Compliance Schedule or Schedule of Compliance.** A schedule of remedial measures in a permit, including an enforceable sequence of interim requirements (e.g., actions, operations, or milestones) leading to compliance with the CWA and these rules. ( )

**17. Concentrated Animal Feeding Operation (CAFO).** As defined in 40 CFR 122.23. ( )

**18. Concentrated Aquatic Animal Production (CAAP).** As defined in CFR 122.24 ( )

**19. Continuous Discharge.** A discharge occurring without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities. ( )

**20. Daily Discharge.** The discharge of a pollutant measured during a calendar day or any twenty-four (24)-hour period that reasonably represents the calendar day for sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limits expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant discharged over the day. ( )

**21. Design Flow.** The average or maximum point source discharge volume per unit time that a facility or system is constructed to accommodate. ( )

**22. Direct Discharge.** The discharge of a pollutant to waters of the United States. ( )

**23. Discharge Monitoring Report (DMR).** A required facility or activity report containing monitoring and discharge quality and quantity information and data, submitted periodically, as defined in the discharge permit. These reports must be submitted to the Department in an approved format. ( )

**24. Discharge.** When used without qualification means the discharge of a pollutant. ( )

**25. Discharge of a Pollutant.** Any addition of any pollutant or combination of pollutants to waters of the United States from any point source. This definition includes additions of pollutants into waters of the United States from surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by an indirect discharger. ( )

**26. Draft Permit.** A document prepared under these rules indicating the Department's tentative decision to issue or deny, modify, revoke and reissue, terminate, or reissue a permit. A notice of termination of a permit, and a notice of intent to deny a permit, as discussed in Subsections 107.01 and 203.02, are types of draft permits. Denial of a request for modification, revocation and reissuance, or termination, as discussed in Subsection 201.01, is not a draft permit. A proposed permit is not a draft permit. ( )

**27. Effluent.** Discharge of treated or untreated pollutants into waters of the United States. ( )

**28. Effluent Limitation or Limit.** A restriction imposed by the Department on quantities, discharge

rates, and concentrations of pollutants that are discharged from point sources into waters of the United States, in accordance with these rules and the CWA. ( )

**29. Effluent Limitations Guidelines (ELG).** A regulation published by EPA under CWA Section 304(b) to adopt or revise effluent limitations. ( )

**30. Electronic Signature.** Information in digital form that is included in or associated with an electronic document that signifies the same meaning and intention as a handwritten signature. ( )

**31. Equivalent Dwelling Unit (EDU).** A measure where one (1) EDU is equivalent to wastewater generated from one (1) single-family residence. For assessing fees associated with publicly or privately owned domestic sewage treatment, the number of EDUs is calculated as the population served divided by the average household size as defined in the most recent US Census Bureau data (for that municipality, county, or average number of persons per household for the state of Idaho). For fees associated with industrial wastewater treatment owned by a municipality, EDUs are calculated according to the definition of EDU in IDAPA 58.01.16, "Wastewater Rules." ( )

**32. Existing Source.** A source that is not a new source or a new discharger. ( )

**33. Facilities or Equipment.** Buildings, structures, process or production equipment or machinery that form a permanent part of the new source and will be used in its operation, if the facilities or equipment are of such value as to represent a substantial commitment to construct. It excludes facilities or equipment used in feasibility, engineering, and design studies regarding the source or water pollution treatment for the source. ( )

**34. Facility or Activity.** A point source or other facility or activity (including land or appurtenances) regulated under the IPDES program. ( )

**35. Fundamentally Different Factors.** The factors relating to a discharger's facilities, equipment, processes or other factors related to the discharger are fundamentally different from the factors considered by EPA in developing the national effluent limits. ( )

**36. General Permit.** An IPDES permit issued under Section 130 authorizing a category of discharges within a geographical area. ( )

**37. Hazardous Substance.** A substance designated under 40 CFR Part 116 pursuant to CWA Section 311. ( )

**38. Idaho Pollutant Discharge Elimination System (IPDES).** Idaho's program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under these rules and CWA Sections 307, 402, 318, and 405. ( )

**39. Indian Country.** ( )

**a.** Land within the limits of an Indian reservation under the jurisdiction of the US Government, notwithstanding the issuance of a patent, and including rights-of-way running through the reservation; ( )

**b.** Dependent Indian communities within the borders of the United States, whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of the state; and ( )

**c.** Indian allotments, the Indian titles to which have not been extinguished including rights-of-way running through the same. ( )

**40. Indian Tribe.** Any Indian tribe, band, group, or community recognized by the Secretary of the Interior and exercising governmental authority over a federal Indian reservation. ( )

**41. Indirect Discharger.** A nondomestic discharger introducing pollutants to a privately or publicly ( )

owned treatment works. ( )

**42. Infiltration.** Water other than wastewater that enters a sewer system (including sewer service connections and foundation drains) from the ground through sources such as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow. ( )

**43. Inflow.** Water other than wastewater that enters a sewer system (including sewer service connections) from sources including, but not limited to, roof leaders, cellar drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration. ( )

**44. Integrated Planning.** A voluntary plan developed by the permittee in consultation and coordination with the Department. The plan will be based on USEPA 2012 policy guidance as further codified by the America's Water Infrastructure Act of 2018, Public law: 115-270. Integrated Plans may include wastewater discharges from POTWs, reclaimed or recycled water from municipalities, MS4 storm water, nonpoint source municipal storm water, and municipal owned geothermal water. An Integrated Plan may also incorporate other watershed activities undertaken by municipalities such as beneficial reuse of biosolids, stream and restoration activities, and aquatic and riparian improvements. ( )

**45. Interstate Agency.** An agency of two (2) or more states established by or under an agreement or compact, or any other agency of two (2) or more states having substantial powers or duties pertaining to the control of pollution. ( )

**46. Major Facility.** ( )

**a.** A publicly or privately owned treatment works with a design flow equal to or greater than one million gallons per day (1 MGD), or serves a population of ten thousand (10,000) or more, or causes significant water quality impacts; or ( )

**b.** A non-municipal facility that equals or exceeds the eighty (80) point accumulation described in the Score Summary of the NPDES Non-municipal Permit Rating Work Sheet (June 27, 1990) or the Department equivalent. ( )

**47. Maximum Daily Discharge Limitation.** The highest allowable daily discharge. ( )

**48. Maximum Daily Flow.** The largest volume of flow to be discharged during a continuous twenty-four-hour period expressed as a volume per unit time. ( )

**49. Mixing Zone.** As defined in [IDAPA 58.01.02](#). ( )

**50. Municipality.** A city, town, county, district, association, or other public body created by or under state law with jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under CWA Section 208. ( )

**51. National Pollutant Discharge Elimination System (NPDES).** The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under CWA Sections 307, 402, 318, and 405. ( )

**52. New Discharger.** A building, structure, facility, or installation that: ( )

**a.** Discharge or may discharge pollutants; ( )

**b.** Did not discharge pollutants at a particular site before August 13, 1979; ( )

**c.** Is not a new source; and ( )



- d. Has never received an effective NPDES or IPDES permit for discharges at that site. ( )
- e. This includes an indirect discharger which commences discharging into waters of the United States after August 13, 1979, and an existing mobile point source, such as an aggregate plant, that discharges at a site for which it does not have a permit; ( )
53. **New Source.** A building, structure, facility, or installation that discharges or may discharge pollutants, and construction has commenced: ( )
- a. After promulgation of performance standards under CWA Section 306 applicable to the source; or ( )
- b. After proposal of performance standards under CWA Section 306 applicable to the source, but only if the standards are promulgated within one hundred twenty (120) days of the proposal. ( )
54. **Notice of Intent to Deny.** A draft permit that conveys to a permit applicant or permittee the Department's intent to not issue or renew an IPDES permit. ( )
55. **Notice of Intent to Obtain Coverage under an IPDES General Permit.** An applicant seeking discharge coverage under an IPDES general permit must submit a notice of intent to obtain coverage for discharges to waters of the United States under general permit classifications, including, but not limited to: ( )
- a. Storm Water Construction General Permit (CGP); ( )
- b. Multi-sector General Permit (MSGP) for Industrial Storm Water Requirements; ( )
- c. Municipal Separate Storm Sewer System (MS4) General Permit; ( )
- d. Concentrated Animal Feeding Operation (CAFO) General Permit; ( )
- e. Concentrated Aquatic Animal Production (CAAP) Facility General Permit; ( )
- f. Ground Water Remediation General Permit; ( )
- g. Suction Dredge General Permit; or ( )
- h. Pesticide General Permit (PGP). ( )
56. **Notice of Termination.** A notice of termination conveys: ( )
- a. To a permittee, the Department's intent to terminate an existing IPDES permit for cause; or ( )
- b. To the Department a permittee's intent to terminate coverage for an activity under an individual or general permit. A construction general permit holder must submit a notice of termination within 30 (thirty) days of completing construction activities and final stabilization for storm water control. ( )
57. **Owner or Operator.** The person, company, corporation, district, association, or other organizational entity that is an owner or operator of any facility or activity subject to regulation under the IPDES program. ( )
58. **Pesticide Discharges.** Discharges that result from the application of biological pesticides, and the application of chemical pesticides that leave a residue, from point sources to waters of the United States. This does not include agricultural storm water discharges and return flows from irrigated agriculture that are excluded by law (33 U.S.C. 1342(i); 33 U.S.C. 1362(14)). ( )
59. **Pesticide Residue.** To determine whether an IPDES permit is needed for discharges to waters of

the United States from pesticide application, the portion of a pesticide application discharged from a point source to waters of the United States that no longer provides pesticidal benefits. It includes degradation byproducts of the pesticide. ( )

**60. Permit.** The authorization, license, or equivalent control document issued by the Department to implement these rules. This does not include a draft permit or a proposed permit. ( )

**61. Person.** An individual, public or private corporation, partnership, association, firm, joint stock company, joint venture, trust, estate, state, municipality, commission, political subdivision of the state, state or federal agency, department or instrumentality, special district, interstate body or a legal entity, or an agent or employee recognized by law as the subject of rights and duties. ( )

**62. Point Source.** A discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft that discharges or may discharge pollutants. This does not include return flows from irrigated agriculture or agricultural storm water runoff that are excluded by law (33 U.S.C. 1342(l); 33 U.S.C. 1362(14)). ( )

**63. Pollutant.** Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does not mean: ( )

**a.** Sewage from vessels; or ( )

**b.** Water, gas, or other material injected into a well to facilitate production of oil or gas, or water resulting from oil and gas production and disposed of in a well, if the well used for production or disposal is approved by authority of the state where the well is located, and if the state determines the injection or disposal will not degrade ground or surface water resources.

NOTE: Radioactive materials covered by the Atomic Energy Act are encompassed in its definition of source, byproduct, or special nuclear materials. Examples of materials not covered include radium and accelerator-produced isotopes. See *Train v. Colorado Public Interest Research Group, Inc.*, 426 U.S. 1 (1976). ( )

**64. Potable Water.** As defined in [IDAPA 58.01.16](#). ( )

**65. Pretreatment.** As defined in [40 CFR 403.3](#). ( )

**66. Primary Industry Category.** An industry category listed in Appendix A of 40 CFR Part 122. ( )

**67. Privately Owned Treatment Works.** A device or system used to treat wastes and is not a publicly owned treatment works (POTW). ( )

**68. Process Wastewater.** Water that, during manufacturing or processing, comes into direct contact with or results from producing or using a raw material, intermediate product, finished product, byproduct, or waste product. ( )

**69. Proposed Permit.** An IPDES permit prepared after the public comment period closes (and when applicable, any public meeting and administrative appeals) that is sent to EPA for review before final issuance by the Department. A proposed permit is not a draft permit. ( )

**70. Proposed Settlement of a State Enforcement Action.** A Department consent order, compliance agreement schedule, or compliance schedule order issued in response to a notice of violation that will be signed by the Director. This does not include amendments or extensions of consent orders, compliance agreement schedules, or compliance schedule orders. ( )

**71. Publicly Owned Treatment Works (POTW).** As defined in [40 CFR 403.3](#). ( )

72. **Receiving Waters.** Waters of the United States to which there is a discharge of pollutants. ( )
73. **Recommencing Discharger.** A source that renews discharges after terminating operations. ( )
74. **Regional Administrator.** The Region 10 Administrator of the US Environmental Protection Agency or the authorized representative of the Regional Administrator. ( )
75. **Secondary Industry Category.** An industry category that is not a primary industry category. ( )
76. **Secondary Treatment.** Technology-based requirements for direct discharging POTWs, based on the expected performance of a combination of physical and biological processes typical for the treatment of pollutants in municipal sewage. Standards are the minimum level of effluent quality for BOD<sub>5</sub>, total suspended solids (TSS), and pH (except for treatment equivalent to secondary treatment and other special considerations). ( )
77. **Secretary.** Secretary of the Army, acting through the Chief of Engineers. ( )
78. **Septage.** Liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained. ( )
79. **Severe Property Damage.** Substantial physical damage to property, damage to the treatment facilities causing them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. ( )
80. **Sewage.** As defined in [IDAPA 58.01.16](#). ( )
81. **Sewage from Vessels.** Human body wastes and wastes from toilets and other receptacles intended to receive or retain body wastes that are discharged from vessels and regulated under CWA Section 312. ( )
82. **Sewage Sludge.** Solid, semi-solid, or liquid residue removed during municipal wastewater or domestic sewage treatment. Sewage sludge includes, but is not limited to, solids removed during primary, secondary, or advanced wastewater treatment; scum; septage; portable toilet pumpings; type III marine sanitation device pumpings (33 CFR Part 159); and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during sewage sludge incineration. ( )
83. **Sewage Sludge Use or Disposal Practice.** The collection, storage, treatment, transportation, processing, monitoring, use, or disposal of sewage sludge. ( )
84. **Significant Industrial User.** Industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Parts 400 through 471 and any other industrial user that: ( )
- a. Discharge an average of twenty-five thousand (25,000) gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blowdown wastewater); ( )
- b. Contribute a process waste stream that makes up five percent (5%) or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or ( )
- c. Is designated by the Control Authority based on reasonable potential to adversely affect the POTW's operation or violate a Pretreatment Standard or requirement (in accordance with 40 CFR 403.8(f)(6)). ( )
85. **Silvicultural Point Source.** As defined in [40 CFR 122.27](#). ( )
86. **Site.** Land or water area where a facility or activity is physically located or conducted, including adjacent land used with the facility or activity. ( )

- 87. Sludge-Only Facility.** A TWTDS whose methods of sewage sludge use or disposal is subject to regulations under CWA Section 405(d) and is required to obtain an IPDES permit. ( )
- 88. Source.** A building, structure, facility, or installation that discharges or may discharge pollutants. ( )
- 89. Standards for Sewage Sludge Use or Disposal.** Regulations promulgated under CWA Section 405(d) and these rules which govern minimum requirements for sewage sludge quality, management practices, and monitoring and reporting applicable to sewage sludge or the use or disposal of sewage sludge by a person. ( )
- 90. Storm Water.** Storm water runoff, snow melt runoff, and surface runoff and drainage. ( )
- 91. Technology-Based Effluent Limitation (TBEL).** Treatment requirements under the CWA that represent the minimum level of control to be imposed in a permit issued under CWA Section 402. ( )
- 92. Total Dissolved Solids.** Total dissolved (filterable) solids determined by use of the method specified in 40 CFR Part 136. ( )
- 93. Toxic Pollutant.** A substance, material or disease-causing agent, or a combination that after discharge to waters of the United States and upon exposure, ingestion, inhalation, or assimilation into any organism (including humans), either directly from the environment or indirectly by ingestion through food chains, will cause death, disease, behavioral abnormalities, malignancy, genetic mutation, physiological abnormalities (including reproductive malfunctions) or physical deformations in affected organisms or their offspring. Toxic pollutants include, but are not limited to, the one hundred twenty-six (126) priority pollutants identified by EPA under CWA Section 307(a), or, for sewage sludge use or disposal practices, a pollutant identified in regulations implementing CWA Section 405(d). ( )
- 94. Treatment.** As defined in [IDAPA 58.01.16](#). ( )
- 95. Treatment Works Treating Domestic Sewage (TWTDS).** A POTW or other sewage sludge or waste water treatment devices or systems, regardless of ownership (including federal facilities), used in storing, treating, recycling, and reclaiming municipal or domestic sewage, including land dedicated for sewage sludge disposal. This does not include septic tanks or similar devices. Domestic sewage includes waste and waste water from humans or household operations that are discharged to or enter a treatment works. ( )
- 96. Upset.** An exceptional incident resulting in unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. ( )
- 97. User.** A person served by a wastewater system. ( )
- 98. Variance.** A mechanism or provision under CWA Section 301 or 316, 40 CFR Part 125, or in the ELGs allowing modification to or waiver of the effluent limit requirements or time deadlines of the CWA. This includes provisions allowing the establishment of alternative limits based on fundamentally different factors or on CWA Sections 301(c), 301(g), 301(h), 301(i), or 316(a). ( )
- 99. Wasteload Allocation (WLA).** The portion of a receiving water's loading capacity allocated to one (1) of its existing or future point sources of pollution. ( )
- 100. Wastewater.** As defined in [IDAPA 58.01.16](#). ( )
- 101. Water Pollution.** An alteration of the physical, thermal, chemical, biological, or radioactive properties of waters of the United States, or the discharge of a pollutant into the waters of the United States that will or is likely to create a nuisance or to render waters harmful, detrimental, or injurious to public health, safety, or welfare, or to fish and wildlife, or to domestic, commercial, industrial, recreational, aesthetic, or other beneficial uses.

( )

**102. Water Quality-Based Effluent Limit (WQBEL).** An effluent limit determined by selecting the most stringent of the effluent limits calculated using all applicable water quality criteria (e.g., aquatic life, human health, wildlife, translation of narrative criteria) for a specific point source to a specific receiving water. ( )

**103. Water Transfer.** An activity that conveys or connects waters of the United States without subjecting the transferred water to intervening industrial, municipal, or commercial use. ( )

**104. Wetlands.** Areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include swamps, marshes, bogs, and similar areas. ( )

**105. Whole Effluent Toxicity (WET).** The aggregate toxic effect of effluent measured directly by a toxicity test. ( )

**011. -- 049. (RESERVED)**

**050. COMPUTATION OF TIME.**

**01. Computing Time.** When computing a period of time scheduled to begin after or before an act or event occurs, the date of the act or event is not included. The last day of the period is included, unless it is a Saturday, Sunday, or legal holiday, in which case the period runs until the end of the next day which is neither a Saturday, Sunday, or holiday. The section does not apply to submission deadlines for twenty-four (24) hour reporting, permit applications, or notices of intent for coverage under a general permit ( )

**02. Notice by Mail.** When a party or interested person has the right or is required to act within a prescribed period after the service of notice or other paper and the notice or paper is served by mail, three (3) days will be added to the prescribed time. ( )

**051. -- 089. (RESERVED)**

**090. SIGNATURE REQUIREMENTS.**

**01. Permit Applications and Notices of Intent.** IPDES permit applications and notices of intent must be signed by a certifying official as follows: ( )

**a.** For a corporation, a responsible corporate officer must sign the application or notice of intent. In this subsection, a responsible corporate officer means: ( )

**i.** President, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or other person who performs similar policy- or decision-making functions for the corporation; or ( )

**ii.** Manager of one (1) or more manufacturing, production, or operating facilities or sites, if the manager: ( )

(1) Is authorized to make management decisions that govern the operation of the regulated facility, including the explicit or implicit duty of recommending major capital investments, and initiating and directing other comprehensive measures to ensure long-term environmental compliance with environmental statutes and regulations; ( )

(2) Ensures the necessary systems are established or actions taken to gather complete and accurate information for IPDES permit application requirements; and ( )

(3) Has been assigned or delegated authority to sign documents following corporate procedures; ( )

**b.** For a partnership or sole proprietorship, the general partner or proprietor, respectively, signs the application; and ( )

**c.** For a municipality, state, or other public agency, either a principal executive officer or ranking elected official must sign the application. In this subsection, a principal executive officer of an agency means: ( )

**i.** Chief executive officer of the agency; or ( )

**ii.** Senior executive officer responsible for the overall operations of a principal geographic unit or agency division. ( )

**02. Reports and Other Information Submitted.** A report or information required by an IPDES permit, notice of intent, monitoring and reporting provisions, and other information requested by the Department must be signed by a person described in Subsection 090.01, or by a duly authorized representative of that person. A person is a duly authorized representative only if: ( )

**a.** Authorization is made in writing by a person described in Subsection 090.01; ( )

**b.** Authorization specifies either: ( )

**i.** An individual or a position responsible for the overall operation of the regulated facility or activity, including a manager, operator, superintendent, or position of equivalent responsibility; or ( )

**ii.** An individual or position responsible for overall environmental matters for the company; and ( )

**c.** The written authorization is submitted to the Department. ( )

**03. New Authorization.** If an authorization is no longer accurate due to a change in staffing or personnel for the overall operation of the facility, a new authorization satisfying the requirements of Subsection 090.01 must be submitted to the Department before or with a report, information, or application to be signed by an authorized representative. ( )

**04. Certification.** A person signing a document under Subsections 090.01 or 090.02 must certify as follows: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." ( )

**05. Electronic Signatures.** The Department may require signed, certified, or authorized information to be submitted electronically, with an electronic signature approved by the Department. ( )

**06. Electronic Reporting.** When documents described in Subsection 090.01 or 090.02 are submitted electronically by or on behalf of the IPDES-regulated facility, persons providing the electronic signature must meet the relevant requirements of this section, and ensure the relevant requirements of 40 CFR Part 3 (Cross-Media Electronic Reporting) and 40 CFR Part 127 (NPDES Electronic Reporting Requirements) are met for that submission. ( )

**091. -- 099. (RESERVED)**

**100. EFFECT OF A PERMIT.**

**01. Rights.** The issuance of, or coverage under, an IPDES permit does not convey property rights or exclusive privilege nor does it authorize injury to persons or property or invasion of other private rights, or

infringement of state or local law or regulations. It does not constitute authorization of the permitted activities by another state or federal agency or private person or entity, and does not excuse the permit holder from the obligation to obtain other necessary approvals, authorizations, or permits. ( )

**02. Compliance.** Except for toxic effluent standards and prohibitions imposed under CWA Section 307, and standards for sewage sludge use or disposal under CWA Section 405(d), compliance with an IPDES permit during its term constitutes compliance, for enforcement, with CWA Sections 301, 302, 306, 307, 318, 403, and 405(a) through (b). A permit or coverage under a permit may be modified, revoked and reissued, or terminated during its term for cause as established in Sections 130 (General Permits), 201 (Modification, or Revocation and Reissuance of IPDES Permits), and 203 (Termination of IPDES Permits). ( )

**101. DURATION.**

**01. Permit Term.** IPDES permits will be issued for a duration of five (5) years or less. ( )

**a.** The Department may issue a permit for less than five (5) years. The reasoning behind issuing a permit for a shorter period will be provided in the fact sheet. ( )

**b.** The duration of a permit may not be modified to lengthen the effective term of the permit past the maximum five (5) year duration. ( )

**c.** A permit may be issued to expire on or after the statutory deadline established in CWA Sections 301(b)(2)(A), (C), and (E), if the permit includes effluent limits required by CWA Sections 301(b)(2)(A), (C), (D), (E) and (F), whether or not ELGs have been promulgated or approved. ( )

**d.** A determination that a particular discharger falls within a given industrial category for setting a permit expiration date under Subsection 101.01.c. is not conclusive as to the discharger's inclusion in that industrial category for any other purposes, and does not prejudice any rights to challenge or change that inclusion at the time that a permit based on that determination is formulated. ( )

**e.** A federally-issued NPDES permit transferred to the Department to administer after EPA approval of the IPDES program, continues in effect and is enforceable by the Department, subject to Subsections 101.02 and 101.03. ( )

**02. Continuation of Individual Permits.** The conditions of an expired individual federal NPDES permit (except for permits under EPA authority) or a state-issued IPDES permit, will remain fully effective and enforceable until the effective date of a new permit or the date of the Department's final decision to deny the application for the new permit, if: ( )

**a.** The permittee submitted a timely and complete application for a new permit under Section 105; and ( )

**b.** The Department, because of time, resources, or other constraints, but through no fault of the permittee, does not issue a new permit with an effective date on or before the expiration date of the previous permit. ( )

**03. Continuation of General Permits.** The conditions of an expired general NPDES permit or a state-issued IPDES permit, will remain fully effective and enforceable (except for permits under EPA authority) until the date the authorization to discharge under the new permit is determined, if: ( )

**a.** The permittee submitted a timely notice of intent to obtain coverage under the new general permit as specified in Section 130; and ( )

**b.** The Department, because of time, resources, or other constraints, but through no fault of the permittee, does not issue a new general permit with an effective date on or before the expiration date of the previous permit. ( )

**04. Continuation of Permits During an Appeal.** Whether the conditions of an expired permit remain effective and enforceable during an appeal of a new permit, or an appeal of the denial of a permit application, is governed by Section 204. ( )

**102. OBLIGATION TO OBTAIN AN IPDES PERMIT.**

**01. Persons Who Must Obtain a Permit.** A person who discharges or proposes to discharge a pollutant from a point source into waters of the United States, or who owns or operates a sludge-only facility whose sewage sludge use or disposal practice is regulated by 40 CFR Part 503 or these rules, and who does not have an IPDES or NPDES permit in effect, must submit a complete IPDES permit application to the Department, unless the discharge, proposed discharge, or TWTDS is: ( )

**a.** Covered by one (1) or more general permits in compliance with Section 130. An applicant must complete a notice of intent for a discharge or proposed discharge covered by one (1) or more general permits; ( )

**b.** Excluded from IPDES permit requirements under Subsection 102.05; ( )

**c.** By a user to a privately owned treatment works, and the Department, under Section 370, does not otherwise require the person to apply for a permit; or ( )

**d.** A TWTDS facility that uses or disposes of sewage sludge where a standard applicable to its sewage sludge use or disposal practices has not been published. These facilities must submit limited background information, as specified in Subsection 105.17.o., within one (1) year after publication of applicable standards. ( )

**02. Operator's Duty to Obtain a Permit.** When a facility or activity is owned by one person but is operated by another person, it is the operator's duty to obtain a permit. ( )

**03. Permits Under CWA 405(f).** New and currently permitted TWTDS whose sewage sludge use or disposal practices are regulated by 40 CFR Part 503 must submit permit applications according to the schedule in Subsection 105.17. The Department may require permit applications from TWTDS at any time if the Department determines that a permit is necessary to protect public health and the environment from potential adverse effects that may occur from toxic pollutants in sewage sludge. ( )

**04. Designation of Small Municipal Separate Storm Sewer Systems (MS4s).** DEQ will designate a small MS4 that is not located in an urbanized area, as determined by the latest decennial census by the US Census Bureau, as a regulated small MS4 that must be covered by an IPDES permit if the Department determines that the storm water discharge: ( )

**a.** Results in or has the potential to result in exceedance of water quality standards or other significant water quality impacts; or ( )

**b.** Contributes substantially to the pollutant loadings of a physically interconnected MS4 that is regulated by the IPDES storm water program. ( )

**05. Exclusions from Permit.** A person must not discharge pollutants from a point source into waters of the United States without first obtaining an IPDES permit from the Department or coverage under an IPDES general permit, unless the discharge is excluded from IPDES permit requirements or the discharge is authorized by an IPDES or NPDES permit that continues in effect. The Department will not require persons to obtain IPDES permits for facilities or activities that are not required to obtain NPDES permits from EPA under the CWA and CWA regulations. Discharges excluded from IPDES permit requirements, but that may be regulated by other state or federal regulations include: ( )

**a.** Sewage discharge from vessels and effluent from properly functioning marine engines, laundry, shower and galley sink wastes, or other discharge incidental to the normal operation of a vessel of the US Armed Forces under CWA Section 312, and a recreational vessel under CWA Section 502(25). None of these exclusions apply to: ( )



- i. Rubbish, trash, garbage, or other materials discharged overboard; nor to ( )
- ii. Discharges when the vessel is operating in a capacity other than as a means of transportation such as: ( )
- (1) An energy or mining facility; ( )
- (2) A storage facility, or when secured to a storage facility; or ( )
- (3) When secured to the bed of the waters of the United States for mineral or oil exploration or development; ( )
- b.** A discharge of dredged or fill material into waters of the United States regulated under CWA Section 404; ( )
- c.** Sewage, industrial wastes, or other pollutants discharged into publicly owned treatment works (POTWs) by an indirect discharger who has received a will-serve letter authorizing the discharge to the POTW. Plans or agreements to switch to this method of disposal in the future do not relieve dischargers of the obligation to have and comply with permits until all discharges of pollutants to waters of the United States are eliminated. This exclusion does not apply to introducing pollutants to privately owned treatment works or to other discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other party not leading to treatment works; ( )
- d.** A discharge in compliance with the instructions of an on-scene coordinator under 40 CFR Part 300 (The National Oil and Hazardous Substances Pollution Contingency Plan), or 33 CFR 153.10(e) (Control of Pollution by Oil and Hazardous Substances, Discharge Removal); ( )
- e.** Introduction of pollutants from non-point source agricultural and silvicultural activities, including storm water runoff from orchards, cultivated crops, pastures, range lands, and forest lands; however, this exclusion does not apply to discharges from concentrated animal feeding operations (CAFO) as defined in 40 CFR 122.23, discharges from concentrated aquatic animal production (CAAP) facilities, discharges to aquaculture projects, and discharges from silvicultural point sources; ( )
- f.** Return flow from irrigated agriculture; ( )
- g.** Discharges into a privately owned treatment works, except as the Department may otherwise require under Subsection 302.15; and ( )
- h.** Discharges from a water transfer. This exclusion does not apply to pollutants introduced by the water transfer activity to the transferred water. ( )

**103. PERMIT PROHIBITIONS.**

The Department will not issue an IPDES permit for a discharge: ( )

**01. CWA Compliance.** Unless the conditions of the permit provide for compliance with the requirements of IDAPA 58.01.02, “Water Quality Standards” and 58.01.25 “ Idaho Pollutant Discharge Elimination System Rules”; ( )

**02. EPA Objection.** When the Department has received written objection under 40 CFR 123.44 from the EPA Regional Administrator and until the objections are resolved according to the process identified in the Memorandum of Agreement between EPA and the Department; ( )

**03. Water Quality Requirements.** When the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected states; ( )

**04. Anchorage and Navigation Impaired.** When, in the judgment of the Secretary of the United States Army through the Army Corp Chief of Engineers, anchorage and navigation in or on the waters of the United

States will be substantially impaired by the discharge; ( )

**05. Banned Content.** Of any radiological, chemical, or biological warfare agent or high level radioactive waste; ( )

**06. Area Wide Waste Treatment Management Plans.** That is inconsistent with a plan or plan amendment approved under CWA Section 208(b); or ( )

**07. New Sources or New Dischargers.** For a new source or new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards. ( )

**a.** When the owner or operator of a new source or new discharge proposes to discharge into a water segment that does not meet water quality standards, or that is not expected to meet those standards even after applying the effluent limit required by CWA Sections 301(b)(1)(A) and (B), and for which the state or interstate agency has performed a pollutant load allocation for the pollutant to be discharged, then the owner or operator must demonstrate: ( )

**i.** Sufficient remaining pollutant load allocations exist to allow for the discharge; and ( )

**ii.** The existing dischargers into the segment are subject to compliance schedules that bring the segment into compliance with water quality standards. ( )

**b.** The Department may waive the submission of information by the permit applicant required in Subsection 103.07.a. if the Department determines adequate information exists to evaluate the request. ( )

**c.** The development of limits to meet the criteria of this section is explained in the fact sheet to the permit. ( )

**104. PRE-APPLICATION PROCESS.**

A person who intends to apply for a permit or who proposes to discharge a pollutant into the waters of the United States may contact the Department to schedule a meeting to discuss an application before submittal: ( )

**01. Permit Applicability.** Whether the actions or facility will require an IPDES permit, and whether other suitable permitting options are available; ( )

**02. Application Content.** The IPDES permit application requirements; and ( )

**03. Application Schedule.** The IPDES permit application submittal schedule. ( )

**105. INDIVIDUAL PERMIT APPLICATIONS.**

**01. Electronic Submittals.** The Department may require an applicant to electronically submit information required by this section using an approved electronic method. ( )

**02. Application Retention Schedule.** An applicant must keep records of all data used to complete a permit application and supplemental information submitted for at least three (3) years from the date the application is signed. ( )

**03. Time to Apply.** A person required under Subsections 102.01 through 102.03 to obtain an IPDES permit must submit a complete application for a permit to the Department following the requirements of this subsection. A permit application must be signed and certified as required by Section 090. ( )

**a.** A person proposing a new discharge must apply at least one hundred eighty (180) days before the discharge will commence, unless the Department grants permission to submit the application on a later date as specified in Subsections 105.03.e. and f. A facility proposing a new storm water discharge from an industrial activity must apply one hundred eighty (180) days before that facility commences activity that may result in a discharge of storm water, unless the Department grants permission to submit the application on a later date as specified in

Subsections 105.03.e. and f. ( )

**b.** Facilities described under 40 CFR 122.26(b)(14)(x) or (b)(15)(i) must apply at least ninety (90) days before construction commences unless otherwise required by the general permit. ( )

**c.** A TWTDS that commences operations after promulgation of a “standard for sewage sludge use or disposal” must apply to the Department at least one hundred eighty (180) days before commencing proposed operations. ( )

**d.** A person discharging from a permitted facility with an effective permit must reapply at least one hundred eighty (180) days before the expiration of the existing permit, unless the Department grants permission to submit the application on a later date as specified in Subsections 105.03.e. and f. ( )

**e.** The Department may grant permission to apply in less than one hundred eighty (180) days. The Department’s prior approval must be obtained at least one hundred eighty (180) days before the existing permit expires or new discharge commences. ( )

**f.** The application will not be accepted as an application for permit renewal after permit expiration. Applications received after the permit expiration will be reviewed as an application for a new source or new discharger. ( )

**04. Individual Permit Application Forms.** An applicant must use one (1) or more Department-approved forms appropriate to the number and type of discharge or outfall at the applicant’s facility. A person required by Subsections 102.01 through 102.03 to obtain an individual IPDES permit must submit an application to the Department providing the information required by this subsection and Subsections 105.05 through 105.19: ( )

**a.** Applicants, other than a POTW, TWTDS, and pesticide applicators (Subsection 105.06), EPA Form 1 equivalent and the following forms, if applicable: ( )

**i.** CAFO (Subsection 105.09) or CAAP (Subsection 105.10) facility, EPA Form 2B equivalent; ( )

**ii.** Existing industrial facility, including manufacturing facilities, commercial facilities, mining activities, and silviculture activities (Subsection 105.07), EPA Form 2C equivalent; ( )

**iii.** New industrial facility that discharges process wastewater (Subsection 105.16), EPA Form 2D equivalent; ( )

**iv.** New or existing industrial facility that discharges only non-process wastewater (Subsection 105.08.a.), EPA Form 2E equivalent; ( )

**v.** New or existing facility with discharge composed entirely of storm water from industrial activity (Subsection 105.19), EPA Form 2F equivalent unless the applicant is exempted by 40 CFR 122.26(c)(1)(ii). If the applicant’s discharge is composed of storm water and non-storm water (Subsections 105.07, 105.08, and 105.16), EPA Forms 2C, 2D, or 2E equivalent are also required; or ( )

**vi.** Operating a sludge-only facility (Subsection 105.17), that currently does not have and is not applying for an IPDES permit for a direct discharge to a surface water body, EPA Form 2S equivalent; ( )

**b.** Applicant is a new or existing POTW or privately owned treatment works (Subsections 105.11 through 105.15): ( )

**i.** EPA Form 2A equivalent; and ( )

**ii.** EPA Form 2S equivalent, if applicable. ( )

**05. Application Information for All Dischargers.** In addition to the application information required for specific dischargers, the Department may require the following information to comply with Section 103 and to: ( )

**a.** Determine compliance with the antidegradation policy and antidegradation implementation provisions in IDAPA 58.01.02.051 and 052, “Water Quality Standards”; ( )

**b.** Determine compliance with the mixing zone provisions in IDAPA 58.01.02.060, “Water Quality Standards”; or ( )

**c.** Authorize a compliance schedule under IDAPA 58.01.02.400, “Water Quality Standards.” ( )

**06. Application Requirements for Dischargers Other than Treatment Works Treating Domestic Sewage (TWTDS), Publicly Owned Treatment Works (POTWs), and Pesticide Applicators.** An applicant for an IPDES permit other than a POTW and TWTDS, must provide the following information to the Department, using the forms specified in Subsection 105.04: ( )

**a.** Applicant’s activity requiring an IPDES permit; ( )

**b.** Name, mailing address, e-mail address, and location of the facility for the submitted application; ( )

**c.** Up to four (4) Standard Industrial Classification (SIC) or North American Industrial Classification System (NAICS) codes identifying the principal products or services provided by the facility; ( )

**d.** Operator’s name, mailing address, e-mail address, telephone number, ownership status, and status as federal, state, private, public, or other entity; ( )

**e.** Statement that the facility is not in Indian country, if applicable; ( )

**f.** List of permits or construction approvals received or applied for under: ( )

**i.** Hazardous waste management program under IDAPA 58.01.05, “Rules and Standards for Hazardous Waste”; ( )

**ii.** Underground injection control (UIC) program under the Idaho Department of Water Resources UIC program at IDAPA 37.03.03, “Rules and Minimum Standards for the Construction and Use of Injection Wells”; ( )

**iii.** IPDES program under IDAPA 58.01.25 “Idaho Pollutant Discharge Elimination System Rules”; ( )

**iv.** Prevention of significant deterioration (PSD) program under IDAPA 58.01.01, “Rules for Control of Air Pollution in Idaho”; ( )

**v.** Nonattainment program under IDAPA 58.01.01, “Rules for Control of Air Pollution in Idaho”; ( )

**vi.** National emission standards for hazardous pollutants (NESHAPS) preconstruction approval under IDAPA 58.01.01, “Rules for Control of Air Pollution in Idaho”; ( )

**vii.** Dredge or fill permits under the Clean Water Act section 404; or ( )

**viii.** Other relevant environmental permits, programs or activities subject to state jurisdiction, approval, and permits, including IDAPA 58.01.17, “Recycled Water Rules”; and ( )

**g.** Topographic map, or other map if a topographic map is unavailable, extending one (1) mile beyond ( )

- the property boundaries of the source, depicting the: ( )
- i. Facility and each of its intake and discharge structures; ( )
  - ii. Location of the facility's hazardous waste treatment, storage, or disposal areas; ( )
  - iii. Location of each well where fluids from the facility are injected underground; and ( )
  - iv. Location of wells, springs, other surface water bodies, and drinking water wells listed in public records or known by the applicant to exist in the map area; and ( )
  - h. Description of the nature of the business; ( )
  - i. Indicate whether the facility uses cooling water and the source of the cooling water; and ( )
  - j. Indicate whether the facility is requesting any variances in Subsection 310.01 if known at the time of application. ( )

**07. Application Requirements for Existing Manufacturing, Commercial, Mining and Silviculture Dischargers.** ( )

- a. Except for a facility subject to the requirements in Subsection 105.08, an applicant for an IPDES permit for an existing discharge from a manufacturing, commercial, mining, or silviculture facility or activity must provide the following information to the Department, using the forms specified in Subsection 105.04: ( )
  - i. For each outfall: ( )
    - (1) Latitude and longitude to the nearest second (or equivalent) and the name of each receiving water; ( )
    - (2) Identify each type of process, operation, or production area that contributes wastewater to the effluent from that outfall, including process wastewater, cooling water, and storm water runoff; processes, operations, or production areas may be described in general terms, such as dye-making reactor or distillation tower; ( )
    - (3) Average flow that each process contributes and a description of the wastewater treatment received, including the ultimate disposal of solid or fluid wastes other than by discharge; ( )
    - (4) For a privately owned treatment works, identify each user of the treatment works; and ( )
    - (5) Average flow of point sources composed of storm water. The average flow may be estimated, and the basis for the rainfall event with the method of estimation must be submitted; ( )
  - ii. Describe the frequency, duration, and flow rate of each occurrence for any discharge specified in Subsections 105.07.a.i.(2) through (5) that are intermittent or seasonal, except for storm water runoff, spillage, or leaks; ( )
  - iii. Reasonable measure of the applicant's actual production reported in the units used in the ELG if the ELG under CWA Section 304 applies to the applicant and is expressed as production or another measure of operation. The reported measure must reflect the actual production of the facility as required by Subsection 303.02.b.; ( )
  - iv. If the applicant is subject to present requirements or compliance schedules for construction, upgrading, or operation of waste treatment equipment, identify the abatement requirement, describe the abatement project, and list the required and projected final compliance dates; ( )
  - v. List the toxic pollutants the applicant currently uses or manufactures as an intermediate or final product or byproduct, except the Department may waive or modify this requirement; ( )

- (1) If the applicant demonstrates an undue burden to identify each toxic pollutant; and ( )
- (2) The Department has adequate information to issue the permit; ( )
- vi. Identify biological toxicity tests the applicant knows or believes was made within the last three (3) years on the applicant's discharges or on discharges to a receiving water in relation to a discharge; and ( )
- vii. Identify each laboratory or firm and the analyses performed, if a contract laboratory or consulting firm performed the analyses required by Subsection 105.07.c. through m. ( )
- b.** Owner or operator of a facility must submit, with an application, a line drawing of the water flow through the facility with a water balance, showing operations contributing wastewater to the effluent and treatment units. ( )
- i. In the line drawing, similar processes, operations, or production areas may be indicated as a single unit, labeled to correspond to the more detailed identification under Subsections 105.07.a.i(2) through (5). ( )
- ii. Water balance must show approximate average flows at intake and discharge points and between units, including treatment units. ( )
- iii. If a water balance cannot be determined for certain activities, the applicant may provide a pictorial description of the nature and amount of sources of water and collection and treatment measures. ( )
- c.** In addition to the information listed in Subsections 105.07.a. through 105.07.b., and except for information on storm water discharges required by 40 CFR 122.26, an applicant for an IPDES permit for an existing facility described in Subsection 105.07.a. must: ( )
- i. Collect, prepare, and submit information on the effluent characteristics and discharge of pollutants specified in this section; and ( )
- ii. When quantitative data for a pollutant are required, collect a sample of effluent and analyze it for the pollutant following the analytical methods approved in 40 CFR Part 136, except when no analytical method is approved, the applicant may use and must describe a suitable method. ( )
- d.** An applicant under this subsection must: ( )
- i. Use grab samples to provide information on cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*), enterococci (previously known as fecal streptococcus), and volatile organics; temperature, pH, and dissolved oxygen. Residual chlorine effluent data may be obtained from grab samples or from calibrated and properly maintained continuous monitors; ( )
- ii. For all other pollutants, use twenty-four (24) hour composite samples, unless specified otherwise at 40 CFR Part 136, with at least four (4) grab samples, except at least one (1) grab sample may be taken for effluents from holding ponds or other impoundments with a retention period greater than twenty-four (24) hours; ( )
- e.** For Subsection 105.07.c., exceptions to testing and data provision requirements for effluent characteristics include: ( )
- i. When an applicant has two (2) or more outfalls with substantially identical effluents, the Department may allow the applicant to test only one (1) outfall and the quantitative data reported will also apply to the substantially identical outfall; and ( )
- ii. An applicant's duty under Subsections 105.07.j., k., and l. to provide quantitative data for certain pollutants known or believed to be present does not apply to pollutants present in a discharge solely resulting from their presence in intake water; however, an applicant must report those pollutants are present. ( )

f. For storm water discharges, associated with an existing facility described in Subsection 105.07.a., from storm events that yield more than one-tenth (0.1) inch of rainfall: ( )

i. Samples must be collected from the discharge resulting from a storm event and at least seventy-two (72) hours after the previously measurable storm event exceeding one-tenth (0.1) inch rainfall. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed fifty percent (50%) from the average or median rainfall event in that area; and ( )

ii. For all applicants, a flow-weighted composite sample must be taken for either the entire discharge or for the first three (3) hours of the discharge, except for: ( )

(1) Sampling may be conducted with a continuous sampler or a combination of at least three (3) sample aliquots taken in each hour of discharge for the entire discharge or for the first three (3) hours of the discharge, with each aliquot separated by at least fifteen (15) minutes. If the Department approves, an applicant for a storm water discharge permit under Subsection 105.18 may collect flow-weighted composite samples using different protocols with respect to the time duration between the collection of sample aliquots; ( )

(2) A minimum of one (1) grab sample may be taken for storm water discharges from holding ponds or other impoundments with a retention period greater than twenty-four (24) hours; or ( )

(3) For a flow-weighted composite sample, only one (1) analysis of the composite of aliquots is required; ( )

iii. For samples taken from discharges associated with industrial activities, quantitative data must be reported for the grab sample taken during the first thirty (30) minutes, or as soon after as practicable, of the discharge for pollutants specified in Subsection 105.19 except for all storm water permit applicants taking flow-weighted composites, quantitative data must be reported for pollutants specified in 40 CFR 122.26(a) through (b) and (e) through (g), Subsections 105.18 and 105.19, but not for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*), and enterococci (previously known as fecal streptococcus); ( )

iv. The Department may, on a case-by-case basis, allow or establish appropriate site-specific sampling procedures or requirements, including: ( )

(1) Sampling locations; ( )

(2) Season in which the sampling takes place; ( )

(3) Minimum duration between the previous measurable storm event and the sampled storm event; ( )

(4) Minimum or maximum level of precipitation required for an appropriate storm event; ( )

(5) Form of precipitation sampled, whether snow melt or rain fall; ( )

(6) Protocols for collecting samples under 40 CFR Part 136; and ( )

(7) Additional time for submitting data; and ( )

v. An applicant knows or believes a pollutant is present in an effluent if an evaluation of the expected use, production, or storage of the pollutant, or previous analyses for the pollutant, shows the pollutant's presence. ( )

g. Unless a reporting requirement is waived under Subsection 105.07.h., applicants subject to this subsection must report quantitative data for the following pollutants for every outfall: ( )

i. 5-day biochemical oxygen demand (BOD5); ( )

- ii. Chemical oxygen demand (COD); ( )
- iii. Total organic carbon (TOC); ( )
- iv. Total suspended solids (TSS); ( )
- v. Ammonia, as N; ( )
- vi. Temperature (both winter and summer); and ( )
- vii. pH. ( )

**h.** The Department may waive the reporting requirements under Subsection 105.07.g. for individual point sources or for a particular industry category for one (1) or more of the pollutants listed in Subsection 105.07.g. if the applicant demonstrates that information adequate to support issuing a permit can be obtained with less stringent requirements. ( )

**i.** Except as provided in Subsection 105.07.o., an applicant with an existing facility described in Subsection 105.07.a. that has processes that qualify in one (1) or more of the primary industry categories shown in Appendix A to 40 CFR Part 122 contributing to a discharge, must report quantitative data for pollutants in each outfall containing process wastewater as follows: ( )

i. Data for the organic toxic pollutants listed in Table II of Appendix D to 40 CFR Part 122 in the fractions designated in Table I of Appendix D to 40 CFR Part 122. In this subsection: ( )

(1) Table II of Appendix D to 40 CFR Part 122, lists the organic toxic pollutants in each fraction that result from the sample preparation required by the analytical procedure using gas chromatography/mass spectrometry; and ( )

(2) If the Department determines an applicant falls within an industrial category for selecting fractions for testing, the determination does not establish the applicant's category for another purpose (Notes 2 and 3 to 40 CFR 122.21); and ( )

ii. Data for the toxic metals, cyanide, and total phenols listed in Table III of Appendix D to 40 CFR Part 122. ( )

**j.** An applicant must disclose whether he knows or believes that any of the conventional and nonconventional pollutants in Table IV of Appendix D to 40 CFR Part 122 are discharged from each outfall. If an ELG limits the pollutant either directly or indirectly by express limits on an indicator, the applicant must report quantitative data. For every pollutant discharged that is not limited in an ELG, the applicant must either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged. ( )

**k.** An applicant must disclose whether he knows or believes that any of the organic toxic pollutants listed in Table II or the toxic metals, cyanide, or total phenols listed in Table III of Appendix D to 40 CFR Part 122 for which quantitative data are not otherwise required under Subsection 105.07.i., are discharged from each outfall. Unless qualified as a small business under Subsection 105.07.o., the applicant must: ( )

i. Report quantitative data for every pollutant expected to be discharged in concentrations of ten (10) parts per billion or greater; ( )

ii. Report quantitative data for acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4, 6 dinitrophenol, if any of these four (4) pollutants are expected to be discharged in concentrations of one hundred (100) parts per billion or greater; and ( )

iii. For every pollutant expected to be discharged in concentrations less than ten (10) parts per billion, or for acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4, 6 dinitrophenol, in concentrations less than one hundred (100) parts per billion, either submit quantitative data, or describe the reasons the pollutant is expected to be



discharged and submit supporting documentation. ( )

**l.** An applicant must disclose whether he knows or believes that asbestos or the hazardous substances listed in Table V of Appendix D to 40 CFR Part 122 are discharged from each outfall. For every pollutant expected to be discharged, the applicant must describe the reasons the pollutant is expected to be discharged and report quantitative data for any pollutant. ( )

**m.** An must disclose and report qualitative data, generated using a screening procedure not calibrated with analytical standards, for 2,3,7, 8-tetrachlorodibenzo-p-dioxin (TCDD) if the applicant: ( )

i. Uses or manufactures: ( )

(1) 2,4,5-trichlorophenoxy acetic acid (2,4,5,-T); ( )

(2) 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5,-TP); ( )

(3) 2-(2,4,5-trichlorophenoxy) ethyl, 2,2-dichloropropionate (Erbon); ( )

(4) o,o-dimethyl o-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel); ( )

(5) 2,4,5-trichlorophenol (TCP); or ( )

(6) Hexachlorophene (HCP); or ( )

ii. Knows or believes that TCDD is or may be present in an effluent. ( )

**n.** Where quantitative data are required in Subsections 105.07.c. through m., existing data may be used, if available, in lieu of sampling done solely for the application, provided all: ( )

i. Data requirements are met; sampling was performed, collected, and analyzed no more than four and one-half (4 ½) years before submission; ( )

ii. Data represent the discharge; and ( )

iii. Available representative data are considered in the values reported. ( )

**o.** An applicant is exempt from the quantitative data requirements in Subsections 105.07.i. or 105.07.j. for the organic toxic pollutants listed in Table II of Appendix D to 40 CFR Part 122, if he qualifies as a small business under one (1) of the following criteria: ( )

i. Coal mine with an expected total annual production of less than one hundred thousand (100,000) tons per year; or ( )

ii. Gross total annual sales average less than two hundred eighty-seven thousand, three hundred dollars (\$287,300) per year in 2014 dollars. ( )

**p.** In addition to the information reported on the application, an applicant must provide at the Department's request, other information required to assess the discharges of the facility and to determine whether to issue an IPDES permit. This information may include quantitative data and bioassays to assess the relative toxicity of discharges to aquatic life and to determine the cause of the toxicity. ( )

**08. Application Requirements for New or Existing Manufacturing, Commercial, Mining, and Silviculture Facilities that Discharge only Non-process Wastewater. ( )**

**a.** An applicant that is a manufacturing, commercial, mining, or silvicultural discharger that discharges only non-process wastewater not regulated by an ELG or new source performance standard must provide the following information to the Department for all discharges, except for storm water discharges, using the forms

- specified in Subsection 105.04: ( )
- i. Number of each outfall, latitude and longitude to the nearest second (or equivalent), and name of each receiving water; ( )
  - ii. For a new discharger, the date of expected commencement of discharge; ( )
  - iii. Identify the general type of waste discharged, or expected to be discharged upon commencement of operations, including sanitary wastes, restaurant or cafeteria wastes, or non-contact cooling water; ( )
  - iv. Identify cooling water additives that are used or expected to be used upon commencement of operations, with their composition if existing composition is available; ( )
  - v. Effluent characteristics prepared and submitted as described in Subsections 105.08.b. and 105.08.c.; ( )
  - vi. Describe the frequency of flow and duration of seasonal or intermittent discharge, except for storm water runoff, leaks, or spills; ( )
  - vii. Describe the treatment system used or to be used; ( )
  - viii. Additional information the applicant wants considered, such as influent data for obtaining net credits under Subsection 303.07; and ( )
  - ix. Signature of the certifying official under Section 090. ( )
- b.** Except as otherwise provided in Subsections 105.08.d. through g., an application for a discharger described in Subsection 105.08.a. must include quantitative data for: ( )
- i. 5-day biochemical oxygen demand (BOD5); ( )
  - ii. Total suspended solids (TSS); ( )
  - iii. Fecal coliform (including *E. coli*), if believed present or if sanitary waste is or will be discharged; ( )
  - iv. Total residual chlorine (TRC), if chlorine is used; ( )
  - v. Oil and grease; ( )
  - vi. Chemical oxygen demand (COD), if non-contact cooling water is or will be discharged; ( )
  - vii. Total organic carbon (TOC), if non-contact cooling water is or will be discharged; ( )
  - viii. Ammonia, as N; ( )
  - ix. Discharge flow; ( )
  - x. pH; and ( )
  - xi. Temperature, both in winter and summer. ( )
- c.** Data required under Subsection 105.08.b.: ( )
- i. Grab samples must be used for oil and grease, fecal coliform (including *E. coli*), and volatile organics. Temperature, pH, and TRC effluent data may be obtained from grab samples or from calibrated and properly maintained continuous monitors; ( )

ii. Twenty-four (24) hour composite samples must be used for pollutants listed in Subsection 105.08.b., other than those specified in Subsection 105.08.c.i., unless specified otherwise in 40 CFR Part 136. Twenty-four (24) hour composite samples must comprise at least four (4) grab samples unless specified otherwise in 40 CFR Part 136. For a composite sample, only one (1) analysis of the composite aliquots is required; ( )

iii. The quantitative data may be collected over the past three hundred sixty-five (365) days, if the data represents current operations, and must include maximum daily value, average daily value, and number of measurements taken; and ( )

iv. The applicant must collect and analyze samples in accordance with 40 CFR Part 136. ( )

d. The Department may waive the testing and reporting requirements for the pollutants or flow listed in Subsection 105.08.c. if the applicant requests a waiver before or with its application, and demonstrates that information adequate to support permit issuance can be obtained through less stringent requirements. ( )

e. If the applicant is a new discharger, the applicant must: ( )

i. Complete and submit Item IV of EPA Form 2E equivalent, in accordance with Subsection 105.04.a.iv., by providing quantitative data that complies with the section no later than two (2) years after the discharge commences, except the applicant does not need to complete the portions of Item IV requiring tests already performed and reported under the discharge monitoring requirements of the IPDES or NPDES permit; and ( )

ii. Include estimates and the source of each estimate instead of sampling data for the pollutants or parameters listed in Subsection 105.08.b.; ( )

f. For the required data, pollutant levels must be reported or estimated as concentration and as total mass, except for flow, pH, and temperature. Submittal of estimated data must be accompanied by documents supporting the estimated value. ( )

g. An applicant's duty, under Subsections 105.08.b., c., and e., to provide quantitative data or estimates of certain pollutants does not apply to pollutants present in a discharge solely resulting from their presence in intake water. An applicant must report the presence of those pollutants. If the requirements of Subsection 303.07 are met, net credit may be provided for the presence of pollutants in intake water. ( )

**09. Application Requirements for New and Existing Concentrated Animal Feeding Operations (CAFO).** An applicant for an IPDES permit for a new or existing CAFO, as defined in 40 CFR 122.23(b) must provide the following information to the Department, using the forms specified in Subsection 105.04: ( )

a. Name of the owner and operator; ( )

b. Facility location and mailing addresses; ( )

c. Latitude and longitude of the production area to the nearest second (or equivalent), measured at the entrance to the production area; ( )

d. Topographic map of the geographic area where the CAFO is located, showing the specific location of the production area; ( )

e. Specific information about the number and type of animals, including, if applicable: beef cattle, broilers, layers, swine weighing fifty-five (55) pounds or more, swine weighing less than fifty-five (55) pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, ducks, turkeys, or other animals, whether in open confinement or housed under roof; ( )

f. Type of containment and total capacity in tons or gallons of any anaerobic lagoon, roofed storage shed, storage pond, under-floor pit, above-ground storage tank, below-ground storage tank, concrete pad, impervious soil pad, or other structure or area used for containment and storage of manure, litter, and process wastewater;

- ( )
- g.** Total number of acres available and under the applicant’s control for land application of manure, litter, or process wastewater; ( )
  - h.** Estimated amounts of manure, litter, and process wastewater generated per year in tons or gallons; ( )
  - i.** Estimated amounts of manure, litter, and process wastewater transferred to other persons per year in tons or gallons; and ( )
  - j.** A completed nutrient management plan that will be implemented upon the date of permit coverage. A nutrient management plan must meet, at a minimum, the requirements specified in 40 CFR 122.42, including all CAFOs subject to 40 CFR 412.30 through 412.37, 412.40 through 412.47, or the requirements of 40 CFR 412.4(c). ( )

**10. Application Requirements for New and Existing Concentrated Aquatic Animal Production (CAAP) Facilities.** An applicant for an IPDES permit for a new or existing CAAP facility must provide the following information, using the forms specified in Subsection 105.04: ( )

- a.** Maximum daily and average monthly flow from each outfall; ( )
- b.** Number of ponds, raceways, and similar structures; ( )
- c.** Name of the receiving water and the source of intake water; ( )
- d.** Total yearly and maximum harvestable weight for each species of aquatic animal,; and ( )
- e.** Calendar month of maximum feeding and the total mass of food fed during that month. ( )

**11. Application Requirements for New and Existing POTWs and Other Dischargers Designated by the Department.** ( )

**a.** Except as provided in Subsection 105.11.b., an applicant that is a POTW and any other discharger designated by the Department must provide the information in this subsection, using the forms specified in Subsection 105.04.b. An applicant must submit all information available at the time of application and may reference information previously submitted to the Department. ( )

**b.** The Department may waive a requirement of this subsection if it has access to substantially identical information or if that information is not of material concern for a specific permit, if approved by the EPA Regional Administrator. The waiver request to the Regional Administrator must include the Department’s justification for the waiver. A Regional Administrator’s disapproval of the Department’s proposed waiver does not constitute final agency action, but does provide notice to the state and permit applicant(s) that EPA may object to a state-issued permit issued in the absence of the required information. ( )

**c.** An applicant under this subsection must provide: ( )

- i.** Name, mailing address, and location of the facility; ( )
- ii.** Name, mailing address, e-mail address, and telephone number of the applicant, and whether the applicant is the facility’s owner, operator, or both; ( )
- iii.** List of environmental permits or construction approvals received or applied for, including dates, under: ( )

(1) Hazardous waste management program under IDAPA 58.01.05, “Rules and Standards for Hazardous Waste”; ( )

- (2) Underground injection control (UIC) program under the Idaho Department of Water Resources UIC program at IDAPA 37.03.03, “Rules and Minimum Standards for the Construction and Use of Injection Wells”; ( )
- (3) IPDES program under IDAPA 58.01.25, “Idaho Pollutant Discharge Elimination System Rules”; ( )
- (4) Prevention of significant deterioration (PSD) program under IDAPA 58.01.01, “Rules for the Control of Air Pollution in Idaho”; ( )
- (5) Nonattainment program under IDAPA 58.01.01, “Rules for the Control of Air Pollution in Idaho”; ( )
- (6) National emission standards for hazardous pollutants (NESHAPS) preconstruction approval under IDAPA 58.01.01, “Rules for the Control of Air Pollution in Idaho”; ( )
- (7) Dredge or fill permits under CWA Section 404; ( )
- (8) Sludge Management Program under IDAPA 58.01.16.650, “Wastewater Rules,” and Section 380 of these rules; and ( )
- (9) Other relevant environmental permits, programs, or activities, including those subject to state jurisdiction, approval, and permits; ( )
- iv. Name, population, and EDUs of each municipal entity served by the facility, including unincorporated connector districts, whether each municipal entity owns or maintains the collection system and, if the information is available, whether the collection system is a separate sanitary sewer or a combined storm and sanitary sewer; ( )
- v. Statement whether the facility is in Indian country and whether the facility discharges to a receiving stream that flows through Indian country; ( )
- vi. Facility’s design flow rate, or the wastewater flow rate the plant was built to handle, annual average daily flow rate, and maximum daily flow rate for each of the previous three (3) years; ( )
- vii. Statement identifying the types of collection systems, either separate sanitary sewers or combined storm and sanitary sewers, used by the treatment works, and an estimate of the percent of sewer line each type comprises; ( )
- viii. Information for outfalls to waters of the United States and other discharge or disposal methods: ( )
- (1) For effluent discharges to waters of the United States, the total number and types of outfalls including treated effluent, combined sewer overflows, bypasses, constructed emergency overflows; ( )
- (2) For wastewater discharged to surface impoundments, the location of each surface impoundment, the average daily volume discharged to each surface impoundment, and whether the discharge is continuous or intermittent; ( )
- (3) For wastewater applied to the land, the location of each application site, the size in acres of each application site, the average daily volume in gallons per day applied to each application site, and whether the application is continuous or intermittent; ( )
- (4) For effluent sent to another facility for treatment before discharge, the method the effluent is transported; name, mailing address, e-mail address, contact person, and phone number of the organization transporting the discharge, if the transport is provided by a party other than the applicant; name, mailing address, e-

mail address, contact person, phone number, and IPDES or NPDES permit number, if any, of the receiving facility; and average daily flow rate from this facility into the receiving facility in million gallons per day (MGD); and ( )

(5) For wastewater disposed of in a manner not included in Subsections 105.11.c.viii(1) through (4), including underground percolation and underground injection, a description of the disposal method, the location and size of each disposal site, if applicable, the annual average daily volume in gallons per day disposed of by this method, and whether disposal by this method is continuous or intermittent; and ( )

ix. Name, mailing address, e-mail address, telephone number, and responsibilities of contractors responsible for operating or maintaining the POTW facility. ( )

x. Indicate whether applicant is operating under or requesting to operate under a variance as specified in Subsection 310.02 if known at the time of application. ( )

**d.** In addition to the information described in Subsection 105.11.c., an applicant with a design flow greater than or equal to zero point one (0.1) million gallons per day (MGD) must provide: ( )

i. Current average daily volume in gallons per day of inflow and infiltration, and describe steps the facility is taking to minimize inflow and infiltration; ( )

ii. Topographic map, or other map if a topographic map is unavailable, extending at least one (1) mile beyond property boundaries of the treatment plant including unit processes, and showing: ( )

(1) Treatment plant area and unit processes; ( )

(2) Major pipes or other structures through which wastewater enters the treatment plant and the pipes or other structures through which treated wastewater is discharged from the treatment plant, including outfalls from bypass piping, if applicable; ( )

(3) Each well where fluids from the treatment plant are injected underground; ( )

(4) Wells, springs, and other surface water bodies listed in public records or known to the applicant within one-quarter (1/4) mile of the property boundaries of the treatment works; ( )

(5) Sewage sludge management facilities including on-site treatment, storage, and disposal sites; and ( )

(6) Each location at which waste classified as hazardous under IDAPA 58.01.05, "Rules and Standards for Hazardous Waste," enters the treatment plant by truck, rail, or dedicated pipe; ( )

iii. Process flow diagram or schematic as follows: ( )

(1) Diagram showing the processes of the treatment plant, including bypass piping and backup power sources or redundancy in the system, a water balance showing treatment units and disinfection, and daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units; and ( )

(2) Narrative description of the diagram; and ( )

iv. Information regarding scheduled improvements: ( )

(1) Outfall number of each affected outfall; ( )

(2) Narrative description of each required improvement; ( )

(3) Scheduled dates for commencing and completing construction, commencing discharge and attaining operational level, and actual completion date for events listed; and ( )

- (4) Description of permits and authorizations for other federal and state requirements. ( )
- e. An applicant must provide the following information for each outfall, including bypass points, through which effluent is discharged, as applicable: ( )
- i. For each outfall: ( )
- (1) Outfall number; ( )
- (2) County, and city or town in which the outfall is located; ( )
- (3) Latitude and longitude, to the nearest second; ( )
- (4) Distance from shore and depth below surface; ( )
- (5) Average daily flow rate, in million gallons per day (MGD); ( )
- (6) If the outfall has a seasonal or periodic discharge, the number of times per year the discharge occurs, duration of each discharge, flow of each discharge, and months when discharge occurs; and ( )
- (7) Statement whether the outfall is equipped with a diffuser and the type of diffuser used, such as high-rate; ( )
- ii. For each outfall discharging effluent to waters of the United States, the following receiving water information, if available: ( )
- (1) Name of each receiving water; ( )
- (2) Critical flow of each receiving water; and ( )
- (3) Total hardness of the receiving water at critical low flow; and ( )
- iii. For each outfall discharging to waters of the United States, the following information describing the treatment of the discharges: ( )
- (1) Highest level of treatment, including primary, equivalent to secondary, secondary, advanced, or other treatment level provided for: ( )
- (a) Design biochemical oxygen demand removal percentage; ( )
- (b) Design suspended solids removal percentage; ( )
- (c) Design phosphorus removal percentage; ( )
- (d) Design nitrogen removal percentage; and ( )
- (e) Other removals that an advanced treatment system is designed to achieve; and ( )
- (2) Type of disinfection used, and whether the treatment plant de-chlorinates, if disinfection is accomplished through chlorination. ( )
- f. In addition to Subsection 105.11.a., and except as provided in Subsection 105.11.h., an applicant must undertake sampling and analysis and submit effluent monitoring information for samples taken from each outfall where effluent is discharged to waters of the United States, except for combined sewer overflows, including: ( )

- i. Pollutants listed in Appendix J, Table 1A to 40 CFR Part 122; ( )
- ii. For an applicant with a design flow greater than or equal to zero point one (0.1) million gallons per day (MGD), pollutants listed in Appendix J, Table 1 to 40 CFR Part 122, except a facility that does not use chlorine for disinfection, does not use chlorine elsewhere in the treatment process, and has no reasonable potential to discharge chlorine in the facility's effluent, is not required to sample or analyze chlorine; ( )
- iii. Pollutants listed in Appendix J, Table 2 to 40 CFR Part 122 and other pollutants the state or EPA has established water quality standards for the receiving waters if the facility is a POTW: ( )
  - (1) With a design flow rate equal to or greater than one (1) million gallons per day (MGD); ( )
  - (2) With an approved pretreatment program; ( )
  - (3) Required to develop a pretreatment program; or ( )
  - (4) The Department re compliance with these rules; ( )
- iv. Sampling and analysis for additional pollutants, as the Department may require, on a case-by-case basis; ( )
- v. Data from at least three (3) samples taken within four and one-half (4 ½) years before the date of the permit application; to meet this requirement: ( )
  - (1) Samples must represent the seasonal variation in the discharge from each outfall; ( )
  - (2) Existing data may be used, if available, in lieu of sampling done solely for this application; and ( )
  - (3) Additional samples may be required by the Department on a case-by-case basis; and ( )
- vi. Existing data for pollutants specified in Subsections 105.11.f.i. through iv. collected within four and one-half (4 ½) years of the application. This data must be included in the pollutant data summary submitted by the applicant, except if the applicant samples for a specific pollutant on a monthly or more frequent basis, only the data collected for that pollutant within one (1) year of the application must be provided. ( )
- g. To meet the information requirements of Subsection 105.11.f., an applicant must: ( )
  - i. Collect samples of effluent and analyze the samples for pollutants following the analytical methods approved under 40 CFR Part 136 unless an alternative is specified in the existing IPDES or NPDES permit; ( )
  - ii. Use the following methods: ( )
    - (1) Grab samples for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*), and volatile organics. Temperature, pH, dissolved oxygen, and residual chlorine data may be obtained from grab samples or from calibrated and properly maintained continuous monitors; ( )
    - (2) Twenty-four (24) hour composite samples for other pollutants, unless specified otherwise at 40 CFR Part 136, using at least four (4) grab samples; for a composite sample, only one (1) analysis of the composite of aliquots is required; and ( )
  - iii. Provide at least the following information for each parameter: ( )
    - (1) Maximum daily discharge, expressed as concentration or mass, based upon actual sample values; ( )
    - (2) Average daily discharge for all samples, expressed as concentration or mass, and the number of



samples used to obtain this value; ( )

(3) Analytical method used; and ( )

(4) Threshold level, such as the method detection limit, minimum level, or other designated method endpoint for the analytical method used; and ( )

iv. Report metals as total recoverable, unless the Department requires otherwise. ( )

**h.** When an applicant has two (2) or more outfalls with substantially identical effluent discharging to the same receiving water segment, the Department may, on a case-by-case basis, allow the applicant to submit sampling data for only one (1) outfall. The Department may also allow an applicant to composite samples from one (1) or more outfalls that discharge into the same mixing zone, under IDAPA 58.01.02, "Water Quality Standards." For POTWs applying before commencing discharge, data must be submitted no later than twenty-four (24) months after discharge commences. ( )

**12. Whole Effluent Toxicity (WET) Monitoring for POTWs. ( )**

**a.** An applicant for a permit under Subsection 105.11 must submit information on effluent monitoring for WET by identifying WET tests conducted during the four and one-half (4 ½) years before the application date on the discharges or on receiving water near the discharge. For POTWs applying before discharge commences, data must be submitted no later than twenty-four (24) months after discharge commences. ( )

**b.** An applicant under Subsection 105.11 must submit to the Department, in compliance with Subsections 105.12.c. through f., the results of valid WET tests for acute or chronic toxicity for samples taken from each outfall where effluent is discharged to surface waters, except for combined sewer overflows, if the applicant: ( )

i. Has a design flow rate greater than or equal to one (1) million gallons per day (MGD); ( )

ii. Has an approved pretreatment program or is required to develop a pretreatment program; or ( )

iii. Is required to comply with this subsection by the Department, based on consideration of: ( )

(1) Variability of the pollutants or pollutant parameters in the POTW effluent based on chemical-specific information, type of treatment plant, and types of industrial contributors; ( )

(2) Ratio of effluent flow to receiving stream flow; ( )

(3) Existing controls on point or non-point sources, including total maximum daily load (TMDL) calculations for the receiving stream segment and the relative contribution of the POTW; ( )

(4) Receiving water characteristics, including possible or known water quality impairment, and whether the POTW discharges to a water designated as an outstanding natural resource water; or ( )

(5) Other considerations, including the history of toxic impacts and compliance problems at the POTW that the Department determines may cause or contribute to adverse water quality impacts. ( )

**c.** When an applicant under Subsection 105.11 has two (2) or more outfalls with substantially identical effluent discharging to the same receiving water segment, the Department may, on a case-by-case basis, allow the applicant to submit WET data for only one (1) outfall. The Department may also allow an applicant to composite samples from one (1) or more outfalls that discharge into the same mixing zone. ( )

**d.** An applicant under Subsection 105.12.b. that is required to perform WET testing must provide: ( )

- i. Results of at least four (4) quarterly tests for a year, from the year preceding the permit application or results from four (4) tests performed at least annually in the four and one-half (4 ½) year period before the application, if the results show no appreciable toxicity using a safety factor determined by the Department; ( )
- ii. Number of chronic or acute WET tests conducted since the last permit reissuance; ( )
- iii. Results using the form provided by the Department, or test summaries, if available and comprehensive, for each WET test conducted if the information has not been reported previously to the Department. ( )
- iv. For WET data submitted to the Department within four and one-half (4 ½) years before the date of the application, the dates on which the data were submitted and a summary of the results; and ( )
- v. Information on the cause of toxicity and written details of any toxicity reduction evaluation conducted, if WET tests conducted within the past four and one-half (4 ½) years revealed toxicity. ( )
- e. An applicant under Subsection 105.11 must conduct tests with no less than two (2) species, including fish, invertebrate, or plant, and test for acute or chronic toxicity, depending on the range of receiving water dilution. Unless the Department directs otherwise, an applicant must conduct acute or chronic testing based on: ( )
  - i. Acute toxicity testing if the dilution of the effluent is greater than a ratio of one thousand to one (1,000:1) at the edge of the mixing zone; ( )
  - ii. Acute or chronic toxicity testing, if the dilution of the effluent is between a ratio of one hundred to one (100:1) and one thousand to one (1,000:1) at the edge of the mixing zone; acute testing may be more appropriate at the higher end of this range (one thousand to one [1,000:1]), and chronic testing may be more appropriate at the lower end of this range (one hundred to one (100:1)); or ( )
  - iii. Chronic testing if the dilution of the effluent is less than a ratio of one hundred to one (100:1) at the edge of the mixing zone. ( )
- f. For the WET testing required by this section, an applicant must conduct testing using methods approved under 40 CFR Part 136. ( )

**13. Application Requirements for POTWs Receiving Industrial Discharges.** ( )

- a. An applicant for an IPDES permit as a POTW under Subsection 105.11 must state in its application the number of significant industrial users (SIU) and non-significant categorical industrial users (NSCIU), as defined at 40 CFR 403.3(v), including SIUs and NSCIUs that truck or haul waste, discharging to the POTW. A POTW with one (1) or more SIUs must provide the following information for each SIU that discharges to the POTW: ( )
  - i. Name and mailing address of the SIU; ( )
  - ii. Description of all industrial processes that affect or contribute to the SIU's discharge; ( )
  - iii. Principal products and raw materials of each SIU that affects or contributes to that SIU's discharge; ( )
  - iv. Average daily volume of wastewater discharged by the SIU, indicating the amount attributable to process flow and non-process flow; ( )
  - v. Whether the SIU is subject to local limits; ( )
  - vi. Whether the SIU is subject to one (1) or more categorical standards, and if so, under which category and subcategory; and ( )

vii. Whether problems at the POTW, including upsets, pass-through, or interference have been attributed to the SIU in the past four and one-half (4 ½) years. ( )

b. The Department may waive information required in Subsection 105.13.a. for a POTW with a pretreatment program if the applicant submitted either of the following that contains information substantially identical to the information required in Subsection 105.13.a.: ( )

i. Annual report submitted within one (1) year of the application; or ( )

ii. Pretreatment program. ( )

**14. Application Requirements for POTWs Receiving Discharges from Hazardous Waste Generators and from Waste Cleanup or Remediation Sites.** ( )

a. POTWs receiving hazardous or corrective action wastes or wastes generated at another type of cleanup or remediation site must provide: ( )

i. If a POTW receives, or has been notified that it will receive by truck, rail, or dedicated pipe, wastes regulated as hazardous wastes under 40 CFR Part 261 and IDAPA 58.01.05, "Rules and Standards for Hazardous Waste," the applicant must report: ( )

(1) How waste is delivered, including by truck, rail, or dedicated pipe; and ( )

(2) Hazardous waste number designated in IDAPA 58.01.05, "Rules and Standards for Hazardous Waste" for the transported waste, and the amount received annually of each hazardous waste; and ( )

ii. If the POTW receives, or has been notified that it will receive, wastewater that originates from remedial activities, including those undertaken under Comprehensive Environmental Response, Compensation, and Liability Act, and the Resource Conservation and Recovery Act Sections 3004(u) or 3008(h), the applicant must report: ( )

(1) Identity and description of each site or facility at which the wastewater originates; ( )

(2) The identity of known hazardous constituents specified in IDAPA 58.01.05, "Rules and Standards for Hazardous Waste," in the wastewater; and ( )

(3) Extent of treatment the wastewater receives or will receive before entering the POTW. ( )

b. An applicant is exempt from the requirements of Subsection 105.14.a.ii. if he receives no more than fifteen (15) kilograms per month of hazardous wastes, unless the wastes are acute hazardous wastes as specified in IDAPA 58.01.05, "Rules and Standards for Hazardous Waste." ( )

**15. Application Requirements for POTWs with Combined Sewer Systems and Overflows.** A POTW applicant with a combined sewer system must provide the following information on the combined sewer system and outfalls: ( )

a. System map indicating the location of: ( )

i. Combined sewer overflow discharge points; ( )

ii. Sensitive use areas potentially affected by combined sewer overflows including beaches, drinking water supplies, shellfish beds, and sensitive aquatic ecosystems; ( )

iii. Outstanding national resource waters potentially affected by combined sewer overflows; and ( )

iv. Waters supporting threatened and endangered species potentially affected by combined sewer ( )

- overflows; ( )
- b.** System diagram of the combined sewer collection system including the locations of: ( )
    - i. Major sewer trunk lines, both combined and separate sanitary; ( )
    - ii. Points where separate sanitary sewers feed into the combined sewer system; ( )
    - iii. In-line and off-line storage structures; ( )
    - iv. Flow-regulating devices; and ( )
    - v. Pump stations; ( )
  - c.** Information on each outfall for each combined sewer overflow discharge point covered by the permit application, including: ( )
    - i. Outfall number; ( )
    - ii. County and city or town where the outfall is located; ( )
    - iii. Latitude and longitude, to the nearest second (or equivalent); and ( )
    - iv. Distance from shore and depth below surface; ( )
  - d.** Statement whether the applicant monitored the following in the past year for a combined sewer overflow: ( )
    - i. Rainfall; ( )
    - ii. Overflow volume; ( )
    - iii. Overflow pollutant concentrations; ( )
    - iv. Receiving water quality; ( )
    - v. Overflow frequency; and ( )
    - vi. Number of storm events monitored in the past year; ( )
  - e.** Information about the number of combined sewer overflows from each outfall in the past year and, if available: ( )
    - i. Average duration per event; ( )
    - ii. Average volume for each event; and ( )
    - iii. Minimum rainfall that caused a combined sewer overflow event in the last year; ( )
  - f.** Name of each receiving water; ( )
  - g.** Description of known water quality impact caused by the combined sewer overflow operations, including permanent or intermittent beach closings, permanent or intermittent shellfish bed closings, fish kills, fish advisories, other recreational loss, or the exceedance of state water quality standards, on the receiving water; and ( )
  - h.** Applicants must provide the name, mailing address, e-mail address, telephone number, and

responsibilities of contractors responsible for operating or maintaining the facility. ( )

**16. Application Requirements for New Sources and New Discharges.** ( )

**a.** An applicant for an IPDES permit for a new manufacturing, commercial, mining, silviculture, or other discharge, except for a new discharge from a facility subject to the requirements of Subsection 105.08 or a new discharge of storm water associated with industrial activity subject to the requirements of Subsection 105.19, except as provided by Subsection 105.19.c., must provide the following information to the Department, using the forms specified in Subsection 105.04.b.: ( )

i. Latitude and longitude to the nearest second (or equivalent) of the expected outfall location and the name of each receiving water; ( )

ii. Expected date the discharge will commence; ( )

iii. Information on flows, sources of pollution, and treatment technologies: ( )

(1) Describe treatment the wastewater will receive, identify operations contributing wastewater to the effluent, state the average flow contributed by each operation, and describe the ultimate disposal of solid or liquid wastes not discharged; ( )

(2) Line drawing of the water flow through the facility with a water balance as described in Subsection 105.07.b.; and ( )

(3) If the expected discharges will be intermittent or seasonal, describe the frequency, duration, and maximum daily flow rate of each discharge occurrence, except for storm water runoff, spillage, or leaks; ( )

iv. If a new source performance standard promulgated under CWA Section 306 or an ELG applies to the applicant and is expressed by production or another measure of operation, a reasonable calculation of the applicant's expected actual production reported in the units used in the ELG or new source performance standard, as required by Subsection 303.02.b., for each of the first three (3) years. The applicant may submit alternative estimates if production is likely to vary; ( )

v. Effluent characteristics as described in Subsection 105.16.b.; ( )

vi. Existence of technical evaluations concerning the applicant's wastewater treatment, with the name and location of similar plants of which the applicant has knowledge; ( )

vii. Optional information the permittee wishes the Department to consider. ( )

**b.** Applicant must provide the following effluent characteristics information: ( )

i. Estimated daily maximum, daily average, and the source of that information for each outfall for: ( )

(1) Five (5)-day biochemical oxygen demand (BOD5); ( )

(2) Chemical oxygen demand (COD); ( )

(3) Total organic carbon (TOC); ( )

(4) Total suspended solids (TSS); ( )

(5) Flow; ( )

(6) Ammonia, as N; ( )

- (7) Temperature, in both winter and summer; and ( )
- (8) pH. ( )
- ii. Estimated daily maximum, daily average, and the source of that information for each outfall for all conventional and nonconventional pollutants in Table IV of Appendix D to 40 CFR Part 122, if the applicant knows or believes the pollutants will be present or if the pollutants are limited by an ELG or new source performance standard either directly or indirectly through limits on an indicator pollutant; ( )
- iii. Estimated daily maximum, daily average, and the source of that information for the following pollutants for each outfall, if the applicant knows or believes the pollutants will be present in the discharge from an outfall: ( )
- (1) Pollutants in Table IV of Appendix D to 40 CFR Part 122; ( )
- (2) Toxic metals, total cyanide, and total phenols listed in Table III of Appendix D to 40 CFR Part 122; ( )
- (3) Organic toxic pollutants in Table II of Appendix D to 40 CFR Part 122 except bis (chloromethyl) ether, dichlorofluoromethane, and trichlorofluoromethane; however, this requirement is waived for: ( )
- (a) Applicant with expected gross sales of less than two hundred eighty-seven thousand three hundred dollars (\$287,300) per year in 2014 dollars for the next three (3) years (Subsection 105.07.o.ii.); or ( )
- (b) Coal mine with expected average production of less than one hundred thousand (100,000) tons of coal per year (Subsection 105.07.o.i.); ( )
- iv. The information that 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) may be discharged if the applicant uses or manufactures one (1) of the following compounds, or if the applicant knows or believes that TCDD will or may be present in an effluent: ( )
- (1) 2,4,5-trichlorophenoxy acetic acid (2,4,5-T); Chemical Abstract Service (CAS) #93-76-5; ( )
- (2) 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP) (CAS #93-72-1); ( )
- (3) 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) (CAS #136-25-4); ( )
- (4) o,o-dimethyl o-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel) (CAS #299-84-3); ( )
- (5) 2,4,5-trichlorophenol (TCP) (CAS #95-95-4); or ( )
- (6) Hexachlorophene (HCP) (CAS #70-30-4); and ( )
- v. The potential presence of the pollutants listed in 40 CFR Part 122, Appendix D, Table V if the applicant believes these pollutants will be present in an outfall, except quantitative estimates are not required unless already available when the applicant applies for the permit. ( )
- c. No later than twenty-four (24) months after commencing discharge from the proposed facility, the applicant must complete and submit Items V and VI of EPA application Form 2C equivalent. The applicant need not complete those portions of Item V or the Department equivalent requiring tests already performed and reported under the discharge monitoring requirements of its permit. ( )
- d. The effluent characteristics requirements in Subsections 105.08.b., c., and e. that an applicant must provide estimates of certain pollutants expected to be present do not apply to pollutants present in a discharge based solely on their presence in intake water. An applicant must report that a pollutant is present. Net credits may be provided for the presence of pollutants in intake water if the requirements of Subsection 303.07 are met, and (except for discharge flow, temperature, and pH) all levels must be estimated as concentration and as total mass. ( )

e. The Department may waive the reporting requirements for any of the pollutants and parameters in Subsection 105.16.b. if the applicant requests a waiver with its application, or earlier, and demonstrates that information adequate to support issuing the permit can be obtained through less stringent reporting requirements. ( )

**17. Application Requirements for Treatment Works Treating Domestic Sewage (TWTDS).** TWTDS with a currently effective NPDES or IPDES permit must submit a permit application during the next IPDES permit renewal, using EPA Form 2S equivalent. New applicants must submit all information available at the time of permit application. The information may be provided by referencing information previously submitted to the Department. ( )

a. The Department may waive requirements of this subsection if there is access to substantially identical information. The Department may also waive requirements of this subsection that are not of material concern for a specific permit, if approved by the EPA Regional Administrator. The waiver request to the Regional Administrator must include the Department's justification for the waiver. An EPA Regional Administrator's disapproval of the Department's proposed waiver does not constitute final agency action but does notify the state and permit applicant that EPA may object to a state-issued permit in the absence of the required information. ( )

b. Applicants must submit: ( )

i. Name, mailing address, and location of the TWTDS where the application is submitted; ( )

ii. Name, mailing address, e-mail address, and telephone number of the applicant, indicating whether the applicant is the owner, operator, or both; ( )

iii. Whether the facility is a Class I Sludge Management Facility; ( )

iv. Design flow rate in million gallons per day (MGD); ( )

v. Total population and (EDUs) served; and ( )

vi. TWTDS status as federal, state, private, public, or other entity. ( )

c. Applicants must submit the facility's NPDES or IPDES permit number, if applicable, and a list of federal, state, and local permits or construction approvals received or applied for under: ( )

i. Hazardous waste management program under IDAPA 58.01.05, "Rules and Standards for Hazardous Waste"; ( )

ii. Underground injection control (UIC) program under the Idaho Department of Water Resources UIC program at IDAPA 37.03.03, "Rules and Minimum Standards for the Construction and Use of Injection Wells"; ( )

iii. IPDES program under IDAPA 58.01.25, "Idaho Pollutant Discharge Elimination System Rules"; ( )

iv. Prevention of significant deterioration (PSD) program under IDAPA 58.01.01, "Rules for the Control of Air Pollution in Idaho"; ( )

v. Nonattainment program under IDAPA 58.01.01, "Rules for the Control of Air Pollution in Idaho"; ( )

vi. National emission standards for hazardous pollutants (NESHAPS) preconstruction approval under IDAPA 58.01.01, "Rules for the Control of Air Pollution in Idaho"; ( )

vii. Dredge or fill permits under CWA Section 404; ( )

- viii. Sludge Management Program under IDAPA 58.01.16.650, “Wastewater Rules,” and Section 380 of these rules; and ( )
- ix. Other relevant environmental permits, programs, or activities, subject to state jurisdiction, approval, and permits. ( )
- d. Applicants must identify the generation, treatment, storage, land application, or disposal of sewage sludge that occurs in Indian country. ( )
- e. Applicants must submit a topographic map (or other map if a topographic map is unavailable) extending one (1) mile beyond property boundaries of the facility and showing: ( )
- i. Sewage sludge management facilities, including on-site treatment, storage, and disposal sites; and ( )
- ii. Wells, springs, and other surface water bodies that are within one-quarter ( $\frac{1}{4}$ ) mile of the property boundaries and listed in public records or known to the applicant. ( )
- f. Applicants must submit a line drawing and/or a narrative description identifying sewage sludge management practices employed during the term of the permit, including all units used for collecting, dewatering, storing, or treating sewage sludge, the destination of liquids and solids leaving each unit, and all processes used for pathogen reduction and vector attraction reduction. ( )
- g. Applicant must submit sewage sludge monitoring data quantifying pollutants with limits in sewage sludge established in 40 CFR Part 503 for the applicant's use or disposal practices on the date of permit application. ( )
- i. The Department may require sampling for additional pollutants, as appropriate, on a case-by-case basis; ( )
- ii. Applicants must provide data from at least three (3) samples taken within four and one-half ( $4\frac{1}{2}$ ) years before the date of the permit application. Samples must represent the sewage sludge and be collected at least one (1) month apart. Existing data may be used in lieu of sampling done solely for this application; ( )
- iii. Applicants must collect and analyze samples following analytical methods approved under SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods) unless an alternative was specified in an existing sewage sludge permit; and ( )
- iv. Monitoring data provided must include at least the following information for each parameter: ( )
- (1) Average monthly concentration for all samples (mg/kg dry weight), based upon actual sample values; ( )
- (2) Analytical method used; and ( )
- (3) Method detection level. ( )
- h. If the applicant is either the person who generates sewage sludge during the treatment of domestic sewage in a treatment works or the person who derives a material from sewage sludge, the following information must be provided: ( )
- i. If the applicant's facility generates sewage sludge, the total dry metric tons per three hundred sixty-five (365)-day period generated at the facility; ( )
- ii. If the applicant's facility receives sewage sludge from another facility, the following information



for each facility from which sewage sludge is received: ( )

(1) Name, mailing address, and location of the other facility; ( )

(2) Total dry metric tons per three hundred sixty-five (365)-day period received from the other facility;  
and ( )

(3) Description of treatment processes occurring at the other facility, including blending activities and  
treatment to reduce pathogens or vector attraction characteristics; ( )

iii. If the applicant's facility changes the quality of sewage sludge through blending, treatment, or other  
activities, the following information must be submitted: ( )

(1) Whether the Class A pathogen reduction requirements in 40 CFR 503.32(a) or the Class B  
pathogen reduction requirements in 40 CFR 503.32(b) are met, and a description of treatment processes used to  
reduce pathogens in sewage sludge; ( )

(2) Whether the vector attraction reduction options of 40 CFR 503.33(b)(1) through (b)(8) are met, and  
a description of treatment processes used to reduce vector attraction properties in sewage sludge; and ( )

(3) Description of blending, treatment, or other activities that change the quality of sewage sludge;  
( )

iv. If sewage sludge from the applicant's facility meets the ceiling concentrations in 40 CFR  
503.13(b)(1), the pollutant concentrations in 40 CFR 503.13(b)(3), the Class A pathogen requirements in 40 CFR  
503.32(a), and one (1) of the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (b)(8), and if  
the sewage sludge is applied to the land, the applicant must provide the total dry metric tons per three hundred sixty-  
five (365)-day period of sewage sludge subject to this subsection that is applied to the land; ( )

v. If sewage sludge from the applicant's facility is sold or given away in a bag or other container for  
land application, and the sewage sludge is not subject to Subsection 105.17.h.iv., the applicant must provide: ( )

(1) Total dry metric tons per three hundred sixty-five (365)-day period of sewage sludge subject to this  
subsection that is sold or given away in a bag or other container for land application; and ( )

(2) Copy of labels or notices that accompany the sewage sludge sold or given away; and ( )

vi. If sewage sludge from the applicant's facility is provided to another person who generates sewage  
sludge during the treatment of domestic sewage in a treatment works or a person who derives a material from sewage  
sludge, and the sewage sludge is not subject to Subsection 105.17.h.iv., the applicant must provide the following  
information for each facility receiving the sewage sludge: ( )

(1) Name, e-mail address, and mailing address of the receiving facility; ( )

(2) Total dry metric tons per three hundred sixty-five (365)-day period of sewage sludge subject to this  
subsection that the applicant provides to the receiving facility; ( )

(3) Description of treatment processes occurring at the receiving facility, including blending activities  
and treatment to reduce pathogens or vector attraction characteristic; ( )

(4) Copy of the notice and necessary information that the applicant is required to provide the receiving  
facility under 40 CFR 503.12(g); and ( )

(5) If the receiving facility places sewage sludge in bags or containers for sale or give-away to  
application to the land, a copy of any labels or notices that accompany the sewage sludge. ( )

i. If sewage sludge from the applicant's facility is applied to the land in bulk form, and is not subject

to Subsection 105.17.h.iv., v., or vi., the applicant must provide: ( )

i. Total dry metric tons per three hundred sixty-five (365)-day period of sewage sludge subject to this subsection that is applied to the land; ( )

ii. If land application sites are in states other than the state where the sewage sludge is prepared, a description of how the applicant will notify the permitting authority for the state where the land application sites are located; ( )

iii. The following information for each land application site identified at the time of permit application: ( )

(1) Name (if any), and location for the land application site; ( )

(2) Latitude and longitude to the nearest second (or equivalent), and method of determination; ( )

(3) Topographic map (or another map if a topographic map is unavailable) showing the site's location; ( )

(4) Name, mailing address, e-mail address, and telephone number of the site owner, if different from the applicant; ( )

(5) Name, mailing address, e-mail address, and telephone number of the person who applies sewage sludge to the site, if different from the applicant; ( )

(6) Whether the site is agricultural land, forest, a public contact site, or a reclamation site, as defined under 40 CFR 503.11; ( )

(7) Type of vegetation grown on the site, if known, and the nitrogen requirement for the vegetation; ( )

(8) Whether the vector attraction reduction options of 40 CFR 503.33(b)(9) or (b)(10) are met at the site, and a description of procedures employed during use to reduce vector attraction properties in sewage sludge; and ( )

(9) Other information describing how the site will be managed, as specified by the permitting authority. ( )

iv. The following information for each land application site identified during permit application, if the applicant intends to apply bulk sewage sludge subject to the cumulative pollutant loading rates in 40 CFR 503.13(b)(2) to the site: ( )

(1) Whether the applicant contacted the permitting authority in the state where the bulk sewage sludge subject to 40 CFR 503.13(b)(2) will be applied, to ascertain whether bulk sewage sludge subject to 40 CFR 503.13(b)(2) has been applied to the site on or since July 20, 1993, and if so, the name of the permitting authority and the name, phone number, and e-mail address, if available, of a contact person at the permitting authority; ( )

(2) Identification of facilities other than the applicant's facility that have sent, or are sending, sewage sludge subject to the cumulative pollutant loading rates in 40 CFR 503.13(b)(2) to the site since July 20, 1993, if, based on the inquiry in Subsection 105.17.i.iv(1) bulk sewage sludge subject to cumulative pollutant loading rates in 40 CFR 503.13(b)(2) has been applied to the site since July 20, 1993; ( )

v. If all land application sites have not been identified during permit application, the applicant must submit a land application plan that, at a minimum: ( )

(1) Describes the geographical area covered by the plan; ( )

- (2) Identifies the site selection criteria; ( )
- (3) Describes how the site will be managed; ( )
- (4) Provides for advance notice to the permit authority of specific land application sites and reasonable time for the permit authority to object before land applying the sewage sludge; and ( )
- (5) Provides for advance public notice of land application sites in the manner prescribed by state and local law. When state or local law does not require advance public notice, it must be provided in a manner that informs the public of the planned land application. ( )
- j.** If sewage sludge from the applicant's facility is placed on a surface disposal site, the applicant must provide: ( )
- i.** Total dry metric tons of sewage sludge from the applicant's facility that is placed on surface disposal sites per three hundred sixty-five (365)-day period; ( )
- ii.** The following information for each surface disposal site receiving sewage sludge from the applicant's facility that the applicant does not own or operate: ( )
- (1) Site name or number, contact person, mailing address, e-mail address, and telephone number for the surface disposal site; and ( )
- (2) Total dry metric tons from the applicant's facility per three hundred sixty-five (365)-day period placed on the surface disposal site; ( )
- iii.** The following information for each active sewage sludge unit at each surface disposal site that the applicant owns or operates: ( )
- (1) Name or number and location of the active sewage sludge unit; ( )
- (2) Latitude and longitude to the nearest second (or equivalent), and method of determination; ( )
- (3) If not already provided, a topographic map (or other map if a topographic map is unavailable) that shows the unit's location; ( )
- (4) Total dry metric tons placed on the active sewage sludge unit per three hundred sixty-five (365)-day period; ( )
- (5) Total dry metric tons placed on the active sewage sludge unit over the life of the unit; ( )
- (6) Description of the liner for the active sewage sludge unit, including whether it has a maximum permeability of  $1 \times 10^{-7}$  cm/sec; ( )
- (7) Description of a leachate collection system for the active sewage sludge unit, including the method used for leachate disposal, and federal, state, and local permit number(s) for leachate disposal; ( )
- (8) If the active sewage sludge unit is less than one hundred fifty (150) meters from the property line of the surface disposal site, the actual distance from the unit boundary to the site property line; ( )
- (9) Remaining capacity (dry metric tons) for the active sewage sludge unit; ( )
- (10) Date on which the active sewage sludge unit is expected to close, if a date has been identified; ( )
- (11) The following information for other facilities that sends sewage sludge to the active sewage sludge unit: ( )

- (a) Name, contact person, and mailing address of the facility; and ( )
- (b) Information about the quality of the sewage sludge received from the facility, including any treatment at the facility to reduce pathogens or vector attraction characteristics; ( )
- (12) Whether the vector attraction reduction options of 40 CFR 503.33(b)(9) through (b)(11) are met at the active sewage sludge unit, and a description of procedures employed at the time of disposal to reduce vector attraction properties in sewage sludge; ( )
- (13) The following information, as applicable to ground water monitoring occurring at the active sewage sludge unit: ( )
- (a) Description of ground water monitoring occurring at the active sewage sludge unit; ( )
- (b) Ground water monitoring data describing the well locations and approximate depth to ground water; ( )
- (c) Copy of a ground water monitoring plan prepared for the active sewage sludge unit; and ( )
- (d) Copy of a certification obtained from a qualified ground water scientist that the aquifer has not been contaminated; and ( )
- (14) If site-specific pollutant limits are sought for the sewage sludge placed on this active sewage sludge unit, information to support the request. ( )
- k.** If sewage sludge from the applicant's facility is fired in a sewage sludge incinerator, the applicant must provide: ( )
- i. Total dry metric tons of sewage sludge from the applicant's facility that is fired in sewage sludge incinerators per three hundred sixty-five (365)-day period; ( )
- ii. The following information for each sewage sludge incinerator firing the applicant's sewage sludge that the applicant does not own or operate: ( )
- (1) Name or number, contact person, mailing address, e-mail address, and telephone number of the sewage sludge incinerator; and ( )
- (2) Total dry metric tons from the applicant's facility per three hundred sixty-five (365)-day period fired in the sewage sludge incinerator; ( )
- iii. The following information for each sewage sludge incinerator that the applicant owns or operates: ( )
- (1) Name or number and the location of the sewage sludge incinerator; ( )
- (2) Latitude and longitude to the nearest second (or equivalent), and method of determination; ( )
- (3) Total dry metric tons per three hundred sixty-five (365)-day period fired in the sewage sludge incinerator; ( )
- (4) Information, test data, and documentation of ongoing operating parameters indicating that compliance with the National Emission Standard for Beryllium in 40 CFR Part 61 will be achieved; ( )
- (5) Information, test data, and documentation of ongoing operating parameters indicating that compliance with the National Emission Standard for Mercury in 40 CFR Part 61 will be achieved; ( )

- (6) Dispersion factor for the sewage sludge incinerator and modeling results and supporting documentation; ( )
- (7) Control efficiency for parameters regulated in 40 CFR 503.43, and performance test results and supporting documentation; ( )
- (8) Information used to calculate the risk specific concentration (RSC) for chromium, including the results of incinerator stack tests for hexavalent and total chromium concentrations, if the applicant is requesting a chromium limit based on a site-specific RSC value; ( )
- (9) Whether the applicant monitors total hydrocarbons (THC) or carbon monoxide (CO) in the exit gas for the sewage sludge incinerator; ( )
- (10) Type of sewage sludge incinerator; ( )
- (11) Maximum performance test combustion temperature, obtained during the performance test of the sewage sludge incinerator to determine pollutant control efficiencies; ( )
- (12) The following information on the sewage sludge feed rate used during the performance test: ( )
- (a) Sewage sludge feed rate in dry metric tons per day; ( )
- (b) Identify whether the feed rate submitted is average use or maximum design; and ( )
- (c) Describe how the feed rate was calculated; ( )
- (13) Incinerator stack height in meters for each stack and identify whether actual or creditable stack height was used; ( )
- (14) Operating parameters for the sewage sludge incinerator air pollution control device obtained during the performance test of the sewage sludge incinerator to determine pollutant control efficiencies; ( )
- (15) Identify the monitoring equipment in place including, but not limited to, equipment to monitor: ( )
- (a) Total hydrocarbons or carbon monoxide; ( )
- (b) Percent oxygen; ( )
- (c) Percent moisture; and ( )
- (d) Combustion temperature; and ( )
- (16) List of air pollution control equipment used with this sewage sludge incinerator. ( )
- I.** If sewage sludge from the applicant's facility is sent to a municipal solid waste landfill (MSWLF), the applicant must provide the following information for each MSWLF: ( )
- i. Name, contact person, mailing address, e-mail address location, and MSWLF permit numbers; ( )
- ii. Total dry metric tons per three hundred sixty-five (365)-day period sent from this facility to the MSWLF; ( )
- iii. Determination of whether the sewage sludge meets the requirements for MSWLF disposal of sewage sludge, including the results of the paint filter liquids test and additional requirements that apply on a site-

- specific basis; and ( )
- iv. Information, if known, indicating whether the MSWLF complies with criteria in 40 CFR Part 258. ( )
  - m. Name, mailing address, e-mail address, telephone number, and responsibilities of contractors that operate or maintain a facility related to sewage sludge generation, treatment, use, or disposal. ( )
  - n. At the request of the Department, the applicant must provide information necessary to determine the appropriate standards for permitting under 40 CFR Part 503 and to assess the sewage sludge use and disposal practices, determine whether to issue a permit, or identify appropriate permit requirements. ( )
  - o. TWTDS facilities using or disposing of sewage sludge where a standard applicable to its sewage sludge use or disposal practices has been published must submit the following information on EPA Form 2S, Part I equivalent form: ( )
    - i. TWTDS's name, mailing address, location, and status as federal, state, private, public, or other entity; ( )
    - ii. Applicant's name, address, e-mail address, telephone number, and ownership status; ( )
    - iii. Description of the sewage sludge use or disposal practices. Unless the sewage sludge meets the requirements of Subsection 105.17.h.iv., the description must include the name and address of facilities where sewage sludge is sent for treatment or disposal, and the locations of land application sites; ( )
    - iv. Annual amount of sewage sludge generated, treated, used or disposed (estimated dry weight basis); and ( )
    - v. Most recent data the TWTDS may have on the quality of the sewage sludge. ( )

**18. Application Requirements for Municipal Separate Storm Sewer (MS4) Discharges.** The operator of a discharge from a large or medium MS4 or an MS4 designated by the Department under 40 CFR 122.26(a)(1)(v) may submit a jurisdiction-wide or system-wide permit application. Where more than one (1) public entity owns or operates an MS4 within a geographic area (including adjacent or interconnected MS4s), an operator may be co-applicant to the same application. Permit applications for discharges from large and medium MS4s or MS4s designated under 40 CFR 122.26 (a)(1)(v) must include: ( )

- a. In Part 1 of the application: ( )
  - i. Applicant's name, address, e-mail address, telephone number of contact person, ownership status and status as a state or local government entity; ( )
  - ii. Description of existing legal authority to control discharges to the MS4. When existing legal authority is not sufficient to meet the criteria provided in Subsection 105.18.b.i., the description must list additional authorities and include a schedule and commitment to seek the additional authority that will be needed to meet the criteria; ( )
  - iii. Description of the historic use of ordinances, guidance or other controls that limited the discharge of non-storm water discharges to a POTW serving the same area as the MS4, including: ( )
    - (1) USGS seven point five (7.5) minute topographic map (or equivalent topographic map with a scale between one to ten thousand [1:10,000] and one to twenty-four thousand [1:24,000] if cost effective) extending one (1) mile beyond the service boundaries of the MS4 covered by the permit application; ( )
    - (2) Location of known MS4 outfalls discharging to waters of the United States; ( )
    - (3) Description of the land use activities (divisions indicating undeveloped, residential, commercial,

agricultural, and industrial uses) accompanied with estimates of population densities and projected growth for a ten (10) year period within the drainage area served by the MS4 and an estimate of an average runoff coefficient for each land use type; ( )

(4) Location and description of the activities of each currently operating or closed municipal landfill or other treatment, storage, or disposal facility for municipal waste; ( )

(5) Location and permit number of known discharges to the MS4 that have been issued a NPDES or IPDES permit; ( )

(6) Location of major structural controls for storm water discharge (retention basins, detention basins, and major infiltration devices); and ( )

(7) Identification of publicly owned parks, recreational areas, and other open lands. ( )

iv. Description of the discharge including: ( )

(1) Monthly mean rain and snow fall estimates (or summary of weather bureau data) and the monthly average number of storm events; ( )

(2) Existing quantitative data describing the volume and quality of discharges from the MS4, including a description of the outfalls sampled, sampling procedures and analytical methods used; ( )

(3) List of water bodies that receive discharges from the MS4, including downstream segments, lakes, and estuaries where pollutants from the system discharges may accumulate and cause water degradation, and a description of known water quality impacts. At a minimum, the description of impacts must include whether the water bodies receiving the discharges have been: ( )

(a) Assessed for CWA Section 305(b) reports submitted by the Department, the basis for the assessment (evaluated or monitored), a summary of designated use support and attainment of CWA goals (fishable and swimmable waters), and causes of nonsupport of designated uses; ( )

(b) Listed under CWA Section 304(l)(1)(A)(i), 304(l)(1)(A)(ii), or 304(l)(1)(B) that is not expected to meet water quality standards or water quality goals; ( )

(c) Listed in state Nonpoint Source Assessments required by CWA Section 319(a), without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain water quality standards due to storm sewers, construction, highway maintenance, and runoff from municipal landfills and municipal sludge adding significant pollution (or contributing to a violation of water quality standards); ( )

(d) Identified and classified according to eutrophic condition of publicly owned lakes listed in state reports required under CWA Section 314(a) ( including a description of those publicly owned lakes for which uses are known to be impaired, description of procedures, processes and methods to control the discharge of pollutants from MS4s into lakes, and description of methods and procedures to restore the lakes' quality); ( )

(e) Recognized by the applicant as highly valued or sensitive waters; ( )

(f) Defined by the state as wetlands; and ( )

(g) Found to have pollutants in bottom sediments, fish tissue, or biosurvey data. ( )

(4) Results of a field screening analysis for illicit connections and illegal dumping for either selected field screening points or major outfalls covered in the permit application. At a minimum, a screening analysis includes a narrative description, for either each field screening point or major outfall, of visual observations made during dry weather periods. If flow is observed, two (2) grab samples will be collected during a twenty-four (24)-hour period with at least four (4) hours between samples. For the samples, a narrative description of the color, odor, turbidity, presence of an oil sheen or surface scum and other relevant observations about the potential presence of

non-storm water discharges or illegal dumping must be provided. In addition, a narrative description of the results of a field analysis using suitable methods to estimate pH, total chlorine, total copper, total phenol, and detergents (or surfactants) must be provided with a description of the flow rate. Where the field analysis does not involve analytical methods approved under 40 CFR Part 136, the applicant must provide a description of the method used including the name of the manufacturer of the test method with the range and accuracy of the test. Field screening points are either major outfalls or other outfall points (or another point of access such as manholes) randomly located throughout the storm sewer system by placing a grid over a drainage system map and identifying those cells of the grid that contain a segment of the storm sewer system or major outfall. The field screening points are established using the following guidelines and criteria: ( )

(a) Overlay a grid system consisting of perpendicular north-south and east-west lines spaced one-quarter (1/4) mile apart on a map of the MS4, creating a series of cells; ( )

(b) Identify cells that contain a segment of the MS4; select one (1) field screening point in each cell; major outfalls may be used as field screening points; ( )

(c) Locate field screening points downstream of sources of suspected illegal or illicit activity; ( )

(d) Locate field screening points to the degree practicable at the farthest manhole or other accessible location downstream in the system, within each cell; however, consider the safety of personnel and accessibility of the location in making this determination; ( )

(e) Hydrologic conditions, total drainage area of the site, population density of the site, traffic density, age of the structures or buildings in the area, history of the area, and land use types; ( )

(f) For medium MS4s, no more than two hundred fifty (250) cells need to have identified field screening points; in large MS4s, no more than five hundred (500) cells need to have identified field screening points; cells established by the grid that contain no storm sewer segments will be eliminated from consideration; if fewer than two hundred fifty (250) cells in medium municipal sewers are created, and fewer than 500 in large systems are created by the overlay on the municipal sewer map, then those cells that contain a segment of the sewer system are subject to field screening (unless access to the separate storm sewer system is impossible); and ( )

(g) Large or medium MS4s that are unable to utilize the procedures described in Subsection 105.18.a.iv.(4)(a) through (f), because a sufficiently detailed map of the separate storm sewer systems is unavailable, must field screen no more than five hundred (500) or two hundred fifty (250) major outfalls respectively (or major outfalls in the system, if less). In these circumstances, the applicant must establish a grid system consisting of north-south and east-west lines spaced one-quarter (1/4) mile apart as an overlay to the boundaries of the MS4, thereby creating a series of cells. The applicant will select major outfalls in as many cells as possible until at least five hundred (500) major outfalls (large municipalities) or two hundred fifty (250) major outfalls (medium municipalities) are selected; a field screening analysis must occur at these major outfalls; and ( )

(5) Information and a proposed program to meet the requirements of Subsection 105.18.b.iii., including at least: the location of outfalls or field screening points appropriate for representative data collection under Subsection 105.18.b.iii.(1), a description of why the outfall or field screening point is representative, the seasons when sampling is intended, and a description of the sampling equipment. The proposed sampling locations of outfalls or field screening points must reflect water quality concerns (Subsection 105.18.a.iv(3)); ( )

v. Description of the existing management programs to control pollutants from the MS4 including existing source controls and operation and maintenance measures for structural controls that are currently implemented. The controls may include, but are not limited to: procedures to control pollution resulting from construction activities; floodplain management controls; wetland protection measures; BMPs for new subdivisions; and emergency spill response programs. The description may address controls established under state law and local requirements; ( )

vi. Description of the existing program to identify illicit connections to the MS4 that includes inspection procedures and methods for detecting and preventing illicit discharges and describes areas where this program has been implemented; and ( )



vii. Description of the financial resources currently available to the municipality to complete part 2 of the permit application. A description of the municipality's budget for existing storm water programs, including an overview of the municipality's financial resources and budget, including overall indebtedness and assets, and sources of funds for storm water programs. ( )

**b.** In Part 2 of the application: ( )

i. Demonstrate the applicant can operate under legal authority established by statute, ordinance, or series of contracts that authorizes or enables the applicant at a minimum to: ( )

(1) Control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the MS4 by storm water discharges associated with industrial activity and the quality of storm water discharged from sites of industrial activity; ( )

(2) Prohibit through ordinance, order or similar means, illicit discharges to the MS4; ( )

(3) Control through ordinance, order or similar means the discharge to an MS4 of spills, dumping or disposal of materials other than storm water; ( )

(4) Control through interagency agreements among co-applicants the contribution of pollutants from a portion of the municipal system to another portion of the municipal system; ( )

(5) Require compliance with conditions in ordinances, permits, contracts or orders; and ( )

(6) Complete inspection, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including prohibiting illicit discharges to the MS4. ( )

ii. Location of major outfall discharges to waters of the United States that were not reported under Subsection 105.18.a.iii(2). Provide an inventory, organized by watershed, of the name, address, and a description (Standard Industrial Classification [SIC] codes) that best reflects the principal products or services provided by each facility that may discharge, to the MS4, and the storm water associated with industrial activity; ( )

iii. When quantitative data for a pollutant are required under Subsection 105.18.b.iii(1)(c), the applicant must collect a sample of effluent in accordance with Subsection 105.07.c. through 105.07.m. and analyze it for the pollutant following the analytical methods approved under 40 CFR Part 136. When no analytical method is approved, the applicant may use a suitable method but must provide a description of the method. The applicant must provide information characterizing the quality and quantity of discharges covered in the permit application, including: ( )

(1) Quantitative data from representative outfalls designated by the Department and developed as follows (based on information received in part 1 of the application. The Department will designate between five (5) and ten (10) outfalls or field screening points as representative of the commercial, residential and industrial land use activities of the drainage area contributing to the system or, where there are less than five (5) outfalls covered in the application, the Department will designate all outfalls): ( )

(a) For each outfall or field screening point designated under this subsection, samples must be collected of storm water discharges from three (3) storm events occurring at least one (1) month apart in accordance with Subsection 105.07.c. through 105.07.m. (the Department may allow exemptions to sampling three (3) storm events when climatic conditions create good cause for the exemptions); ( )

(b) A narrative description must be provided of the date and duration of the storm event sampled, rainfall estimates of the storm event that generated the sampled discharge and the duration between the storm event sampled and the end of the previous measurable (greater than one-tenth [0.1] inch rainfall) storm event; ( )

(c) For samples collected and described under Subsections 105.18.b.iii(1)(a) and (b), quantitative data will be provided for the organic pollutants listed in Table II and the pollutants listed in Table III (toxic metals,

cyanide, and total phenols) of 40 CFR Part 122, Appendix D, and for the following pollutants: ( )

- (i) Total suspended solids (TSS); ( )
- (ii) Total dissolved solids (TDS); ( )
- (iii) Chemical oxygen demand (COD); ( )
- (iv) Five (5)-day biochemical oxygen demand (BOD5); ( )
- (v) Oil and grease; ( )
- (vi) Fecal coliform (including *E. coli*); ( )
- (vii) Enterococci (previously known as fecal streptococcus); ( )
- (viii) pH; ( )
- (ix) Total Kjeldahl nitrogen; ( )
- (x) Nitrate plus nitrite; ( )
- (xi) Total ammonia plus organic nitrogen; ( )
- (xii) Dissolved phosphorus; and ( )
- (xiii) Total phosphorus; ( )

(d) Additional quantitative data required by the Department for determining permit conditions (the Department may require that quantitative data be provided for additional parameters, and may establish sampling conditions such as the location, season of sample collection, form of precipitation (snow melt, rainfall) and other parameters necessary to ensure representativeness); ( )

(2) Estimates of the annual pollutant load of the cumulative discharges to waters of the United States from identified municipal outfalls and the event mean concentration of the cumulative discharges to waters of the United States from identified municipal outfalls during a storm event for BOD5, COD, TSS, dissolved solids, total nitrogen, total ammonia plus organic nitrogen, total phosphorus, dissolved phosphorus, cadmium, copper, lead, and zinc. Estimates must be accompanied by a description of the procedures for estimating constituent loads and concentrations, including modelling, data analysis, and calculation methods; ( )

(3) A proposed schedule to provide estimates for each major outfall identified in Subsection 105.18.b.ii. or 105.18.a.iii(2) of the seasonal pollutant load and of the event mean concentration of a representative storm for constituents detected in samples required under Subsection 105.18.b.iii(1); and ( )

(4) A proposed monitoring program for representative data collection for the term of the permit that describes the location of outfalls or field screening points to be sampled (or the location of instream stations), why the location is representative, the frequency of sampling, parameters to be sampled, and a description of sampling equipment; ( )

iv. A proposed management program covering the duration of the permit, that includes a comprehensive planning process with public participation and where necessary intergovernmental coordination, to reduce the discharge of pollutants to the maximum extent practicable using management practices, control techniques and system, design and engineering methods, and other appropriate provisions. The program must also include a description of staff and equipment available to implement the program. Separate proposed programs may be submitted by each co-applicant. Proposed programs may impose controls on a system wide basis, a watershed basis, a jurisdiction basis, or on individual outfalls. Proposed programs will be considered by the Department when developing permit conditions to reduce pollutants in discharges to the maximum extent practicable. Proposed

management programs must describe priorities for implementing controls: ( )

(1) A description of structural and source control measures, implemented during the life of the permit, to reduce pollutants in runoff from commercial and residential areas that are discharged from the MS4 with an estimate of the expected reduction of pollutant loads, and a proposed schedule for implementing the controls. At a minimum, the description must include: ( )

(a) Maintenance activities and a schedule for structural controls to reduce pollutants (including floatables) in discharges from MS4s; ( )

(b) Planning procedures including a comprehensive master plan to develop, implement, and enforce controls to reduce the discharge of pollutants from MS4s that receive discharges from areas of new development and significant redevelopment. The plan must address controls to reduce pollutants in discharges from MS4s after construction is completed (controls to reduce pollutants in discharges MS4s containing construction site runoff are addressed in Subsection 105.18.b.iv(4)); ( )

(c) Practices for operating and maintaining public streets, roads, and highways and procedures for reducing the impact on receiving waters of discharges from MS4s, including pollutants discharged from deicing activities; ( )

(d) Procedures to ensure flood management projects assess the impacts on the water quality of receiving water bodies and existing structural flood control devices have been evaluated to determine if retrofitting the device to provide additional pollutant removal from storm water is feasible; ( )

(e) Program to monitor pollutants in runoff from operating or closed municipal landfills or other treatment, storage, or disposal facilities for municipal waste that identifies priorities and procedures for inspections and establishes control measures for the discharges (this program can be coordinated with the program developed under Subsection 105.18.b.iv(3)); and ( )

(f) Program to reduce, to the maximum extent practicable, pollutants in discharges from MS4s from pesticides, herbicides, and fertilizer application, including controls such as educational activities, permits, certifications, and other measures for commercial applicators and distributors, and for public right-of-ways and municipal facilities; ( )

(2) Program, including a schedule, to detect and remove (or require the discharger to the MS4 to obtain a separate IPDES permit for) illicit discharges and improper disposal into the storm sewer, including: ( )

(a) Program, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the MS4. This program description must address all illicit discharges; however, the following categories of non-storm water discharges or flows must be addressed where discharges are identified by the municipality as sources of pollutants to waters of the United States: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (defined in Section 010) to separate storm sewers, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (program descriptions must address discharges or flows from firefighting only where the discharges or flows are identified as significant sources of pollutants to waters of the United States); ( )

(b) Procedures to conduct on-going field screening activities during the life of the permit, including areas or locations that will be evaluated by the field screens; ( )

(c) Procedures to investigate portions of the MS4 that, based on the results of the field screen, or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of non-storm water (procedures may include: sampling procedures for constituents such as fecal coliform (including *E. coli*), enterococci (previously known as fecal streptococcus), surfactants (methylene blue active substance [MBAS]), residual chlorine, fluorides and potassium; testing with fluorometric dyes; or conducting storm sewer inspections

where safety and other considerations allow. Such description must include the location of storm sewers identified for evaluation); ( )

(d) Procedures to prevent, contain, and respond to spills that may discharge into the MS4; ( )

(e) Program to promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from MS4s; ( )

(f) Description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials; and ( )

(g) Description of controls to limit infiltration of seepage from municipal sanitary sewers to MS4s where necessary; ( )

(3) Description of a program to monitor and control pollutants in storm water discharges to municipal systems from municipal landfills, hazardous waste treatment, disposal and recovery facilities, industrial facilities that are subject to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), and industrial facilities that the municipal permit applicant determines are contributing a substantial pollutant loading to the MS4. The program must: ( )

(a) Identify priorities and procedures for inspections and establish and implement control measures for the discharges; and ( )

(b) Describe a monitoring program for storm water discharges from industrial facilities identified in Subsection 105.18.b.iv(3), implemented during the term of the permit, including submitting quantitative data on the following constituents: pollutants limited in ELGs subcategories, where applicable; pollutant listed in an existing NPDES or IPDES permit for a facility; oil and grease, COD, pH, BOD5, TSS, total phosphorus, total Kjeldahl nitrogen, nitrate plus nitrite nitrogen, and information on discharges required under Subsections 105.07.j. through l.; ( )

(4) Description of a program to implement and maintain structural and non-structural BMPs to reduce pollutants in storm water runoff from construction sites to the MS4 that includes: ( )

(a) Procedures for site planning that considers potential water quality impacts; ( )

(b) Requirements for nonstructural and structural BMPs; ( )

(c) Procedures for identifying priorities for site inspections and enforcing control measures that consider the nature of the construction activity, topography, and characteristics of soils and receiving water quality; and ( )

(d) Educational and training measures for construction site operators; ( )

v. Estimated reductions in pollutant loadings from the constituents discharged from MS4s as the result of the municipal storm water quality management program. The assessment must also identify known impacts of storm water controls on ground water; ( )

vi. For each fiscal year to be covered by the permit, a fiscal analysis of the necessary capital and operation and maintenance expenditures necessary to accomplish the activities of the programs under Subsections 105.18.b.iii. and iv. The analysis must describe the source of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of the funds; ( )

vii. When more than one (1) legal entity submits an application, the application must describe the roles and responsibilities of each legal entity and procedures to ensure effective coordination; and ( )

viii. Where requirements under Subsections 105.18.a.iv.(5), 105.18.b.ii., 105.18.b.iii.(2), and 105.18.b.iv. are not practicable or applicable, the Department may exclude an operator of a discharge from an MS4

designated under 40 CFR 122.26(a)(1)(v), (b)(4)(ii) or (b)(7)(ii) from the requirements. The Department may not exclude the operator of a discharge from an MS4 identified in 40 CFR Part 122, Appendix F, G, H or I, from the permit application requirements under this subsection except where authorized under this section. ( )

**19. Application Requirements for Industrial and Construction Storm Water Discharges.**  
Application requirements for storm water discharges associated with industrial activity and storm water discharges associated with small construction activity. ( )

**a.** Dischargers of storm water associated with industrial activity and small construction activity must apply for an individual permit or seek coverage under a storm water general permit. Facilities required to obtain an individual permit or a discharge of storm water that the Department is evaluating for designation (Section 130) under 40 CFR 122.26(a)(1)(v) and is not an MS4, must submit an IPDES application following the requirements of Section 105. ( )

**b.** Except as provided in Subsections 105.19.c. through e., the operator of a storm water discharge associated with industrial activity subject to this section must provide: ( )

**i.** Site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) of the facility including: ( )

(1) Each of its drainage and discharge structures; ( )

(2) Drainage area of each storm water outfall; ( )

(3) Paved areas and buildings within the drainage area of each storm water outfall, each past or present area used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners, and fertilizers are applied, each of its hazardous waste treatment, storage, or disposal facilities (including each area not required to have a Resource Conservation and Recovery Act permit for accumulating hazardous waste under 40 CFR 262.34); ( )

(4) Each well where fluids from the facility are injected underground; and ( )

(5) Springs, and other surface water bodies receiving storm water discharges from the facility; ( )

**ii.** An estimate of the area of impervious surfaces (including paved areas and building roofs) and the total area drained by each outfall (within a mile radius of the facility) and a narrative description of the following: ( )

(1) Significant materials that in the three (3) years before the submittal of this application have been treated, stored, or disposed in a manner to allow exposure to storm water; ( )

(2) Method of treatment, storage, or disposal of materials; materials management practices employed, in the three (3) years before the submittal of this application, to minimize contact by these materials with storm water runoff; ( )

(3) Materials loading and access areas; ( )

(4) Location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied; ( )

(5) Location and a description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and ( )

(6) Description of the treatment the storm water receives, including the ultimate disposal of any solid or fluid wastes other than by discharge; ( )

iii. Certification that outfalls containing storm water discharges associated with industrial activity have been tested or evaluated for the presence of non-storm water discharges not covered by an IPDES permit, including a description of the method used, the date of testing, and the on-site drainage points that were directly observed during a test. Tests for non-storm water discharges may include smoke tests, fluorometric dye tests, and analysis of accurate schematics; ( )

iv. Existing information about significant leaks or spills of toxic or hazardous pollutants at the facility that have taken place within the three (3) years before application submittal; ( )

v. Quantitative data based on samples collected during storm events and collected in accordance with Subsection 105.07 from outfalls containing a storm water discharge associated with industrial activity for: ( )

(1) Pollutants limited in an ELG to which the facility is subject; ( )

(2) Pollutants listed in the facility's NPDES or IPDES permit for its process wastewater (if the facility is operating under an existing NPDES or IPDES permit); ( )

(3) Oil and grease, pH, BOD5, COD, TSS, total phosphorus, total Kjeldahl nitrogen, and nitrate plus nitrite nitrogen; ( )

(4) Information on the discharge required under Subsections 105.07.j. through l.; ( )

(5) Flow measurements or estimates of the flow rate, and the total amount of discharge for the storm event sampled, and the method of flow measurement or estimation; and ( )

(6) Date and duration (in hours) of storm event sampled, rainfall measurements or estimates of the storm event (in inches) that generated the sampled runoff and the duration (in hours) between the storm event sampled and the end of the previous measurable (greater than one-tenth [0.1] inch rainfall) storm event; ( )

vi. Operators of a discharge composed entirely of storm water are exempt from the requirements of Subsections 105.07.b., 105.07.a.i.(2) through (5), 105.07.a.ii., 105.07.a.iii., 105.07.g., 105.07.h., 105.07.i., and 105.07.m.; and ( )

vii. Operators of new sources or new discharges (Section 010, Definitions) composed in part or entirely of storm water must include estimates for the pollutants or parameters listed in Subsection 105.19.b.v. instead of actual sampling data, along with the source of each estimate. Operators of new sources or new discharges composed in part or entirely of storm water must provide quantitative data for the parameters listed in Subsection 105.19.b.v. within two (2) years after discharge commences, unless the data has already been reported under the monitoring requirements of the IPDES permit for the discharge. Operators of a new source or new discharge composed entirely of storm water are exempt from the requirements of Subsections 105.16.a.iii.(2) and (3), and 105.16.b. ( )

c. Operator of an existing or new storm water discharge associated with industrial activity solely under 40 CFR 122.26(b)(14)(x) or associated with small construction activity solely under 40 CFR 122.26 (b)(15), is exempt from the requirements of Subsection 105.07 and Subsection 105.19.b. The operator must provide a narrative description of: ( )

i. Location (including a map) and the nature of the construction activity; ( )

ii. Total area of the site and the area of the site that is expected to undergo excavation during the life of the permit; ( )

iii. Proposed measures, including BMPs, to control pollutants in storm water discharges during construction, including a description of state and local erosion and sediment control requirements; ( )

iv. Proposed measures to control pollutants in storm water discharges that will occur after construction operations are completed, including a description of state or local erosion and sediment control requirements; ( )

v. Estimate of the runoff coefficient of the site and the increase in impervious area after the construction addressed in the permit application is completed, the nature of fill material and existing data describing the soil or the quality of the discharge; and ( )

vi. Name of the receiving water. ( )

**d.** Operator of an existing or new discharge composed entirely of storm water from an oil or gas exploration, production, processing, or treatment operation, or transmission facility is not required to submit a permit application under Subsection 105.19.b., unless the facility: ( )

i. Discharge of storm water occurred resulting in a reportable quantity for which notification is or was required under 40 CFR 117.21 or 40 CFR 302.6 at any time since November 16, 1987; or ( )

ii. Discharge of storm water occurred resulting in a reportable quantity for which notification is or was required under 40 CFR 110.6 at any time since November 16, 1987; or ( )

iii. Contributes to a violation of a water quality standard. ( )

**e.** Operator of an existing or new discharge composed entirely of storm water from a mining operation is not required to submit a permit application unless the discharge was in contact with, overburden, raw material, intermediate products, finished product, byproduct, or waste products located on the site. ( )

**f.** Applicants must provide information the Department may require under Subsection 105.07.o. to determine whether to issue a permit and may require facilities subject to Subsection 105.19.c. to comply with Subsection 105.19.b. ( )

**20. Requirements for Integrated Plans.** Integrated planning is a voluntary process for municipalities to identify efficiencies from separate wastewater and storm water programs to best prioritize capital investments and achieve human health and water quality objectives. ( )

**a.** The Department may incorporate integrated plans into IPDES permits, compliance agreement schedules, consent orders, and compliance schedule orders. ( )

**b.** Integrated plans considered by the Department should contain: ( )

i. A description of the water quality, human health, and regulatory issues to be addressed in the plan; ( )

ii. A description of the existing wastewater and storm water systems under consideration and a summary of information describing the systems' current performance; ( )

iii. A communications plan describing how community stakeholders are given consideration in the planning and implementation of the plan; ( )

iv. A process for identifying, evaluating, and selecting alternatives and proposing implementation schedules; ( )

v. A process for evaluating the performance of projects identified in the plan; and ( )

vi. A process for identifying, evaluating, and selecting proposed new projects or modifications to ongoing or planned projects based on changed circumstances. ( )

**106. INDIVIDUAL PERMIT APPLICATION REVIEW.**

**01. Completeness Criteria.** The Department will not process or issue an individual IPDES permit application before receiving a complete application. The application form and supplemental information are complete when submitted to the Department's satisfaction. The Department will not consider a permit application to be

complete until applicable fees required under Section 110 are paid. ( )

**02. Sufficiently Sensitive Methods.** Except as specified in Subsection 106.02.c., a permit application will not be considered complete unless all required quantitative data are collected following sufficiently sensitive analytical methods approved under 40 CFR Part 136 or required under 40 CFR Parts 400 through 471 and 501 through 503. ( )

**a.** A method approved under 40 CFR Part 136 or required under 40 CFR Parts 400 through 471 and 501 through 503 is “sufficiently sensitive” when: ( )

**i.** The method minimum level (ML) is at or below the level of the water quality criterion for the measured pollutant or pollutant parameter; or ( )

**ii.** The method ML is above the water quality criterion, but the amount of the pollutant or pollutant parameter in a facility’s discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or ( )

**iii.** The method has the lowest ML of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR Parts 400 through 471 and 501 through 503 for the measured pollutant or pollutant parameter. ( )

**b.** For Subsection 106.02.a., consistent with 40 CFR Part 136, applicants may opt to provide matrix- or sample- specific MLs rather than the published levels. When an applicant can demonstrate, despite a good faith effort to use a method that meets the definition of “sufficiently sensitive,” the analytical results are not consistent with the QA/QC specifications for that method, then the Department may determine the method is not performing adequately and the applicant will select a different method from the remaining EPA-approved methods that is sufficiently sensitive consistent with Subsection 106.02.a. When no other EPA-approved methods exist, the applicant will select a method consistent with Subsection 106.02.c. ( )

**c.** When there is no analytical method approved under 40 CFR Part 136, required under 40 CFR Parts 400 through 471 and 501 through 503, and is not otherwise required by the Department, the applicant may use any suitable method but must describe the method. When selecting a suitable method, other factors such as a method’s precision, accuracy, or resolution, may be considered when assessing the performance of the method. ( )

**03. Independence.** The Department will judge the completeness of an IPDES permit application independently of other permit application or permit. ( )

**04. Schedule.** The Department will notify an applicant in writing whether the application is complete within: ( )

**a.** Thirty (30) days if the application is for a new source or new discharger under the IPDES program, or ( )

**b.** Sixty (60) days if the application is for an existing source or sludge-only facility. ( )

**05. Additional Information.** Notification that an application is complete does not preclude the Department from requiring the applicant submit additional information for the Department’s use in processing the application. This additional information may only be requested when necessary to clarify, modify, or supplement previously submitted material. ( )

**a.** Requests for additional information will not render an application incomplete. ( )

**b.** While processing the application, if the Department decides a site visit is necessary, the Department will notify the applicant and schedule a date. Failure to schedule or refusal of a requested site visit are grounds for permit denial. ( )

**c.** The applicant’s failure or refusal to correct deficiencies, or supply requested information may result



in permit denial, and appropriate enforcement actions may be initiated, if warranted. ( )

**06. Incomplete Due to Waiver Denial.** The Department will not consider a permit application complete if the Department waived application requirements under Subsection 105.11 or 105.17 and the EPA has disapproved the waiver. ( )

**07. Impact of Waiver Delay.** If a person required to reapply for a permit submits a waiver request to the Department more than two hundred ten (210) days before an existing permit expires, and the EPA does not disapprove the waiver request one hundred eighty-one (181) days before the permit expires, the Department will consider the permit application complete without the information subject to the waiver request. ( )

**08. Application Completeness Date.** The application is complete when the Department notifies the applicant. ( )

**107. DECISION PROCESS.**

After the Department has determined a permit application is complete, the Department will decide whether to tentatively deny the application, or prepare an IPDES draft permit. ( )

**01. Application Denial.** If the Department decides to tentatively deny the application: ( )

**a.** A notice of intent to deny the permit application will be issued. A notice of intent to deny the permit application follows the same procedures as a draft permit and will be made available for public comment. The Department will give notice of opportunity for a public meeting, as specified in Section 109; ( )

**b.** The Department will generate a response to public comment; and ( )

**c.** Issue a final decision that may: ( )

**i.** Withdraw the notice of intent to deny the application, and proceed to prepare a draft permit and fact sheet as defined in Section 108; or ( )

**ii.** Confirm the decision to deny the application. ( )

**d.** The applicant may appeal the final decision to deny the application by adhering to the requirements of Section 204. ( )

**02. Draft Permit.** If the Department decides to generate a draft permit and fact sheet, it will comply with Section 108. ( )

**a.** Upon completion of the draft permit and fact sheet, the Department will issue a public notification as required in Subsection 109.01. ( )

**b.** An opportunity for the public to comment and request a public meeting will be provided. ( )

**c.** The Department will generate a response to public comment as stipulated in Subsection 109.03. ( )

**03. Proposed Permit.** After the close of the public comment period on a draft permit, the Department will make appropriate changes in response to comments and generate a proposed permit and fact sheet. ( )

**04. Final Permit.** After the public comment period closes on a draft permit, and after receiving comments on the proposed permit from EPA, the Department will issue a final permit decision and fact sheet. The final permit decision will issue, deny, modify, revoke and reissue, or terminate a permit. ( )

**a.** The Department will notify the applicant and each person who has submitted written comments or requested notice of the final permit decision. ( )

- b.** A final permit decision shall become effective twenty-eight (28) days after the service of notice of the decision unless: ( )
  - i. A later effective date is specified in the decision; or ( )
  - ii. A Petition for Review is filed with the Department as specified in Section 204. ( )

**108. DRAFT PERMIT AND FACT SHEET.**

**01. Draft Permit. ( )**

- a.** If the Department decides to prepare a draft permit, it will contain: ( )
  - i. Conditions established under Section 300; ( )
  - ii. Conditions for specific categories established under Section 301 and 40 CFR 122.42(e); ( )
  - iii. Conditions established under Section 302; ( )
  - iv. Conditions established under Section 303; ( )
  - v. Monitoring requirements established under Section 304; ( )
  - vi. Schedules of compliance established under Section 305; and ( )
  - vii. Approved variances. ( )
- b.** General and individual proposed permits will be available to the EPA Region 10 Administrator for comment as specified in Subsections 107.03 (Proposed Permit) and 107.04 (Final Permit). ( )

**02. Fact Sheets. ( )**

- a.** A fact sheet containing the information required in Subsection 108.02.b. must accompany the draft permit prepared for: ( )
  - i. Major IPDES facility or activity; ( )
  - ii. Class I sludge management facility; ( )
  - iii. IPDES general permit; ( )
  - iv. Permit that incorporates a variance or requires an explanation under Subsection 108.02.b.ix. through 108.02.b.x.; ( )
  - v. Permit that includes a sewage sludge land application plan under 40 CFR 501.15(a)(2)(ix); and ( )
  - vi. Permit that the Department finds is the subject of wide-spread public interest or raises major issues. ( )
- b.** A fact sheet must describe the principal facts and significant factual, legal, methodological, and policy questions considered in preparing the draft permit and must include, if applicable: ( )
  - i. Brief description of the type of facility or activity that is the subject of the draft permit; ( )
  - ii. Type and quantity of wastes, fluids, or pollutants that are proposed to be or are being treated, stored, disposed of, injected, emitted, or discharged; ( )

- iii. Summary of the basis for the draft permit conditions, including references to applicable statutes or regulations and appropriate supporting references to the administrative record; ( )
- iv. Reasons for the Department’s tentative decision on requested variances or alternatives to required standards; ( )
- v. Description of the procedures for reaching a final decision on the draft permit, including: ( )
  - (1) Beginning and ending dates of the comment period under Subsection 109.02 and the address where comments are submitted; ( )
  - (2) Procedure for requesting a public meeting and the nature of that meeting; and ( )
  - (3) Other procedures by which the public may participate in the final decision; ( )
- vi. Name and telephone number of a person to contact for additional information; ( )
- vii. Justification for waiver of application requirements under Section 105 for new and existing POTWs; ( )
- viii. Calculations or other explanations of the derivation of specific effluent limits and conditions, including a citation to the ELG or performance standard as required by Section 302, and reasons why the effluent limits and conditions apply, or an explanation of how an alternate effluent limit was developed; ( )
- ix. If applicable, an explanation of why the draft permit contains: ( )
  - (1) Limits to control toxic pollutants under Subsection 302.07; ( )
  - (2) Limits on internal waste streams under Section 304; ( )
  - (3) Limits on indicator pollutants under 40 CFR 125.3(g); ( )
  - (4) Limits established on a case-by-case basis under 40 CFR 125.3 (c)(2) or (c)(3) or CWA Section 405(d)(4); ( )
  - (5) Limit to meet the criteria for permit issuance under Subsection 103.07; or ( )
  - (6) Waivers from monitoring requirements granted under Subsection 302.03; ( )
- x. For a draft permit for a treatment works owned by a person other than a state or municipality, an explanation of the Department’s decision on regulation of users under Subsection 302.15; ( )
- xi. If appropriate, a sketch or description of the location of the discharge or regulated activity described in the application; and ( )
- xii. For permits that include a sewage sludge land application plan under 40 CFR 501.15(a)(2)(ix), a description of how each of the required elements of the land application plan are addressed in the permit. ( )

**109. PUBLIC NOTIFICATION AND COMMENT.**

- 01. Public Notification.** ( )
  - a.** The Department will give notice to the public that: ( )
    - i.** A draft permit has been prepared under Subsection 108.01; ( )

- ii. The Department intends to deny a permit application under Subsection 107.01; ( )
- iii. A public meeting is scheduled; or ( )
- iv. An IPDES new source determination has been made. ( )
- b.** A public notice may describe more than one (1) permit or permit action. ( )
- c.** The Department will allow at least thirty (30) days for public comment on the items in the notice, and provide at least thirty (30) days' notice before the public meeting. Notice of the draft permit and meeting may be combined and given at the same time. ( )
- d.** Public notice that a draft permit has been prepared and a public meeting on the draft permit will be given by: ( )
  - i. Mailing a copy of the notice to the following persons, unless person entitled to receive notice under this subsection waives the right to receive notice for any classes and categories of permits: ( )
    - (1) The applicant, unless there is no applicant for an IPDES general permit; ( )
    - (2) An agency (including EPA when the draft permit is prepared by the state) the Department knows has issued or is required to issue a permit for the same facility or activity under: ( )
      - (a) Resource Conservation and Recovery Act, under IDAPA 58.01.05, "Rules and Standards for Hazardous Waste"; ( )
      - (b) Underground Injection Control (UIC) Program under Idaho Department of Water Resources as authorized under Idaho Code Title 42 Chapter 39 and regulated under IDAPA 37.03.03, "Rules and Minimum Standards for the Construction and Use of Injection Wells"; ( )
      - (c) Clean Air Act, under IDAPA 58.01.01, "Rules for the Control of Air Pollution in Idaho"; ( )
      - (d) Idaho Pollutant Discharge Elimination System Program, under IDAPA 58.01.25, "Idaho Pollutant Discharge Elimination System Rules"; or ( )
      - (e) Sludge Management Program, under IDAPA 58.01.16.650, "Wastewater Rules"; and ( )
      - (f) Dredge and Fill Permit Program (CWA Section 404); ( )
    - (3) Affected federal and state agencies with jurisdiction over fish, shellfish, wildlife, and other natural resources, state historic preservation officers, and any affected Indian tribes; ( )
    - (4) State agency responsible for plan development under CWA Sections 208(b)(2), 208(b)(4), or 303(e), and the US Army Corps of Engineers, the US Fish and Wildlife Service, and National Marine Fisheries Service; ( )
    - (5) User identified in the permit application of a privately owned treatment works; ( )
    - (6) Persons on a mailing list developed by: ( )
      - (a) Recording those who request in writing to be on the list; ( )
      - (b) Soliciting persons for area lists from participants in past permit proceedings in that area; and ( )
    - (c) Publishing notice of the opportunity to be on the mailing list on the Department's website and through periodic publication in the local press and in regional and state-funded newsletters, environmental bulletins, ( )

state law journals, or similar publications. The Department may update the mailing list by requesting written indication of continued interest from those listed, and may delete from the list the name of a person who fails to respond to the Department's request; ( )

(7) A unit of local government with jurisdiction over the area where the facility is proposed to be located; and ( )

(8) Each state agency with authority under state law for construction or operation of the facility; ( )

ii. For a major facility permit, general permit, and permit that includes sewage sludge land application plans, by publishing a notice in a daily or weekly newspaper within the area affected by the facility or activity; and ( )

iii. By a method that provides notice of the action to persons potentially affected by it, including press releases or another forum or media to elicit public participation. For IPDES major permits and general permits, in lieu of the requirement for publication of a notice in a daily or weekly newspaper, the Department may publish all notices of activities described in Subsection 109.01.a. to the Department's website. If the Department selects this option for a draft permit, in addition to meeting the requirements in Subsection 109.01.e., the Department will post the draft permit and fact sheet on the website for the duration of the public comment period. The Department will ensure the methods of public notice effectively inform interested communities and allow access to the permitting process for those seeking to participate. ( )

e. A public notice issued under this subsection will contain at least: ( )

i. Name and address of the office processing the permit action for which notice is given and where comments may be submitted; ( )

ii. Name and address of the permittee or permit applicant and, if different, of the facility or activity regulated by the permit, except for IPDES draft general permits; ( )

iii. Description of the business conducted at the facility or activity described in the permit application, or for general permits, when there is no application, in the draft permit; ( )

iv. Name, address, and telephone number of a person from whom interested persons may obtain information, including copies of the draft permit or draft general permit, fact sheet, and application; ( )

v. Description of the comment and public meeting procedures required by this subsection and the time and place of any meetings that will be held; if no meeting has been scheduled, procedures to request a meeting and by which the public may participate in the final permit decision; ( )

vi. Description of the location of each existing or proposed discharge point and the name of the receiving water; ( )

vii. Sludge use and disposal practices and the location of each sludge TWTDS and use or disposal sites known during permit application; ( )

viii. Description of requirements applicable to cooling water intake structures under CWA Section 316(b), in accordance with 40 CFR 125.80 through 89, 125.90 through 99, and 125.130 through 139; and ( )

ix. Link to the Department's website where interested parties can obtain copies of the draft permit, fact sheet, and the permit application, if any; and ( )

f. In addition to the information required by Subsection 109.01.e., the public notice for a draft permit for a discharge for which a request has been filed under the CWA Section 316(a) will include: ( )

i. Statement that the thermal component of the discharge is subject to effluent limits under CWA

Sections 301 or 306, and a description, including a quantitative statement, of the thermal effluent limits proposed under CWA Section 301 or 306; ( )

ii. Statement that a request has been filed under CWA Section 316(a), that alternative less stringent effluent limits may be imposed on the thermal component of the discharge under CWA Section 316(a), and a description, including a quantitative statement, of the alternative effluent limits, if any, included in the request; and ( )

iii. If the applicant has filed an early screening request under 40 CFR 125.72 for a variance under CWA Section 316(a), a statement that the applicant has submitted an early screening request. ( )

**g.** In addition to the public notice described in Subsection 109.01.e., the public notice of a meeting must contain: ( )

i. Reference to the date of previous public notices relating to the permit; ( )

ii. Date, time, and place of the meeting; and ( )

iii. Description of the nature and purpose of the meeting, including the applicable rules and procedures. ( )

**h.** The Department will mail a copy of the public notice described in Subsection 109.01.e. to persons identified in Subsections 109.01.d.i.(1), (2), (3), and (4). ( )

**i.** The Department will hold a public meeting whenever the Department finds, based on requests, a significant degree of public interest in a draft permit. The Department may also hold a public meeting if a meeting might clarify one (1) or more issues involved in the permit decision or for another reason in the Department's discretion. ( )

**02. Public Comment.** ( )

**a.** During the public comment period, an interested person may submit written comments on the draft permit. Written comments must be submitted to the person identified in the notice and as specified in Subsection 109.01.e. ( )

**b.** During the public comment period, an interested person may request a public meeting if no public meeting has been scheduled. The Department will schedule and hold a public meeting if the Department determines that significant public interest exists in the draft permit. ( )

i. A request for a public meeting must be in writing and submitted to the Department within fourteen (14) days after the date of the public notice required by Subsection 109.01. ( )

ii. If a public meeting is held to receive comments, the Department will make an audio recording or hire a court reporter to record the meeting and will prepare a transcript of the meeting if an appeal is filed. ( )

**c.** If, during the comment period for an IPDES draft permit, the district engineer of the US Army Corps of Engineers advises the Department in writing that anchorage and navigation of the waters of the United States will be substantially impaired by granting a permit, the Department will deny the permit and notify the applicant of the denial. If the district engineer advises the Department that imposing specified conditions upon the permit is necessary to avoid substantial impairment of anchorage or navigation, the Department will include the specified conditions in the permit. Review or appeal of denial of a permit or of conditions specified by the district engineer must be sought through the procedures of the US Army Corps of Engineers and not through the state procedures. If a court of competent jurisdiction stays the conditions or if procedures of the US Army Corps of Engineers result in a stay of the conditions, those conditions must be considered stayed in the IPDES permit for the duration of the stay. ( )

**d.** If, during the comment period for an IPDES draft permit, the US Fish and Wildlife Service, the

National Marine Fisheries Service, or another state or federal agency with jurisdiction over fish, wildlife, or public health advises the Department in writing that the imposition of specified conditions upon the permit is necessary to avoid substantial impairment of fish, shellfish, or wildlife resources, the Department may include the specified conditions in the permit to the extent the Department determines they are necessary to comply with the provisions of the CWA. ( )

**e.** In some cases, the Department may confer with one (1) or more of the agencies referred to in Subsections 109.02.c. and 109.02.d. before issuing a draft permit and may state an agency’s view in the fact sheet or the draft permit. ( )

**f.** The Department will consider all comments in making the final decision and will answer the comments as provided in this subsection. ( )

**g.** Requests for extending a public comment period must be received in writing by the Department before the last day of the comment period. ( )

**h.** After the public comment period closes and before issuing the final permit decision, the Department will allow the permit applicant to provide additional information to respond to public comments. To respond to comments, the Department may request the applicant provide additional information. ( )

**03. Response to Comments.** When issuing a final permit, the Department will issue a response to comments that will be available to the public. The response must: ( )

**a.** Specify which provisions, if any, of the draft permit have been changed in the final permit decision, and the reasons for the change; and ( )

**b.** Describe and respond to significant comments on the draft permit raised during the public comment period or meetings. ( )

**110. IPDES FEE SCHEDULE.**

**01. Fee Schedule.** ( )

**a.** Publicly and privately owned treatment works, and other dischargers designated by the Department (Subsection 105.11.a.), must pay an annual fee based on the number of EDUs. The fee is \$1.74 per EDU. EDUs and the appropriate annual fee will be calculated according to the definition of EDUs in Section 010 by the following: ( )

**i.** The Department calculates facility EDUs; or ( )

**ii.** Existing facilities may annually report to the Department the number of EDUs served; or ( )

**iii.** New facilities may report to the Department the number of EDUs to be served, based on the facility planning design as part of the IPDES permit application. ( )

**b.** Other permitted IPDES dischargers must pay an annual fee, an application fee, or both according to:

Permit Type	Application	Annual
Non-POTW Individual Permits		
Major	\$0	\$13,000
Minor	\$0	\$4,000
Storm Water General Permits		

Permit Type	Application	Annual
Construction (CGP)		
1-10 acres <sup>1</sup>	\$200	\$0
>10-50 acres	\$400	\$75
>50-100 acres	\$750	\$100
>100-500 acres	\$1,000	\$400
>500 acres	\$1,250	\$400
Low Erosivity Waiver (CGP)	\$125	\$0
Industrial (MSGP) Permits	\$1,500	\$1,000
Cert. of No Exposure (MSGP)	\$250	\$100
Other General Permits	\$0	\$0

<sup>1</sup>This includes NOIs for construction that will disturb one or more acres of land, or will disturb less than one acre of land but are part of a common plan of development or sale that will ultimately disturb one or more acres of land.

( )

**02. Fee Assessment.**

( )

**a.** An annual fee assessment will be generated for each IPDES-permitted facility for which an annual fee is required under Subsection 110.01. Annual fees will be determined based on the twelve (12) months between October 1 and September 30 each year.

( )

**b. Application Fees and Annual Fees.**

( )

**i.** Application fees, as identified in Subsection 110.01.b., are assessed upon application submittal for coverage under an individual permit, or notice of intent for coverage or waiver under a general permit.

( )

**ii.** Owners or operators of multi-year storm water facilities or construction projects are subject to annual fees that will be assessed in the year (October through September) following the receipt of the application or notice of intent for coverage.

( )

**c.** Assessment of annual fees will consider the number of months a permittee was covered under either a general or an individual permit in a year (October through September of each year). If the permittee was covered for less than a full twelve (12) months, the assessed fee will be pro-rated to account for less than a full year's coverage under the permit.

( )

**03. Billing.** For permitted facilities subject to an annual fee, the annual fee will be assessed, and the Department will send a statement on or before October 1 of each year. The Department will also assess and send annual fee statements when permit coverage is terminated.

( )

**04. Payment.**

( )

**a.** Payment of the annual fee is due on December 31, unless it is a Saturday, Sunday, or legal holiday, in which event the payment is due on the successive business day. Payment of annual fees for terminated permit coverage is due at the time of termination.

( )

**b.** Payment of the application fee is due with the application for an individual permit or notice of intent for coverage under a general permit. The Department will not authorize IPDES permit payments upon receipt of the billing statement.

( )



**c.** A POTW may request, in writing, monthly or quarterly installment payments upon receipt of the billing statement. The Department will approve or deny the request and inform the POTW within ten (10) business days. ( )

**05. Delinquent Unpaid Fees.** A permittee covered under a general or individual permit will be delinquent in payment if the Department does not receive the assessed annual fee by January 1; or if the permittee opted to pay monthly or quarterly, its monthly or quarterly installment is not received by the Department by the last day of the month the payment is due. ( )

**06. Suspension of Services and Disapproval Designation.** Permittees delinquent in payment of fees assessed under Subsections 110.01 and 110.05: ( )

**a.** After ninety (90) days, the Department will suspend all technical services provided. The permittee will receive a warning letter identifying administrative enforcement actions the Department may pursue if the permittee does not comply with the terms of the permit. ( )

**b.** After one hundred and eighty (180) days, the Department will consider the permittee in non-compliance with permit conditions and these rules, and subject to provisions described in Section 500. ( )

**07. Reinstatement of Suspended Services and Approval Status.** Permittees for which delinquency of fee payment under Subsection 110.06 resulted in the suspension of technical services, determination of non-compliance of permit condition, or both, the continuation of technical services, determination of compliance based on payment of fee, or both, will occur upon payment of delinquent annual fee assessments. ( )

**08. Enforcement Action.** Nothing in Section 110 waives the Department's right to undertake a non-fee related enforcement action at any time, including seeking penalties, as provided in Sections 39-108, 39-109, and 39-117, Idaho Code. ( )

**09. Responsibility to Comply.** Subsection 110.06 does not relieve a permittee from its obligation to comply with the state and federal statutes, rules, regulations, permits, or orders. ( )

**111. -- 119. (RESERVED)**

**120. NEW SOURCES AND NEW DISCHARGES.**

**01. New Source Determination.** Except as provided in a new source performance standard, a source is a new source if it meets the definition in Section 010, and: ( )

**a.** Is constructed at a site at which no other source is located; or ( )

**b.** Totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or ( )

**c.** Its processes are substantially independent of an existing source at the same site. In determining whether these processes are substantially independent, the Department will consider factors including the: ( )

**i.** Extent the new facility is integrated with the existing plant; and ( )

**ii.** Extent the new facility is engaged in the same general type of activity as the existing source. ( )

**02. New Source vs. New Discharger.** A source meeting the requirements of Subsection 120.01 is a new source only if a new source performance standard independently applies to it. If no independent standard applies, the source is a new discharger, as defined in Section 010. ( )

**03. Modification vs. New Source/Discharger.** Construction on a site where an existing source is located, results in a modification subject to Subsection 201.02, rather than a new source (or a new discharger) if the

construction does not create a new building, structure, facility, or installation meeting the criteria of Subsection 120.01, but otherwise alters, replaces, or adds to existing process or production equipment. ( )

**04. New Source Construction.** Construction of a new source commences when the owner or operator: ( )

**a.** Begins a new or restarts a continuous on-site construction program: ( )

**i.** Places, assembles, or installs facilities or equipment; or ( )

**ii.** Significantly prepares the site, including clearing, excavation, or removal of existing buildings, structures, or facilities for the placement, assembly, or installation of new source facilities or equipment; or ( )

**b.** Enters into a binding contractual obligation for purchasing facilities or equipment intended for use in its operation within a reasonable time. Items that do not constitute contractual obligations under this section include: ( )

**i.** Options to purchase or contracts that can be terminated or modified without substantial loss; ( )

**ii.** Contracts for feasibility engineering; and ( )

**iii.** Design studies. ( )

**121. -- 129. (RESERVED)**

**130. GENERAL PERMITS.**

**01. Coverage.** The Department may issue a general permit in accordance with the following: ( )

**a.** Within a geographic area, the general permit will be written to cover one (1) or more categories or subcategories of discharges or sludge use or disposal practices or facilities described in the permit under Subsection 130.01.b.ii., except those covered by individual permits within a geographic area. The area will correspond to existing geographic or political boundaries such as: ( )

**i.** Designated planning areas under CWA Sections 208 and 303; ( )

**ii.** Sewer districts or sewer authorities; ( )

**iii.** City, county, or state political boundaries; ( )

**iv.** State highway systems; ( )

**v.** Standard metropolitan statistical areas as defined by state or federal agencies; ( )

**vi.** Urbanized areas as designated by the U.S. Census Bureau; or ( )

**vii.** Another appropriate division or combination of boundaries. ( )

**b.** The general permit may be written to regulate one (1) or more categories or subcategories of discharges or sludge use or disposal practices or facilities, within the area described in Subsection 130.01.a., where the sources within a covered subcategory of discharges are either: ( )

**i.** Storm water point sources; or ( )

**ii.** One (1) or more categories or subcategories of point sources other than storm water point sources or TWTDS, if all: ( )

- (1) Involve the same or substantially similar types of operations; ( )
- (2) Discharge the same types of wastes or engage in the same types of sludge use or disposal practices; ( )
- (3) Require the same effluent limits, operating conditions, or standards for sewage sludge use or disposal; ( )
- (4) Require the same or similar monitoring; and ( )
- (5) In the opinion of the Department, are more appropriately controlled under a general permit than under individual permits. ( )

**c.** Where sources within a specific category or subcategory of dischargers are subject to water quality-based limits imposed under Section 302, the sources in that specific category or subcategory are subject to the same water quality-based effluent limits. ( )

**d.** Other requirements: ( )

i. The general permit will clearly identify the applicable conditions for each category or subcategory of dischargers or TWTDS covered by the permit; and ( )

ii. The general permit may exclude specified sources or areas from coverage. ( )

iii. For general permits issued under Subsection 130.01.b. for small MS4s, the Department will establish the terms and conditions necessary to meet the requirements of 40 CFR 122.34 using one (1) of the two (2) permitting approaches described in Subsections 130.01.d.iii(1) and (2). The Department will indicate in the permit or fact sheet the approach used. ( )

(1) Comprehensive general permit. The Department includes all required permit terms and conditions in the general permit; or ( )

(2) Two-step general permit. The Department includes required permit terms and conditions in the general permit applicable to eligible small MS4s and, during the process of authorizing small MS4s to discharge, establishes additional terms and conditions not included in the general permit to satisfy one (1) or more of the permit requirements in 40 CFR 122.34 for individual small MS4 operators. ( )

(a) The general permit will require that a small MS4 operator seeking authorization to discharge under the general permit submit a Notice of Intent (NOI) consisting of the minimum required information in Subsection 130.05.b., and information the Director identifies as necessary to establish additional terms and conditions that satisfy the permit requirements of 40 CFR 122.34, such as the information required under Subsection 130.05.b. The general permit will explain other steps necessary to obtain permit authorization. ( )

(b) The Department will review the NOI submitted by the small MS4 operator to determine whether the information in the NOI is complete and to establish the additional terms and conditions necessary to meet the requirements of 40 CFR 122.34. The Department may require the small MS4 operator to submit additional information. If the Department makes a preliminary decision to authorize the small MS4 operator to discharge under the general permit, the Department will give the public notice of and opportunity to comment and request a public meeting on its proposed authorization and the NOI, proposed additional terms and conditions, and basis for these additional requirements. The public notice, process for submitting public comments and meeting requests, and meeting process if a request for a meeting is granted, will follow the procedures applicable to draft permits in Sections 108 and 109 except Subsection 109.01.d. The Department will respond to significant comments received during the comment period as provided in Subsection 109.03. ( )

(c) Upon authorization for the MS4 to discharge under the general permit, the final additional terms and conditions applicable to the MS4 operator become effective. The Department will notify the permittee and inform

the public of the decision to authorize the MS4 to discharge under the general permit and of the final additional terms and conditions specific to the MS4. ( )

**02. Electronic Submittals.** As of December 21, 2020, notices of intent submitted in compliance with this section must be submitted electronically by the discharger (or treatment works treating domestic sewage) to the Department unless waived under 40 CFR 127.15. ( )

**03. Information Retention Schedule.** An applicant must keep records of all data used to complete a notice of intent and supplemental information submitted for a period of at least three (3) years from the date the notice of intent is signed. ( )

**04. Notice of Intent.** ( )

**a.** A person required under Subsections 102.01 through 102.03 must submit a notice of intent to the Department for coverage under an IPDES general permit as required in Subsection 130.05. ( )

**b.** A notice of intent must be signed and certified as required in Section 090. ( )

**05. Administration.** ( )

**a.** General permits may be issued, modified, revoked and reissued, or terminated in accordance with Sections 201 (Modification, or Revocation and Reissuance of IPDES Permits) and 203 (Termination of IPDES Permits). ( )

**b.** Authorization to discharge or engage in sludge use and disposal practices will follow these procedures: ( )

**i.** Except as provided in Subsections 130.05.b.xi. and 130.05.b.xii., a discharger must submit, in accordance with general permit requirements, a complete and timely notice of intent to fulfill the requirements for permit applications; ( )

**ii.** A discharger (or TWTDS) who fails to submit a notice of intent in accordance with the terms of the permit is not authorized to discharge (or for a sludge disposal permit, to engage in a sludge use or disposal practice) under the terms of the general permit unless: ( )

(1) The general permit, in accordance with Subsections 130.05.b.xi., contains a provision that a notice of intent is not required; or ( )

(2) The Department notifies a discharger (or TWTDS) that it is covered by a general permit in accordance with Subsection 130.05.b.xii.; ( )

**iii.** Notices of intent must be signed as required in Section 090; ( )

**iv.** The general permit will specify the contents of the notice of intent and require submitting information necessary for adequate program implementation, including at a minimum: ( )

(1) Legal name and address of the operator; ( )

(2) Facility name and address; ( )

(3) Type of facility, site, or discharges; and ( )

(4) Receiving stream; ( )

**v.** Coverage under a general permit may be terminated or revoked in accordance with Subsection 130.05.c. through e.; ( )

vi. Notices of intent for coverage under a general permit for CAFOs must include the information specified in Subsection 105.09 and 40 CFR 122.21(i)(1), including a topographic map; ( )

vii. CAFO owner or operator may be authorized to discharge under a general permit only in accordance with the process described in 40 CFR 122.23(h); ( )

viii. General permits for storm water discharges associated with industrial activity from inactive mining, inactive oil and gas operations, or inactive landfills occurring on federal lands where an operator cannot be identified may contain alternative notice of intent requirements; ( )

ix. General permits will specify the deadlines for submitting notices of intent to be covered and the date(s) when a discharger is authorized to discharge under the permit; ( )

x. General permits will specify whether a discharger (or TWTDS), who has submitted a complete and timely notice of intent to be covered in accordance with the general permit and is eligible for coverage under the permit, is authorized to discharge ( for a sludge disposal permit, to engage in a sludge use or disposal practice) in accordance with the permit: ( )

(1) Upon receipt of the notice of intent by the Department; ( )

(2) After a waiting period specified in the general permit; ( )

(3) On a date specified in the general permit; or ( )

(4) Upon receipt of notification of inclusion by the Department; ( )

xi. Discharges other than discharges from POTWs, combined sewer overflows, MS4s, primary industrial facilities, and storm water discharges associated with industrial activity, may, at the discretion of the Department, be authorized to discharge under a general permit without submitting a notice of intent when the Department finds that a notice of intent requirement is inappropriate. The Department will provide in the public notice of the general permit the reasons for not requiring a notice of intent. The Department will consider: ( )

(1) Type of discharge; ( )

(2) Expected nature of the discharge; ( )

(3) Potential for toxic and conventional pollutants in the discharges; ( )

(4) Expected volume of the discharges; ( )

(5) Other means of identifying discharges covered by the permit; and ( )

(6) Estimated number of discharges to be covered by the permit; and ( )

xii. The Department may notify a discharger (or TWTDS) that it is covered by a general permit, even if the discharger (or TWTDS) has not submitted a notice of intent to be covered. A discharger (or TWTDS) so notified may request an individual permit as specified in Subsection 130.05.d. ( )

c. The Department may terminate, revoke, or deny coverage under a general permit, and require the discharger or applicant to apply for and obtain an individual IPDES permit. An interested person may petition the Department to take action under this subsection. Cases where an individual IPDES permit may be required include: ( )

i. Discharger or TWTDS is not in compliance with the conditions of the general permit; ( )

ii. Change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source or TWTDS; ( )

- iii. ELGs are promulgated for point sources covered by the general permit; ( )
- iv. Water Quality Management plan containing requirements for point sources is approved; ( )
- v. Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary; ( )
- vi. Standards for sewage sludge use or disposal have been promulgated for the sludge use and disposal practice covered by the general IPDES permit; or ( )
- vii. Discharge is a significant contributor of pollutants. For this determination, the Department may consider:
  - (1) Location of the discharge with respect to waters of the United States; ( )
  - (2) Size of the discharge; ( )
  - (3) Quantity and nature of the pollutants discharged to waters of the United States; and ( )
  - (4) Other relevant factors. ( )
- d. Any owner or operator authorized by a general permit may request to be excluded from the coverage of the general permit by applying for an individual permit. ( )
  - i. The owner or operator must submit an application under Section 105, with reasons supporting the request, to the Department no later than ninety (90) days after the publication of the general permit. ( )
  - ii. The Department must process the request under Sections 106 (Individual Permit Application Review), 107 (Decision Process), 108 (Draft Permit and Fact Sheet) and 109 (Public Notification and Comment). ( )
  - iii. The Department will grant a request by issuing an individual permit if the reasons cited by the owner or operator are adequate to support the request. ( )
- e. When an individual IPDES permit is issued to an owner or operator otherwise subject to a general IPDES permit, the applicability of the general permit to the individual IPDES permittee is automatically terminated on the effective date of the individual permit. ( )
- f. A source excluded from a general permit, solely because it already has an individual permit, may request that the individual permit be revoked, and that it be covered by the general permit. Upon revocation of the individual permit, the general permit will apply to the source. ( )

**06. Case-by-Case Requirements for Individual Permits. ( )**

- a. The Department may require an owner or operator authorized by a general permit to apply for an individual IPDES permit as provided in Subsection 130.05.c., only if the owner or operator has been notified in writing that a permit application is required. This notice will include a statement of the reasons for this decision, an application form, a statement setting a time for the owner or operator to file the application, a statement that on the effective date of the individual IPDES permit, the general permit as it applies to the individual permittee automatically terminates, and a statement that the owner or operator may appeal the Department's decision as provided in Section 204. The Department may grant additional time upon request of the applicant. ( )
- b. Before a case-by-case determination that an individual permit is required for a storm water discharge under this section (40 CFR 122.26(a)(1)(v), (a)(9)(iii), and Subsection 105.19), the Department may require the discharger to submit a permit application or other information regarding the discharge described in the

CWA Section 308. ( )

i. When requiring information, the Department will notify the discharger in writing and send an application with the notice. ( )

ii. The discharger must apply for a permit within one hundred eighty (180) days of notice, unless permission for a later date is granted by the Department. ( )

**131. -- 199. (RESERVED)**

**200. RENEWAL OF IPDES PERMITS.**

**01. Interim Effluent Limits.** Except as provided in Subsection 200.02, when a permit is renewed or reissued, interim effluent limit, standards or conditions must be at least as stringent as the final effluent limits, standards, or conditions in the previous permit unless the circumstances on which the previous permit: ( )

a. Materially and substantially changed since the time the permit was issued; and ( )

b. Constitute cause for permit modification or revocation and reissuance under Subsection 201.02. ( )

**02. Final CWA Section 402(a)(1)(B) Effluent Limits.** For effluent limits established by the Department based on CWA Section 402(a)(1)(B), a permit may not be renewed, reissued, or modified based on ELGs promulgated under CWA Section 304(b) after the original issuance of a permit, to contain effluent limit that are less stringent than the comparable effluent limits in the previous permit, except a permit may be renewed, reissued, or modified to contain a less stringent effluent limit applicable to a pollutant, if: ( )

a. Material and substantial alterations or additions to the permitted facility occurred after permit issuance justifying the application of a less stringent effluent limit; ( )

b. Information is available that: ( )

i. Was not available during permit issuance (other than revised regulations, guidance, or test methods) and justifies the application of a less stringent effluent limit during permit issuance; or ( )

ii. The Department determines technical mistakes or mistaken interpretations of law were made in issuing the permit under CWA Section 402(a)(1)(b); ( )

c. A less stringent effluent limit is necessary because of events over which the permittee has no control and there is no reasonably available remedy; ( )

d. The permittee received a permit modification under CWA Sections 301(c), 301(g), 301(i), 301(k), 301(n), or 316(a); or ( )

e. The permittee installed the treatment facilities required to meet the effluent limits in the previous permit and properly operated and maintained the facilities but has not achieved the previous effluent limits. The limits in the reviewed, reissued, or modified permit may reflect the level of pollutant control actually achieved (but will not be less stringent than required ELGs in effect during permit renewal, reissuance, or modification). ( )

**03. Final CWA Section 301(b)(1)(C) or 303 Effluent Limits.** For effluent limits based on CWA Sections 301(b)(1)(C), 303(d), or (e), a permit may not be renewed, reissued, or modified to contain effluent limits less stringent than the comparable effluent limits in the previous permit except when: ( )

a. One of the exceptions in Subsection 200.02 apply; or ( )

b. The water where the discharge occurs is identified as impaired on Idaho's Integrated Report and the effluent limit is based on a TMDL or other waste load allocation established under CWA Section 303, if the

cumulative effect of all revised effluent limits based on the TMDL or waste load allocation will ensure attainment of applicable water quality standards; or ( )

c. The water quality where the discharge occurs meets or exceeds levels required by the water quality standards, and the effluent limit is based on a TMDL or other waste load allocation established under the CWA Section 303, any water quality standard, or permitting standard, if the revision is subject to and consistent with the antidegradation policy and implementation procedures in the water quality standards. ( )

**04. Effluent Limits and Water Quality Standards.** In no event may a permit to which Subsection 200.02 or 200.03 applies be renewed, reissued, or modified to contain an effluent limit less stringent than required by ELGs in effect at the time the permit is renewed, reissued, or modified. In no event may such a permit to discharge into waters of the United States be renewed, issued, or modified to contain a less stringent effluent limit if implementing the limit results in a violation of a water quality standard under IDAPA 58.01.02, "Water Quality Standards." ( )

**201. MODIFICATION, OR REVOCATION AND REISSUANCE OF IPDES PERMITS.**

**01. Procedures to Modify, or Revoke and Reissue Permits.** ( )

a. Permits may be modified, or revoked and reissued, at the request of an interested person (including the permittee) or upon the Department's initiative. Permits may only be modified, or revoked and reissued, for reasons in Subsection 201.02. Requests must be in writing and contain facts or reasons supporting the request. ( )

b. If the Department tentatively decides to modify, or revoke and reissue, a permit, the Department will prepare a draft permit under Section 108, incorporating the proposed changes. ( )

i. The Department may request additional information, and for a modified permit, may require submittal of an updated application. If the tentative decision is to revoke and reissue a permit, the Department will require submittal of a new application. ( )

ii. In a permit modification, only those conditions to be modified will be reopened when a new draft permit is prepared. All other aspects of the existing permit remain in effect for the duration of the unmodified permit. ( )

iii. When a permit is revoked and reissued, the entire permit is reopened as if the permit had expired and is being reissued. During a revocation and reissuance proceeding, the permittee must comply with the conditions of the existing permit until a new final permit is reissued. ( )

iv. Minor modifications, defined in Subsection 201.03, do not require development of a draft permit, and fact sheet, and are not subject to public notification and comment. ( )

**02. Causes to Modify, or Revoke and Reissue Permits.** When the Department receives pertinent information ( e.g., facility inspection, information submitted as required by the permit, a request for modification or revocation and reissuance under Subsection 201.01, or permit file review), the Department may determine whether one (1) or more of the causes listed in Subsections 201.02.c. and 201.02.d. for modification or revocation and reissuance or both exist. ( )

a. If cause exists, the Department may modify or revoke and reissue the permit, subject to the limits of Subsection 201.01.b., and may request a new or updated application, if necessary. ( )

b. If cause does not exist, the Department will not modify or revoke and reissue the permit. ( )

c. The following are causes for modification but not revocation and reissuance of permits except when the permittee requests or agrees: ( )

i. Material and substantial alterations or additions to the permitted facility or activity (including a



change in the permittee's sludge use or disposal practice) occurred after permit issuance and justify permit conditions that are different or absent in the existing permit. ( )

ii. The Department has received new information. Permits may be modified during their terms for this cause only if the information was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and justifies the application of different permit conditions at the time of issuance: ( )

(1) For IPDES general permits (Section 130), cause includes information indicating that cumulative effects on the environment are unacceptable; and ( )

(2) For new source or new discharger IPDES permits (Section 120), cause includes significant information derived from effluent testing required under Subsection 105.08 or 105.16 after issuance of the permit. ( )

iii. The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. Permits may be modified during their terms for this cause only: ( )

(1) For promulgation of amended standards or regulations, when: ( )

(a) The requested modification was based on a promulgated ELG, EPA approved or promulgated water quality standards, or the Secondary Treatment Regulations under 40 CFR Part 133; ( )

(b) The EPA revised, withdrew, or modified that portion of the regulation or ELG on which the permit condition was based, or approved a state action for a water quality standard on which the permit condition was based; and ( )

(c) A permittee requests modification under Subsection 201.01 or 203.01 within ninety (90) days after notice of the action on which the request is based. ( )

(2) For judicial decisions, a court of competent jurisdiction remanded and stayed EPA or Idaho promulgated regulations or ELGs, if the remand and stay concerns that portion of the regulations or guidelines on which the permit condition was based, and a request is filed by the permittee under Subsection 201.01 or 203.01 within ninety (90) days of judicial remand. ( )

iv. The Department determines good cause exists for modifying a compliance schedule, such as an act of God, strike, flood, or materials shortage or other events that the permittee has little or no control and no reasonably available remedy exists. A compliance schedule must not be modified to extend beyond the CWA statutory deadline. ( )

v. When the permittee has filed a request for a variance under CWA Sections 301(c), 301(g), 301(i), 301(k), or 316(a) or for fundamentally different factors within the time specified in Section 310. ( )

vi. When required to incorporate an a CWA Section 307(a) toxic effluent standard or prohibition, under Subsection 302.04. ( )

vii. When required by the reopener conditions in a permit, established in the permit under Subsection 302.05 or 40 CFR 403.18(e) (Pretreatment Standards). ( )

viii. Upon request of a permittee who qualifies for effluent limits on a net basis, or when a discharger is no longer eligible for net limits, as provided in Subsection 303.07. ( )

ix. As necessary under 40 CFR 403.8(e) (Pretreatment Program Requirements: Development and Implementation by POTW). ( )

x. Upon failure of an approved state to notify, as required by CWA Section 402(b)(3), another state whose waters may be affected by a discharge from the approved state. ( )

xi. When the level of discharge of pollutants not limited in the permit exceeds the level that can be achieved by the technology-based treatment requirements appropriate to the permittee under 40 CFR 125.3(c). ( )

xii. To establish a notification level as provided in Subsection 302.08. ( )

xiii. To modify a compliance schedule to reflect the time lost during construction of an innovative or alternative facility, for a POTW that received a loan under IDAPA 58.01.12, "Rules for Administration of Water Pollution Control Loans." The compliance schedule must not be modified to extend beyond the CWA statutory deadline. ( )

xiv. For a small MS4, to include an effluent limit requiring implementation of minimum control measures as specified in 40 CFR 122.34(b) when: ( )

(1) The permit does not include measure(s) based upon the determination that another entity was responsible for implementing the requirement, and ( )

(2) The other entity fails to implement measure that satisfy the requirement. ( )

xv. To correct technical errors in calculation, or mistaken interpretations of law made in determining permit conditions. ( )

xvi. When the discharger has installed the treatment technology considered by the permit writer in setting effluent limits imposed under CWA Section 402(a)(1) and has properly operated and maintained the facilities but has not achieved those effluent limits. The limits in the modified permit may reflect the level of pollutant control achieved (but must not be less stringent than required by a subsequently promulgated ELG). ( )

xvii. The incorporation of the terms of a CAFO's nutrient management plan into the terms and conditions of a general permit when a CAFO obtains coverage under a general permit in accordance with 40 CFR 122.23(h), and Section 130 is not a cause for modification under the requirements of this section. ( )

xviii. When required by a permit condition to incorporate a land application or sludge disposal plan for beneficial reuse of sewage sludge, to revise an existing land application or sludge disposal plan, or to add a land application or sludge disposal plan as required by IDAPA 58.01.16.650, "Wastewater Rules," and Section 380. ( )

**d.** The following are causes to modify or revoke and reissue a permit: ( )

i. Cause exists for termination under Subsection 203.03, and the Department determines that modification or revocation and reissuance is appropriate; ( )

ii. The Department has received notification, as required in the permit, of a proposed transfer of the permit; or ( )

iii. A permit also may be modified to reflect a transfer after the effective date of an automatic transfer (Subsection 202.02) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee. ( )

**03. Minor Modifications of Permits.** Upon the consent of the permittee, the Department may modify a permit to correct or allow for changes in the permitted activity listed in this subsection without following the procedures of Sections 108 (Draft Permit and Fact Sheet), 109 (Public Notification and Comment), and Subsection 201.01. A permit modification not processed as a minor modification under this subsection must be made for cause and meet the requirements of Section 108 and Section 109. Minor modifications may: ( )

**a.** Correct typographical errors; ( )

- b.** Require more frequent or not less frequent monitoring or reporting by the permittee; ( )
- c.** Change an interim compliance date in a compliance schedule, provided the new date is not more than one hundred twenty (120) days after the date specified in the existing permit and does not interfere with attaining the final compliance date requirement; ( )
- d.** Allow for a change in ownership or operational control of a facility where the Department determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Department; ( )
- e.** Change the construction schedule for a discharger that is a new source. No change affects a discharger's obligation to have pollution control equipment installed and in operation before discharge under Section 120, and 40 CFR 122.29(d); ( )
- f.** Delete a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except under permit limits; ( )
- g.** Incorporate conditions of a POTW pretreatment program approved in accordance with 40 CFR 403.11 or a modification approved in accordance with 40 CFR 403.18 as enforceable conditions of the POTW's permits; ( )
- h.** Incorporate changes to the terms of a CAFO's nutrient management plan that were revised in accordance with 40 CFR 122.42(e)(6); or ( )
- i.** Require electronic reporting requirements (to replace paper reporting requirements) specified in 40 CFR Part 127 (NPDES Electronic Reporting). ( )

**202. TRANSFER OF IPDES PERMITS.**

- 01. Transfers by Modification.** Except as provided in Subsection 202.02, a permit may be transferred by the permittee to a new owner or operator only if the permit was modified or revoked and reissued under Subsection 201.02.d., or a minor modification was made under Subsection 201.03, to identify the new permittee and incorporate other requirements necessary under the CWA. ( )
- 02. Automatic Transfers.** As an alternative to transfers by modification, an IPDES permit may be automatically transferred to a new permittee if the: ( )

  - a.** Current permittee notifies the Department at least thirty (30) days before the proposed transfer date; ( )
  - b.** Notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee; and ( )
  - c.** Department does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. A modification under this subsection may be a minor modification under Subsection 201.03. If this notice is not received, the transfer is effective on the date specified in the agreement. ( )

**203. TERMINATION OF IPDES PERMITS.**

- 01. Request to Terminate or Termination Initiated by the Department.** Permits may be terminated either at the request of an interested person (including the permittee) or upon the Department's own initiative. Permits may only be terminated for the reasons specified in Subsection 203.03 or 203.04. ( )

  - a.** Request for termination by persons other than the permittee must be submitted in writing to the Department. ( )

b. As of December 21, 2020, NOTs must be submitted electronically by the permittee to the Department to comply with this section and 40 CFR Part 127 unless waived under 40 CFR 127.15. 40 CFR Part 127 does not eliminate existing requirements for electronic reporting. Independent of 40 CFR Part 127, the permittee may be required to report electronically if specified by a particular permit. ( )

**02. Tentative Permit Termination.** Except as provided in Subsection 203.04, if the Department tentatively decides to terminate a permit under Subsection 203.03, the Department will issue a notice of termination. A notice of termination will be available for public comment, and the Department will give notice of an opportunity for public meetings, as specified in Section 109. ( )

**03. Cause to Terminate Permits.** The following are causes for terminating a permit during its term, or for denying a permit renewal application: ( )

a. Noncompliance by the permittee with conditions of the permit; ( )

b. Permittee's failure in the application or during the permit issuance process to fully disclose relevant facts, or the permittee's misrepresentation of relevant facts at any time; ( )

c. Determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or ( )

d. Change in a condition that requires either a temporary or permanent reduction or elimination of a discharge or sludge use or disposal practice controlled by the permit (e.g., plant closure or termination of discharge by connection to a POTW), or other situations where the Department has sufficient basis for determining discharge will cease. ( )

**04. Expedited Termination Process for Terminated or Eliminated Discharge.** If the entire discharge is permanently terminated by eliminating flow or connecting to a POTW (but not by land application or disposal into a well), the Department may terminate the permit by notice to the permittee. ( )

a. Termination by notice becomes effective thirty (30) days after notice is sent (expedited permit termination), unless the permittee objects within that time. ( )

b. If the permittee objects during that period, the Department will follow procedures for termination in Subsection 203.02. ( )

c. Expedited permit termination procedures are not available to permittees subject to pending state and/or federal enforcement actions including citizen suits brought under federal law. If requesting expedited permit termination procedures, a permittee must certify it is not subject to pending state or federal enforcement actions including citizen suits brought under federal law. ( )

## **204. APPEALS PROCESS.**

**01. Petition for Review of a Permit Decision.** Appeal of a final IPDES permit decision, issued under Section 107, to the Hearing Authority is commenced by filing a Petition for Review with the Department's Hearing Coordinator within the time prescribed in Subsection 204.01.b. The "Hearing Authority" will be a Hearing Officer appointed by the Director from a pool of Hearing Officers approved by the Board. ( )

a. A person who is aggrieved by the final permit decision may file a Petition for Review as provided in this section. A person aggrieved is limited to the permit holder or applicant, and a person or entity who filed comments or who participated in the public meeting on the draft permit. ( )

b. A Petition for Review must be filed with the Department's Hearing Coordinator within twenty-eight (28) days after the Department serves notice of the final permit decision under Section 107. A petition is filed when it is received by the Department's Hearing Coordinator at the address specified in Subsection 204.13. ( )

- c. In addition to meeting the requirements in Subsection 204.06, a Petition for Review must: ( )
- i. Be confined to the issues raised during the public comment process or to changes made to the permit by the Department after the close of the public comment period; ( )
  - ii. Identify the permit condition or other specific aspect of the permit decision being challenged; ( )
  - iii. State the legal and factual basis for the petitioner's contentions; ( )
  - iv. State the relief sought; and ( )
  - v. State the basis for asserting the petitioner is an aggrieved person. ( )

**02. Public Notice of the Petition for Review.** Within fourteen (14) days of the date a Petition for Review has been filed, the Hearing Authority must give reasonable notice to the public of the petition. ( )

**03. Administrative Record Filed By the Department.** The Department will file a certified copy of the administrative record, as identified in Section 600, with an index within twenty-eight (28) days of the date the Petition for Review was filed. ( )

**04. Participation by the Permit Applicant or Permit Holder.** A permit applicant or permit holder who did not file a petition but who wishes to participate in the appeal process must file a notice of appearance within twenty-eight (28) days of the date the Petition for Review was filed. ( )

**05. Petition to Intervene.** A person who has a direct and substantial interest in the outcome of the Petition for Review may file a Petition to Intervene. ( )

a. The Petition to Intervene must state the interest of the intervener, and why intervention will not unduly broaden the issues and cause delay or prejudice to the parties. ( )

b. Petitions to Intervene must be filed within fourteen (14) days of the notice of filing of the Petition for Review. ( )

c. Any party opposing a Petition to Intervene must file objections within seven (7) days after service of the Petition to Intervene and serve the objection upon all parties of record and upon the person petitioning to intervene. ( )

d. If a Petition to Intervene shows direct and substantial interest in the outcome of the Petition for Review, does not unduly broaden the issues, and will not cause delay or prejudice to the parties, the Hearing Authority must grant intervention. ( )

**06. Content and Form Requirements for Petitions and Briefs.** Petitions and briefs filed under this section must: ( )

a. Identify, in the caption, the permit applicant or holder, permitted facility, and permit number. In the caption, include the case number, if available during filing, and title of the document, and ( )

b. Specify on the upper left corner of the first page, the name, address, telephone number, e-mail address and facsimile number, if any, of the person filing the document. If the person filing the document is a representative of a party as provided in Subsection 204.11, the document must identify the name of the person or entity represented. No more than two (2) representatives for service of documents may be listed. ( )

**07. Augmenting the Administrative Record.** Consideration of the Petition for Review by the Hearing Authority is limited to the certified administrative record unless, upon the request of a party, the Hearing Authority allows the record to be augmented. A request to augment the record must be filed within fourteen (14) days of the filing of the certified administrative record, unless intervention is granted, in which case the request to augment must

be filed within fourteen (14) days of the date the order granting intervention is issued. The Hearing Authority may allow the record to be augmented if the requesting party shows that the additional information is material, is relevant to the issues raised in the appeal and that: ( )

a. Good reasons exist for failure to present the information during the permitting proceeding; or ( )

b. Alleged irregularities exist in the permitting proceeding and the party wishes to introduce evidence of the alleged irregularities. ( )

**08. Brief of the Petitioner.** Once requests to augment the record and motions to intervene have been determined, the Hearing Authority must issue an order notifying the parties that the administrative record has been settled and the date the petitioner must file a brief in support of the Petition for Review. In addition to meeting the requirements of Subsection 204.06, the brief must include: ( )

a. Legal arguments and citations to legal authority supporting the allegations in the Petition for Review; and ( )

b. Factual support for the allegations in the Petition for Review, including citations to the administrative record. ( )

c. Statement whether the party requests an opportunity for oral argument. ( )

**09. Response Briefs.** Unless an alternative date is set by the Hearing Authority, the Department and all other parties must file response briefs within twenty-eight (28) days of the service of the petitioner's brief. In addition to meeting the requirements of Subsection 204.06, the response briefs must include: ( )

a. Response to the arguments and assertions in the petitioner's brief (either in support or opposed); ( )

b. Citation to legal authorities and facts in the administrative record relied upon; and ( )

c. Statement whether the party requests an opportunity for oral argument. ( )

**10. Reply Briefs by the Petitioner.** Unless an alternative date is set by the Hearing Authority, the petitioner may file a reply brief within fourteen (14) days after service of response briefs. A petitioner may not raise new issues or arguments in the reply. ( )

**11. Representation of Parties.** Unless otherwise authorized or required by law, appearances and representation of parties or other persons are as follows: ( )

a. A natural person may represent himself or herself or be represented by an attorney or, if the person lacks full legal capacity to act for himself or herself, then by a legal guardian or guardian ad litem or representative of an estate; ( )

b. General partnership may be represented by a partner or an attorney; ( )

c. Corporation, or any other business entity other than a general partnership, must be represented by an attorney; ( )

d. Municipal corporation, local government agency, unincorporated association or nonprofit organization must be represented by an attorney; or ( )

e. State, federal, or tribal governmental entity or agency must be represented by an attorney. ( )

**12. Substitution and Withdrawal of Representatives.** A party's representative may change and a new representative may be substituted by notice to all parties if the proceedings are not unreasonably delayed.

Representatives who wish to withdraw from a proceeding must immediately file a motion to withdraw representation and serve that motion on the party represented and all other parties. ( )

**13. Filing and Service Requirements.** ( )

**a.** Documents must be filed with the Hearing Coordinator and may be filed by email, US mail, hand-delivery, or fax. The Hearing Coordinator assigns case docket numbers, maintains case records, and issues notices on behalf of the Department. Information for filing documents is available at [www.deq.idaho.gov/petitions-for-review](http://www.deq.idaho.gov/petitions-for-review). The documents are deemed to be filed on the date received by the Hearing Coordinator. Upon receipt of the filed document, the Hearing Coordinator will provide confirmation to the originating party. ( )

**b.** Documents filed after the petition must be served on all parties or representatives, unless otherwise directed by the Hearing Authority. ( )

**c.** Service of documents on the named representative is valid service upon the party for all purposes in the proceeding. ( )

**14. Proof of Service.** Every document meeting conditions for service must be attached to or accompanied by proof of service. A certificate of service template is available at <https://www.deq.idaho.gov/public-information/laws-guidance-and-orders/petitions-for-review-and-precedential-orders> ( )

**15. Motions.** A request for an interlocutory or procedural order or other relief must be made by written motion unless these rules prescribe another form. ( )

**a.** A motion must specifically state the grounds for the motion, the relief sought, and the legal argument supporting the motion. Before filing a motion, parties must attempt to ascertain whether the other parties concur or object to the motion and indicate in the motion the attempt made and the response obtained. ( )

**b.** A party may file a response to a motion. Responses must specifically state the grounds for opposition and the legal argument supporting the motion. The response must be filed within fifteen (15) days after service of the motion unless the Hearing Authority shortens or extends the time for response. ( )

**c.** A reply to a response must be filed within ten (10) days after service of the response. A reply must not introduce new issues or arguments and may respond only to matters presented in the response. ( )

**d.** The Hearing Authority may act on a motion for a procedural order at any time without a response. ( )

**e.** Parties must file motions for extensions of time before the due date to allow other parties reasonable opportunity to respond to the request for more time and to provide the Hearing Authority with a reasonable opportunity to issue an order before the due date. ( )

**16. Oral Argument.** The Hearing Authority may hold oral argument on its own initiative or at its discretion in response to a request by one or more of the parties. ( )

**17. Withdrawal of Permit or Portions of Permit by the Department.** The Department may, at any time, upon notification to the Hearing Authority and all parties, withdraw the permit or specified portions of the permit and prepare a new draft permit under Section 108 addressing the portions withdrawn. The new draft permit will proceed through the same process of public comment and opportunity for a public meeting as other draft permits. If applicable, portions of the permit that are not withdrawn continue to apply, unless stayed under Sections 205 (Contested Permit Conditions) and 206 (Stays of Contested Permit Conditions). For those portions of the permit that DEQ does not withdraw that are part of the appeal, the appeal will continue. ( )

**18. Request to Dismiss Petition.** The petitioner, by motion, may request the Hearing Authority to dismiss its appeal. The motion must state the reason for its request. ( )

**19. Burden of Proof.** The petitioner has the burden of proving the allegations in the Petition for

Review. Factual allegations must be proven by a preponderance of the evidence. ( )

**20. Appointment of Hearing Officers.** The Hearing Authority will be a Hearing Officer appointed by the Director from a pool of Hearing Officers approved by the Board. Hearing Officers should be persons with technical expertise or experience in the issues involved in IPDES appeals. Notice of appointment of a Hearing Officer will be served on all parties. No Hearing Officer will be appointed who has a conflict of interest as defined in 40 CFR 123.25(c). ( )

**21. Scope of Authority of the Hearing Authority.** The Hearing Authority has authority: ( )

**a.** To set schedules and take other actions to ensure an efficient and orderly adjudication of the issues raised in the Petition for Review; ( )

**b.** To hear and decide motions; and ( )

**c.** To issue an order that decides the issues raised in the appeal, including findings of fact and conclusions of law. The required contents of an order are stated in Subsection 204.24. ( )

**22. Ex Parte Communications.** The Hearing Authority must not communicate, directly or indirectly, regarding substantive issues in the permit appeal with any party, except upon notice and opportunity for all parties to participate in the communication. The Hearing Authority may communicate ex parte with a party concerning procedural matters (e.g., scheduling). When the Hearing Authority becomes aware of a written ex parte communication regarding a substantive issue from a party or representative of a party during an appeal, the Hearing Authority shall place a copy of the communication in the case file and order the party providing the written communication to serve a copy of the written communication upon all parties of record. Written communications from a party showing service upon all other parties are not ex parte communications. ( )

**23. Alternative Dispute Resolution.** Parties to the permit appeal may agree to use alternative dispute resolution. ( )

**24. Final Orders.** Final orders are issued by the Hearing Authority upon review of the petitions, briefs, and the administrative record on appeal. Motions for reconsideration of a final order will not be considered. Final orders must contain: ( )

**a.** A reasoned statement in support of the decision; ( )

**b.** Findings of fact, with reference to the portions of the administrative record that support the findings. The findings of fact must be based exclusively on the administrative record, or if augmented during the appeal, the augmented record; ( )

**c.** Conclusions of law with respect to legal issues raised in the appeal; ( )

**d.** The final order must either affirm the permitting decision, or vacate and remand the decision to the Department with instructions; and ( )

**e.** A statement of the right to judicial review as stated in Section 204.26. ( )

**25. Final Agency Action for Purposes of Judicial Review.** ( )

**a.** Filing a Petition for Review is a prerequisite to seeking judicial review of the Department's permitting decision. ( )

**b.** For judicial review under Sections 39-107 and 67-5270, Idaho Code, final agency action or determination regarding an appeal of a permit occurs when a final order that affirms the Department's permitting decision is issued. ( )

**c.** An order that vacates and remands the decision to the Department with instructions is not a final



agency action for judicial review. ( )

**26. Petition for Judicial Review. ( )**

**a.** Any person aggrieved by a final agency action or determination by the Department as defined in Subsection 204.25 has a right to judicial review by filing a petition for judicial review. ( )

**b.** The petition for judicial review must be: ( )

**i.** Filed with the Hearing Coordinator in accordance with Subsection 204.13 and with the district court pursuant to Section 67-5272, Idaho Code; and ( )

**ii.** Served on the Hearing Authority, all parties, the Director of the Department, and the Attorney General of the State of Idaho. ( )

**c.** Pursuant to Section 67-5273, Idaho Code, a petition for judicial review of a final agency action must be filed within twenty-eight (28) days of the service date of a final order issued by the Hearing Authority. ( )

**27. IPDES General Permits. ( )**

**a.** Persons affected by an IPDES general permit may not file a petition under this section or otherwise challenge the conditions of a general permit in further Department proceedings. Instead, they may: ( )

**i.** Challenge the conditions in a general permit by filing an action in court; or ( )

**ii.** Apply for an individual IPDES permit under Section 105, as authorized in Section 130, and may then petition the Hearing Authority to review the individual permit. ( )

**b.** As provided in Subsection 130.05.c., any interested person may also petition the Department to require an individual IPDES permit for any discharger eligible for authorization to discharge under an IPDES general permit. ( )

**c.** The Department's decision to terminate, revoke or deny coverage under a general permit and to require application for an individual permit may be appealed under Section 204. ( )

**28. Appeals of Variances. ( )**

**a.** When the Department issues a permit on which EPA has made a variance decision, separate appeals of the Department permit and EPA variance decision are possible. If the owner or operator is challenging the same issues in both proceedings, the EPA Region 10 Administrator will decide, in consultation with the Department, which case will be heard first. ( )

**b.** Variance decisions made by EPA may be appealed under the provisions of 40 CFR 124.19. ( )

**c.** Stays for variances other than CWA Section 301(g) variances are governed by Section 205 and 206. ( )

**205. CONTESTED PERMIT CONDITIONS.**

**01. Force and Effect of Conditions.** As provided in Subsection 206.01, if an appeal of a permit decision is filed under Section 204, the force and effect of the contested conditions of the permit are stayed until final Department action. The Department will notify the discharger and interested parties of the uncontested conditions of the permit that are enforceable obligations of the discharger in accordance with Subsection 206.01.c. ( )

**02. Control Technologies.** When effluent limitations are contested, but the underlying control technology is not, the notice will identify the installation of the technology in accordance with the compliance

schedules as an uncontested, enforceable obligation of the permit. ( )

**03. Combination of Technologies.** When a combination of technologies is contested, but a portion of the combination is not contested, that portion must be identified as uncontested if compatible with the combination of technologies proposed by the requester. ( )

**04. Inseverable Conditions.** Uncontested conditions, if inseverable from a contested condition, must be considered contested. ( )

**05. Enforceable Dates.** Uncontested conditions become enforceable thirty (30) days after the date of notice under Subsection 205.01. ( )

**06. Uncontested Conditions.** Uncontested conditions include: ( )

**a.** Preliminary design and engineering studies or other requirements necessary to achieve the final permit conditions that do not entail substantial expenditures; and ( )

**b.** Permit conditions that must be met regardless of the outcome of the appeal under Section 204. ( )

**206. STAYS OF CONTESTED PERMIT CONDITIONS.**

**01. Stays.** ( )

**a.** If a Petition for Review of an IPDES permit under Section 204 is filed, the contested permit conditions are stayed pending final Department action. Uncontested permit conditions are stayed only until the date specified in Subsection 206.01.b. If the permit involves a new facility or new injection well, new source, new discharger or a recommencing discharger, the applicant will not be issued a permit for the proposed new facility, injection well, source, or discharger pending final Department action. ( )

**b.** Uncontested conditions that are not severable from those contested are stayed together with the contested conditions. The Department will identify the stayed provisions of permits for existing facilities, injection wells, and sources. Other provisions of the permit for the existing facility, injection well, or source become fully effective and enforceable thirty (30) days after the date of the notification required in Subsection 206.01.c. ( )

**c.** As soon as possible after receiving notification from the Hearing Coordinator of the filing of a Petition for Review, the Department will notify the Hearing Authority, applicant, and other parties of the uncontested (and severable) conditions of the final permit that will become fully effective, enforceable obligations of the permit on the date specified in Subsection 206.01.b., and the notice must comply with the requirements of Section 205. ( )

**02. Stays Based on Cross Effects.** ( )

**a.** The Department may grant a stay based on the grounds that an appeal to the Hearing Authority under Section 204 of one permit may result in changes to another Department-issued IPDES permit only when each of the permits involved has been appealed to the Department. ( )

**b.** No stay of an EPA-issued NPDES permit may be granted based on the stay of a Department-issued IPDES permit except at the discretion of the EPA Region 10 Administrator and only upon written request from the Department. ( )

**03. Permittee Responsibilities.** Any facility or activity holding an existing permit must: ( )

**a.** Comply with the conditions of the permit during any modification or revocation and reissuance proceeding under Section 201; and ( )

**b.** To the extent conditions of a new permit are stayed, comply with the conditions of the existing

permit correspond to the stayed conditions, unless compliance with the existing conditions is technologically incompatible with compliance with other new permit conditions that have not been stayed. ( )

**207. -- 299. (RESERVED)**

**300. CONDITIONS APPLICABLE TO ALL PERMITS.**

The following conditions apply to all IPDES permits. Additional conditions are in Sections 301 (Permit Conditions for Specific Categories), 302 (Establishing Permit Provisions), and 40 CFR 122.42(e). All applicable conditions will be incorporated into IPDES permits expressly or by reference. If incorporated by reference, a specific citation must be given in the permit. ( )

**01. Duty to Comply.** The permittee must comply with all conditions of the permit. ( )

**a.** Permit noncompliance constitutes a violation of Idaho law, the CWA, and is grounds for: ( )

i. Enforcement action; ( )

ii. Permit termination, revocation and reissuance, or modification; or ( )

iii. Denial of a permit renewal application. ( )

**b.** The permittee must comply with effluent standards or prohibitions established under CWA Section 307(a) for toxic pollutants and with standards for sewage sludge use or disposal established under CWA Section 405(d), Section 380 of these rules, and IDAPA 58.01.16.650, "Wastewater Rules," within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not been modified to incorporate the requirement. ( )

**02. Duty to Reapply.** If the permittee wishes to continue an activity regulated by the permit after the permit's expiration date, the permittee must apply for and obtain a new permit. If the permittee complies with the application requirements of Section 105, or the notice of intent requirements of Section 130 for a general permit, and a permit is not issued before the permit's expiration date, the permit remains in force as stipulated in Subsections 101.02 and 101.03. ( )

**03. Need to Halt or Reduce Activity.** In an enforcement action, a permittee may not assert as a defense that compliance with the conditions of the permit requires the permittee to halt or reduce the permitted activity. ( )

**04. Duty to Mitigate.** The permittee must take all reasonable steps to minimize or prevent discharge or sludge use or disposal in violation of the permit that has a reasonable likelihood of adversely affecting human health or the environment. ( )

**05. Proper Operation and Maintenance.** At all times, permittee must properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of the permit. ( )

**a.** Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. ( )

**b.** This provision requires operating back-up or auxiliary facilities or similar systems, installed by a permittee, only when needed to achieve compliance with the conditions of the permit or required by IDAPA 58.01.16 "Wastewater Rules." ( )

**06. Permit Actions.** The permit may be modified, revoked and reissued, or terminated for cause. The permittee filing a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. ( )

**07. Property Rights.** The permit does not convey any property rights of any sort or exclusive ( )

privilege. ( )

**08. Duty to Provide Information.** The permittee must furnish information, within a reasonable time, that the Department requests to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The permittee must furnish upon Department request, copies of records required by the permit. ( )

**09. Inspection and Entry.** The permittee must provide the Department's inspectors, or authorized representatives, including authorized contractors acting as representatives of the Department, upon presenting credentials required by law, access to: ( )

**a.** Enter the permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the permit conditions; ( )

**b.** Records that must be kept under the permit conditions and, at reasonable times, to copy the records; ( )

**c.** Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and ( )

**d.** Sample or monitor at reasonable times, to ensure permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location. ( )

**10. Monitoring and Records.** A permittee must comply with the following: ( )

**a.** Samples and measurements must represent the monitored activity. ( )

**b.** Permittee must retain: ( )

**i.** Monitoring information for at least three (3) years from the date of the sample, measurement, report or application. This may be extended by request of the Department at any time; and ( )

**ii.** Records of sewage sludge use and disposal activities for at least five (5) years or longer as required by 40 CFR Part 503. ( )

**c.** Records of monitoring information must include: ( )

**i.** Calibration and maintenance records; ( )

**ii.** Original strip chart recordings for continuous monitoring instrumentation or other forms of data approved by the Department; ( )

**iii.** Copies of reports required by the permit; ( )

**iv.** Records of all data used to complete the application or notice of intent for the permit; ( )

**v.** Date, exact place, and time of sampling or measurements; ( )

**vi.** Names of individuals who performed the sampling or measurements; ( )

**vii.** Dates analyses were performed; ( )

**viii.** Names of any individuals who performed the analyses; ( )

**ix.** Analytical techniques or methods used; and ( )

**x.** Results of the analysis. ( )

**d.** Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless another test method is required by 40 CFR Parts 401 through 471 or 501 through 503. ( )

**11. Signatory Requirements.** Applications, reports, or information submitted to the Department must be signed and certified in accordance with Section 090. ( )

**12. Reporting Requirements.** ( )

**a.** The permittee must give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility if: ( )

**i.** The alteration or addition to a permitted facility meets one (1) of the criteria for determining whether a facility is a new source as defined in Section 120 and 010; ( )

**ii.** The alteration or addition may significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants not subject to effluent limits in the permit or to notification requirements under Subsection 301.01.a.; or ( )

**iii.** The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and the alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites: ( )

(1) Not reported during the permit application process, or ( )

(2) Not reported under an approved land application or sludge disposal plan. ( )

**b.** The permittee must give advance notice to the Department of planned changes in the permitted facility or activity that may result in noncompliance with permit requirements. ( )

**c.** The permit is not transferable to any person except after notice to the Department. The Department may modify or revoke and reissue a permit to change the name of the permittee and incorporate other requirements necessary under Section 202. ( )

**d.** Monitoring results must be reported at the intervals specified in the permit and meet the following requirements: ( )

**i.** Monitoring results will be reported on a Discharge Monitoring Report (DMR) or forms ( may be electronic) provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices. Reports and forms must be submitted electronically by the permittee to the Department to comply with this section and 40 CFR Part 127 unless waived under 40 CFR 127.15. 40 CFR Part 127 does not eliminate existing requirements for electronic reporting. Independent of 40 CFR Part 127, permittees may be required to report electronically if specified by a particular permit. ( )

**ii.** If the permittee monitors a pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream specified in the permit or under 40 CFR Parts 401 through 471 or 501 through 503, the results must be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department. ( )

**iii.** Calculations for all limits that require averaging of measurements will utilize an arithmetic mean unless otherwise specified by the Department in the permit. ( )

**e.** A permittee must submit reports of compliance or noncompliance with, or progress reports on, interim and final requirements contained in the compliance schedule no later than fourteen (14) days following each schedule date of each requirement. Reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted electronically by the permittee to the Department in compliance with this section and 40

CFR Part 127 unless waived under 40 CFR 127.15. 40 CFR Part 127 does not eliminate existing requirements for electronic reporting. Independent of 40 CFR Part 127, permittees may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit. The Director may also require permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. ( )

**f.** The permittee must report to the Department any noncompliance that may endanger health or the environment as follows: ( )

i. Within twenty-four (24) hours from the time the permittee becomes aware of the circumstances, provide any information orally; ( )

ii. Within five (5) days from the time the permittee becomes aware of the circumstances, provide a written submission that contains a description of: ( )

(1) Noncompliance and its cause; ( )

(2) Period of noncompliance, including exact dates and times; ( )

(3) If the noncompliance has not been corrected, the anticipated time it is expected to continue; and ( )

(4) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; ( )

(5) For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described in Subsections 300.12.f.ii(1) through (4), type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combine sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. ( )

(6) Reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted electronically by the permittee to the Department in compliance with this section and 40 CFR Part 127 unless waived under 40 CFR 127.15. 40 CFR Part 127 does not eliminate existing requirements for electronic reporting. Independent of 40 CFR Part 127, permittees may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit. The Director may also require permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. ( )

iii. The following information must be reported within twenty-four (24) hours: ( )

(1) Unanticipated bypass that exceeds effluent limitations in the permit (Subsection 300.07, Property Rights); ( )

(2) Upset that exceeds effluent limits in the permit; and ( )

(3) Violation of a maximum daily discharge limit for the pollutants listed by the Department in the permit to be reported within twenty-four (24) hours (Subsection 302.09, Twenty-Four Hour Reporting); and ( )

iv. The Department may waive the written report on a case-by-case basis under Subsection 300.12.f.iii. if the oral report has been received within twenty-four (24) hours. ( )

**g.** The permittee must report instances of noncompliance not reported under Subsections 300.12.d., e., and f., when the monitoring reports are submitted. The reports of noncompliance must contain the information listed in Subsection 300.12.f. Reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted electronically by the permittee to the Department in compliance with this section and 40 CFR Part

127 unless waived under 40 CFR 127.15. 40 CFR Part 127 does not eliminate existing requirements for electronic reporting. Independent of 40 CFR Part 127, permittees may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit. The Director may also require permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. ( )

**h.** When the permittee becomes aware that it failed to submit relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Department, it must promptly submit the facts or correct information. ( )

**13. Bypass Terms and Conditions.** ( )

**a.** Bypass, as defined in Section 010, is prohibited, and the Department may take enforcement action against a permittee for bypass, unless: ( )

**i.** The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; ( )

**ii.** No feasible alternatives to the bypass existed, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if under reasonable judgment, adequate back-up equipment should have been installed to prevent a bypass from occurring during normal periods of equipment downtime or preventive maintenance; and ( )

**iii.** The permittee submitted a notice of a bypass to the Department in accordance with Subsections 300.13.c. and d. Notices must be submitted electronically by the permittee to the Department in compliance with this section and 40 CFR Part 127 unless waived under 40 CFR 127.15. 40 CFR Part 127 does not eliminate existing requirements for electronic reporting. Independent of 40 CFR Part 127, permittees may be required to report electronically if specified by a particular permit. ( )

**b.** The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines it will meet the three (3) conditions listed in Subsection 300.13.a. ( )

**c.** If the permittee knows in advance of the need for a bypass, it must submit notice to the Department, if possible, at least ten (10) days before the date of the bypass. ( )

**d.** The permittee must submit notice of an unanticipated bypass as required in Subsection 300.12.f. (24-hour notice). ( )

**e.** Bypasses not exceeding limits, are allowed to occur, and are not subject to Subsection 300.13.a. or 300.13.d. if: ( )

**i.** The bypass does not cause effluent limits to be exceeded, and ( )

**ii.** Only if it also is for essential maintenance to ensure efficient operation. ( )

**14. Upset Terms and Conditions.** ( )

**a.** In any enforcement action for noncompliance with technology-based permit effluent limitations, a permittee may claim upset, as defined in Section 010, as an affirmative defense. A permittee seeking to establish the occurrence of an upset has the burden of proof. ( )

**b.** Any determination made in administrative review of a claim that noncompliance was caused by upset, before an action for noncompliance is commenced, is not final administrative action subject to judicial review. ( )

**c.** The following conditions are necessary for a permittee to demonstrate that an upset occurred. A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed,

contemporaneous operating logs, or other relevant evidence that: ( )

- i. An upset occurred and the permittee can identify causes of the upset; ( )
- ii. The permitted facility was properly operated at the time ( )
- iii. The permittee submitted twenty-four (24)-hour notice of the upset as required Subsection 300.12.f.iii(2); and ( )
- iv. The permittee complied with remedial measures required under Subsection 300.04. ( )

**15. Penalties and Fines.** Permits will include penalty and fine requirements under Section 500. ( )

**301. PERMIT CONDITIONS FOR SPECIFIC CATEGORIES.**

In addition to Section 300, conditions identified in this section apply to all IPDES permits within the categories specified below. ( )

**01. Existing Manufacturing, Commercial, Mining, and Silvicultural Dischargers.** In addition to the reporting requirements under Subsection 300.12, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Department as soon as they know or have reason to believe: ( )

**a.** Any activity has occurred or will occur that results in a discharge, on a routine or frequent basis, of a toxic pollutant that is not limited in the permit if the discharge will exceed the highest of the following notification levels: ( )

- i. One hundred micrograms per liter (100 µg/L); ( )
- ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; ( )
- iii. Five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and ( )
- iv. One milligram per liter (1 mg/L) for antimony; ( )
- v. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Subsection 105.07; or ( )
- vi. The level established by the Department in accordance with Subsection 302.08; and ( )

**b.** Any activity has occurred or will occur that results in a discharge, on a non-routine or infrequent basis, of a toxic pollutant that is not limited in the permit if the discharge will exceed the highest of the following notification levels: ( )

- i. Five hundred micrograms per liter (500 µg/L); ( )
- ii. One milligram per liter (1 mg/L) for antimony; ( )
- iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Subsection 105.07; or ( )
- iv. The level established by the Department in accordance with Subsection 302.08. ( )

**02. Publicly Owned Treatment Works.** POTWs must provide adequate notice to the Department of: ( )

**a.** New introduction of pollutants into the POTW from an indirect discharger subject to CWA Section



301 or 306 if it were directly discharging those pollutants; and ( )

**b.** Substantial change in the volume or character of pollutants introduced into the POTW by a source introducing pollutants into the POTW during permit issuance. For this subsection, adequate notice must include: ( )

i. Quality and quantity of effluent introduced into the POTW, and ( )

ii. Anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. ( )

**03. Municipal Separate Storm Sewer Systems (MS4s).** The operator of a large or medium MS4 or an MS4 designated by the Department under 40 CFR 122.26(a)(1)(v) must submit an annual report by the anniversary of the date of the issuance of the permit. All reports must be submitted electronically by the owner, operator, or the duly authorized representative of the MS4 to the Department in compliance with this section and 40 CFR Part 127 unless waived under 40 CFR 127.15. 40 CFR Part 127 does not eliminate existing requirements for electronic reporting. Independent of 40 CFR Part 127, the owner, operator, or the duly authorized representative of the MS4 may be required to report electronically if specified by a particular permit. The report must include: ( )

**a.** Status of implementing the components of the storm water management program established as permit conditions; ( )

**b.** Proposed changes to the storm water management programs established as permit conditions. Proposed changes must be consistent with Subsection 105.18.b.iii.; ( )

**c.** Revisions, if necessary, to the assessment of controls and the fiscal analysis reported in the permit application under Subsection 105.18.b.iv. and 105.18.b.v.; ( )

**d.** Summary of data, including monitoring data, accumulated throughout the reporting year; ( )

**e.** Annual expenditures and budget for the year following each annual report; ( )

**f.** Summary describing the number and nature of enforcement actions, inspections, and public education programs; and ( )

**g.** Identification of water quality improvements or degradation. ( )

**04. Storm Water Dischargers.** The initial permits for discharges composed entirely of storm water issued under 40 CFR 122.26(e)(7) require compliance with the conditions of the permit as expeditiously as practicable but no later than three (3) years after the date of permit issuance. ( )

**05. Concentrated Animal Feeding Operations (CAFOs).** An applicable permit must include provisions under 40 CFR 122.42(e). ( )

**302. ESTABLISHING PERMIT PROVISIONS.**

The Department will establish conditions, as required on a case-by-case basis, to provide for and ensure compliance with applicable requirements of the CWA and state rules, including conditions under Section 101, Section 305, Section 304, and electronic reporting requirements identified under 40 CFR Part 127. An IPDES permit will include conditions meeting the following requirements, when applicable. ( )

**01. Incorporation.** Permit conditions will be incorporated expressly or by reference. If incorporated by reference, a specific citation to the applicable regulations or requirements will be given in the permit. ( )

**02. Applicable Requirements.** The Department will establish conditions, as required on a case-by-case basis, to provide for and ensure compliance with applicable requirements of the CWA and Section 101, and Subsections 304.01, and 305.01. Applicable requirements include: ( )

**a.** All statutory or regulatory requirements that take effect before final administrative disposition of the permit. ( )

**b.** Any requirement that takes effect before the modification or revocation and reissuance of a permit under Section 201. ( )

**c.** New or reissued permits, and to the extent allowed under Section 201 for modified or revoked and reissued permits, will incorporate each of the applicable requirements referenced in Sections 200 (Renewal of IPDES Permits), and 302 (Establishing Permit Provisions) through 304 (Monitoring and Reporting Requirements). ( )

**03. Technology-Based Effluent Limits and Standards.** ( )

**a.** Technology-based effluent limits and standards shall be based on: ( )

i. Effluent limits and standards promulgated under CWA Section 301; ( )

ii. New source performance standards promulgated under CWA Section 306; ( )

iii. Effluent limits determined on a case-by-case basis under CWA Section 402(a)(1); or ( )

iv. Combination of the three (3), in accordance with 40 CFR 125.3. ( )

**b.** For new sources or new dischargers, these technology-based limits and standards are subject to the provisions of 40 CFR 122.29(d). ( )

**c.** The Department may authorize a discharger, subject to technology-based ELGs and standards in an IPDES permit, to forgo sampling of a pollutant found at 40 CFR Parts 401 through 471, if the discharger has demonstrated through sampling and other technical factors that the pollutant is not present in the discharge or is present only at background levels from intake water and without an increase in the pollutant due to activities of the discharger. ( )

i. The waiver is good only for the term of the permit and is not available during the term of the first NPDES or IPDES permit issued to a discharger. ( )

ii. A request for the waiver must be submitted when applying for a reissued permit or modification of a reissued permit. The request must demonstrate through sampling or other technical information, including information generated during an earlier permit term that the pollutant is not present in the discharge or is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger. ( )

iii. A monitoring waiver approval will be included in the permit as an express permit condition and the reasons supporting the approval will be documented in the permit's fact sheet. ( )

iv. This provision does not supersede certification processes and requirements already established in existing ELGs and standards. ( )

**04. Other Effluent Limits and Standards.** ( )

**a.** If toxic effluent limit and standards under CWA Section 301, 302, 303, 307, 318, and 405 or prohibition (including schedules of compliance specified in effluent standard or prohibition) are promulgated under CWA Section 307(a) for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in the permit, the Department will initiate proceedings under Section 201 to modify or revoke and reissue the permit to conform to the more stringent toxic effluent standard or prohibition (Subsection 300.01). ( )

**b.** Standards for sewage sludge use or disposal under CWA Section 405(d), Section 380 of these rules, and IDAPA 58.01.16.650, "Wastewater Rules," will be applied, unless those standards have been included in a permit issued under the appropriate provisions of: ( )

- i. Subtitle C of the Solid Waste Disposal Act; ( )
- ii. Part C of Safe Drinking Water Act; ( )
- iii. The Clean Air Act; or ( )
- iv. State permit programs approved by the EPA. ( )

**c.** When no applicable standards exist for sewage sludge use or disposal, the permit may include requirements developed on a case-by-case basis to protect public health and the environment from any adverse effects that may occur from toxic pollutants in sewage sludge. ( )

**d.** If an applicable standard for sewage sludge use or disposal is promulgated under CWA Section 405(d), Section 380 (Sewage Sludge) of these rules, and IDAPA 58.01.16.650, “Wastewater Rules,” and that standard is more stringent than a limit on the pollutant or practice in the permit, the Department may initiate proceedings under these regulations to modify or revoke and reissue the permit to comply with Section 201, to conform to the standard for sewage sludge use or disposal. ( )

**e.** Include requirements applicable to cooling water intake structures under CWA Section 316(b), in accordance with 40 CFR 125.80 through 125.99. ( )

**05. Reopener Clause.** For a permit issued to a TWTDS (including sludge-only facilities), the Department will include a reopener clause to incorporate applicable standards for sewage sludge use or disposal promulgated under CWA Section 405(d). The Department may promptly modify or revoke and reissue a permit containing the reopener clause required by this subsection if the standard for sewage sludge use or disposal: ( )

- a.** Is more stringent than the requirements for sludge use or disposal in the permit, or ( )
- b.** Controls a pollutant or practice not limited in the permit. ( )

**06. Water Quality Standards and Requirements.** Requirements in addition to or more stringent than promulgated ELGs or standards under CWA Sections 301, 304, 306, 307, 318 and 405 will be included in a permit if they are necessary to: ( )

**a.** Achieve water quality standards established in IDAPA 58.01.02, “Water Quality Standards,” including narrative criteria for water quality and antidegradation provisions. ( )

**i.** Effluent limits in a permit will control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) the Department determines are or may be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above water quality standards, including narrative criteria for water quality. ( )

**ii.** When the Department determines whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a water quality standard, the Department will use procedures to account for: ( )

- (1) Existing controls on point and nonpoint sources of pollution; ( )
  - (2) Variability of the pollutant or pollutant parameter in the effluent; ( )
  - (3) Sensitivity of the species to toxicity testing (when evaluating WET); and where appropriate, ( )
  - (4) Dilution of the effluent in the receiving water; ( )
- iii.** When the Department determines, using the procedures in Subsection 302.06.a.ii., that a discharge

causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the allowable ambient concentration of a state numeric criteria within a state water quality standard for an individual pollutant, the permit must contain effluent limits for that pollutant. ( )

iv. When the Department determines, using the procedures in Subsection 302.06.a.ii., that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the numeric criterion for WET, the permit must contain effluent limits for WET. ( )

v. Except as provided in this subsection, when the Department determines, using the procedures in Subsection 302.06.a.ii., toxicity testing data, or other information, that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative criterion within an applicable water quality standard, the permit must contain effluent limits for WET. Limits on WET are not necessary where the Department demonstrates in the IPDES permit fact sheet, using the procedures in Subsection 302.06.a.ii., that chemical-specific limits for the effluent are sufficient to attain and maintain applicable numeric and narrative state water quality standards. ( )

vi. When the state has not established a numeric water quality criterion for a specific chemical pollutant that is present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion above a narrative criterion within an applicable state water quality standard, the Department will establish effluent limits using one (1) or more of the following options: ( )

(1) A calculated numeric water quality target or concentration value for the pollutant that the Department demonstrates will attain and maintain applicable narrative water quality criteria and will fully protect the designated use. A target or concentration value may be derived: ( )

(a) Using a proposed criterion, or an explicit policy or regulation interpreting its narrative water quality criterion, and ( )

(b) Supplemented with other relevant information that may include EPA's current Water Quality Standards Handbook, risk assessment data, exposure data, information about the pollutant from the Food and Drug Administration (FDA), and current EPA criteria documents; ( )

(2) EPA's water quality recommended criteria, published under CWA Section 304(a), supplemented where necessary by other relevant information; or ( )

(3) Indicator parameter for the pollutant of concern, provided the: ( )

(a) Permit identifies the pollutants intended to be controlled by using the effluent limit; ( )

(b) Required fact sheet states the basis for the limit, including a finding that compliance with the effluent limit on the indicator parameter will result in controls on the pollutant of concern that are sufficient to attain and maintain applicable water quality standards; ( )

(c) Permit requires all effluent and ambient monitoring necessary to show that during the term of the permit the limit on the indicator parameter continues to attain and maintain applicable water quality standards; and ( )

(d) Permit contains a reopener clause allowing the Department to modify or revoke and reissue the permit if the limits on the indicator parameter no longer attain and maintain applicable water quality standards. ( )

vii. When developing water quality-based effluent limits under this subsection, the Department will ensure that the: ( )

(1) Level of water quality to be achieved by limits on point sources established under this subsection is derived from, and complies with applicable water quality standards; and ( )

(2) Effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of available wasteload allocations for the discharge prepared by the state and approved by EPA under 40 CFR 130.7; ( )

b. Attain or maintain a specified water quality through water quality related effluent limits established under CWA Section 302; ( )

c. Conform to applicable water quality requirements under CWA Section 402(b)(5) when the discharge affects a state other than Idaho; ( )

d. Incorporate more stringent limits, treatment standards, or schedules of compliance requirements established under federal or state law or regulations in accordance with CWA Section 301(b)(1)(C); ( )

e. Ensure consistency with the requirements of a Water Quality Management plan approved by EPA under CWA Section 208(b); or ( )

f. Incorporate alternative effluent limits or standards when warranted by fundamentally different factors, under 40 CFR 125.30 through 125.32. ( )

**07. Technology-Based Controls for Toxic Pollutants.** ( )

a. In determining whether to include limits on toxic pollutants in a permit under this section, the Department will establish limits in accordance with Subsections 302.03, 302.04, and 302.06 and in a notification under Section 301, or other relevant information. The fact sheet must explain the development of limits included in the permit. ( )

b. An IPDES permit will include limits to control all toxic pollutants the Department determines (based on information reported in a permit application under Subsection 105.07 and 301.01.a., or on other information) are or may be discharged at a level greater than the level that can be achieved by the technology-based treatment requirements appropriate to the permittee under 40 CFR 125.3(c). ( )

c. The requirement that the limits control pollutants meeting the criteria of Subsection 302.07.b. will be satisfied by: ( )

i. Limits on those toxic pollutants; or ( )

ii. Limits on other pollutants that, in the judgment of the Department, will treat the pollutants under Subsection 302.07.b. to the levels required by 40 CFR 125.3(c). ( )

**08. Notification Level.** An IPDES permit will require a notification level that exceeds the notification level of Subsection 301.01.a., upon a petition from the permittee or on the Department's initiative. This new notification level may not exceed the level that can be achieved by the technology-based treatment requirements appropriate to the permittee under 40 CFR 125.3(c). ( )

**09. Twenty-Four (24) Hour Reporting.** A permit will list pollutants a permittee is required to report violations of maximum daily discharge limits within twenty-four (24) hours under Subsection 300.12.f.iii(3), including toxic pollutants or hazardous substances, or pollutants identified as the method to control a toxic pollutant or hazardous substance. ( )

**10. Permit Durations.** Permits must include permit durations under Subsection 101.01. ( )

**11. Monitoring Requirements.** Permits will include monitoring requirements under Section 304. ( )

**12. Pretreatment Program for POTWs.** A POTW permit will include pretreatment program conditions requiring the permittee to: ( )

**a.** Identify the character and volume of pollutants of Significant Industrial Users discharging into the POTW subject to Pretreatment Standards under CWA Section 307(b) and 40 CFR Part 403; ( )

**b.** Submit a local program when required by 40 CFR Part 403, to ensure compliance with pretreatment standards to the extent applicable under CWA Section 307(b); ( )

**i.** Incorporate the local program into the permit as described in 40 CFR Part 403, and ( )

**ii.** Require indirect dischargers to the POTW to comply with the reporting requirements of 40 CFR Part 403; ( )

**c.** Provide written technical evaluation of the need to revise local limits under 40 CFR 403.5(c)(1), following permit issuance or reissuance; and ( )

**d.** POTWs that are sludge-only facilities, must develop a pretreatment program under 40 CFR Part 403, when the Department determines that a pretreatment program is necessary to ensure compliance with CWA Section 405(d). ( )

**13. Best Management Practices.** An IPDES permit will include BMPs to control or abate the discharge of pollutants when: ( )

**a.** Authorized under CWA Section 304(e) to control toxic pollutants and hazardous substances from ancillary industrial activities; ( )

**b.** Authorized under CWA Section 402(p) to control storm water discharges; ( )

**c.** Numeric effluent limits are infeasible; or ( )

**d.** Practices are necessary to achieve effluent limits and standards or to carry out the CWA. ( )

**14. Reissued Permits.** When a permit is renewed or reissued, it will include provisions under Section 200. ( )

**15. Privately-Owned Treatment Works.** For a privately owned treatment works, conditions expressly applicable to users, as a limited co-permittee, may be necessary in the permit issued to the treatment works to ensure compliance with applicable requirements under this section. ( )

**a.** Alternatively, the Department may issue separate permits to the treatment works and to its users or may require a separate permit application from a user. ( )

**b.** The Department's decision to issue a permit with no conditions applicable to users, to impose conditions on one (1) or more users, to issue separate permits, or to require separate applications, and the basis for that decision, will be stated in the fact sheet for the draft permit for the treatment works. ( )

**16. Grants.** An IPDES permit will include conditions imposed in grants made by the EPA to POTWs under CWA Sections 201 and 204, that are reasonably necessary to achieve effluent limits under CWA Section 301. ( )

**17. Sewage Sludge.** An IPDES permit will include requirements under CWA Section 405 governing the disposal of sewage sludge from POTWs or other TWTDS for uses where regulations have been established. ( )

**18. Navigation.** An IPDES permit will include conditions the Secretary of the Army considers necessary to ensure navigation and anchorage will not be substantially impaired, in accordance with Subsection 103.04 and 109.02. ( )

**19. Qualifying State or Local Programs.** ( )

**a.** For storm water discharges associated with small construction activity disturbing one (1) acre or more, but less than five (5) acres as specified in 40 CFR 122.26(b)(15), the Department may include permit conditions that incorporate by reference qualifying state or local erosion and sediment control program requirements. Where a qualifying state or local program does not include one (1) or more of the elements in this subsection, then the Department must include those elements as conditions in the permit. ( )

**b.** A qualifying state or local erosion and sediment control program includes requirements for construction site operators to: ( )

i. Implement appropriate erosion and sediment control BMPs; ( )

ii. Control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality; ( )

iii. Develop and implement a storm water pollution prevention plan, including: ( )

(1) Site descriptions; ( )

(2) Descriptions of appropriate control measures; ( )

(3) Copies of approved state or local requirements; ( )

(4) Maintenance procedures; ( )

(5) Inspection procedures; ( )

(6) Identification of non-storm water discharges; and ( )

iv. Requirements to submit a site plan for review that incorporates consideration of potential water quality impacts. ( )

**c.** For storm water discharges from a construction activity disturbing five (5) acres or more, including activities that disturb less than five (5) acres but are part of a larger common plan of development or sale that will ultimately disturb five (5) acres or more, as specified in 40 CFR 122.26(b)(14)(x), the Department may include permit conditions that incorporate by reference qualifying state or local erosion and sediment control program requirements. A qualifying state or local erosion and sediment control program includes the elements listed in Subsections 302.19.a. and b. and additional requirements necessary to achieve the technology-based standards of best available technology and best conventional technology based on the best professional judgment of the permit writer. ( )

### **303. CALCULATING PERMIT PROVISIONS.**

**01. Outfalls and Discharge Points.** Permit effluent limits, standards and prohibitions will be established for each outfall or discharge point of the permitted facility, except as otherwise provided under Subsections 302.13, and 303.08. ( )

**02. Production-Based Limits.** ( )

**a.** For POTWs, permit effluent limits, standards, or prohibitions will be calculated based on design flow. ( )

**b.** Except for POTWs or as provided in Subsection 303.02.b.ii., calculation of permit limits, standards, or prohibitions based on production (or other measure of operation) will be based upon a reasonable measure of actual production of the facility. ( )

i. For new sources or new dischargers, actual production must be estimated using projected

production. The time period of the measure of production must correspond to the time period of the calculated permit limit (e.g., monthly production is used to calculate average monthly discharge limits. ( )

ii. The Department may include a condition establishing alternate permit limits, standards, or prohibitions based upon anticipated increased (not to exceed maximum production capability) or decreased production levels. ( )

iii. For the automotive manufacturing industry only, the Department will establish an alternate condition under Subsection 303.02.b.ii., if the applicant satisfactorily demonstrates to the Department, during application submittal, that: ( )

(1) Actual production, as indicated in Subsections 303.02.b. and 303.02.b.i., is substantially below maximum production capability, and ( )

(2) Reasonable potential exists for an increase above actual production during the duration of the permit. ( )

iv. If the Department establishes permit conditions under Subsection 303.02.b.ii.: ( )

(1) The permit will require the permittee to notify the Department at least two (2) business days before the month the permittee expects to operate at a level higher than the lowest production level identified in the permit. The notice must specify: ( )

(a) Anticipated level and the period the permittee expects to operate at the alternate level; and ( )

(b) If the notice covers more than one (1) month, specify the reasons for the anticipated production level increase; and ( )

(c) New notice of discharge at alternate levels must cover a period or production level not covered by a prior notice or, if during two (2) consecutive months otherwise covered by a notice, the production level at the permitted facility does not meet the higher level designated in the notice; ( )

(2) The permittee must comply with the limit, standards, or prohibitions that correspond to the lowest level of production specified in the permit, unless the permittee has notified the Department under Subsection 303.02.b.ii., in which case the permittee must comply with the lower of the actual level of production during each month or the level specified in the notice; and ( )

(3) The permittee must submit, with the Discharge Monitoring Report, the level of production that occurred during each month and the limits, standards, or prohibitions applicable to that level of production. ( )

**03. Metals.** Permit effluent limits, standards, or prohibitions for a metal will be expressed in terms of total recoverable metal as defined in 40 CFR Part 136, unless: ( )

a. An applicable effluent standard or limit has been promulgated under the CWA and specifies the limit for the metal in the dissolved or valent or total form; ( )

b. In establishing permit limits on a case-by-case basis under 40 CFR 125.3, specify the limit on the metal in the dissolved or valent or total form to carry out the provisions of the CWA; or ( )

c. Approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium). ( )

**04. Continuous Discharges.** For continuous discharges, permit effluent limits, standards, and prohibitions, including those necessary to achieve water quality standards, will, unless impracticable, state: ( )

a. Maximum daily and average monthly discharge limits for all dischargers other than POTWs; or ( )



- b. Average weekly and average monthly discharge limits for POTWs. ( )
- 05. Noncontinuous Discharges.** Discharges that are not continuous, as defined in Section 010, will be described and limited, considering the following factors, as appropriate: ( )
- a. Frequency (e.g., a batch discharge must not occur more than once every three (3) weeks); ( )
- b. Total mass (e.g., not to exceed one hundred (100) kilograms of zinc and two hundred (200) kilograms of chromium per batch discharge); ( )
- c. Maximum rate of discharge of pollutants during the discharge (e.g., not to exceed two (2) kilograms of zinc per minute); and ( )
- d. Prohibition or limit of specified pollutants by mass, concentration, or other appropriate measure (e.g., must not contain at any time more than one-tenth (0.1) mg/L zinc or more than two hundred fifty (250) grams (one-fourth (¼) kilogram) of zinc in a discharge). ( )
- 06. Mass Limits.** ( )
- a. Pollutants limited in permits will have limits, standards, or prohibitions expressed in terms of mass except: ( )
- i. pH, temperature, radiation, or other pollutants that cannot be expressed by mass; ( )
- ii. When applicable standards and limits are expressed in other units of measurement; or ( )
- iii. If in establishing permit limits on a case-by-case basis under 40 CFR 125.3, limit expressed in mass are infeasible because the mass of the pollutant discharged cannot be related to a measure of operation (e.g., discharges of TSS from certain mining operations), and permit conditions ensure dilution will not be used as a substitute for treatment. ( )
- b. Pollutants limited by mass, may also be limited by other units of measurement, and the permit requires the permittee to comply with both limits. ( )
- 07. Pollutant Credits for Intake Water.** ( )
- a. The following definitions apply to intake credits in determining reasonable potential and establishing technology- and water quality- based effluent limits for IPDES permits. ( )
- i. An intake pollutant is the amount of a pollutant present in waters of the United States (including ground water as provided in Subsection 303.07.a.iv.) when water is removed from the same body of water by the discharger or other facility supplying the discharger with intake water. ( )
- ii. To be eligible for intake credit, an intake pollutant must be from the same body of water as the discharge, and the Department finds the intake pollutant would have reached the vicinity of the outfall point in the receiving water within a reasonable period if it had not been removed by the permittee. This finding will be established if: ( )
- (1) The background concentration of the pollutant in the receiving water (excluding any amount of the pollutant in the facility's discharge) is similar to the intake water; ( )
- (2) A direct hydrological connection exists between the intake and discharge points; and ( )
- (3) Water quality characteristics (e.g., temperature, pH, hardness) are similar in the intake and receiving waters. ( )

iii. The Department may consider other site-specific factors relevant to the transport and fate of the pollutant to determine in a particular case that a pollutant would have reached the vicinity of the outfall point in the receiving water within a reasonable period if it had not been removed by the permittee. ( )

iv. An intake pollutant from ground water may be considered from the same body of water if the Department determines the pollutant would have reached the vicinity of the outfall point in the receiving water within a reasonable period if it had not been removed by the permittee, except that the pollutant is not from the same body of water if the ground water contains the pollutant partially or entirely due to human activity, such as industrial, commercial, or municipal operations, disposal actions, or treatment processes. ( )

v. The determinations made under Subsections 303.07.b. and c. will be made on a pollutant-by-pollutant and outfall-by-outfall basis. ( )

vi. These provisions do not alter the Department's obligation under Subsection 302.06.a.vii(2) to develop effluent limits consistent with the assumptions and requirements of available waste load allocations for the discharge, that is part of a TMDL prepared by the Department and approved by EPA under 40 CFR 130.7, or prepared by EPA under 40 CFR 130.7(d). ( )

**b.** Consideration of intake pollutants for technology-based effluent limits: ( )

i. Upon request of the discharger, technology-based effluent limitations or standards will be adjusted to reflect credit for pollutants in the discharger's intake water if the: ( )

(1) Applicable effluent limits and standards contained in 40 CFR Part 401 through 471, specifically provide that they will be applied on a net basis; or ( )

(2) Discharger demonstrates the control system proposed or used to meet applicable technology-based limits and standards would, if properly installed and operated, meet the limits and standards in the absence of pollutants in the intake waters. ( )

ii. Credit for generic pollutants such as BOD or TSS will not be granted unless the permittee demonstrates the constituents of the generic measure in the effluent are substantially similar to the constituents of the generic measure in the intake water or appropriate additional limits are placed on process water pollutants either at the outfall or elsewhere. ( )

iii. Credit will be granted only to the extent necessary to meet the applicable limit or standard, up to a maximum value equal to the influent value. Additional monitoring may determine eligibility for credits and compliance with permit limits. ( )

iv. Credit will be granted only if the discharger demonstrates the intake water is drawn from the same body of water where the discharge is made. The Department may waive this requirement if the Department finds that no environmental degradation will result. ( )

v. This section does not apply to the discharge of raw water clarifier sludge generated from the treatment of intake water. ( )

**c.** Consideration of intake pollutants for water quality based effluent limits: ( )

i. The Department will evaluate if reasonable potential exists for the discharge of an identified intake pollutant to cause or contribute to an exceedance of a narrative or numeric water quality criterion. If the Department determines an intake pollutant in the discharge does not have the reasonable potential to cause or contribute to an exceedance of an applicable water quality standard, the Department is not required to include a water quality-based effluent limit for the identified intake pollutant in the facility's permit. ( )

ii. If a reasonable potential exists, then water quality-based effluent limits may be established that reflect a credit for intake pollutants where a discharger demonstrates that the ( )

(1) Facility removes the intake water containing the pollutant from the same body of water where the discharge is made; ( )

(2) Ambient background concentration of the pollutant does not meet the most stringent applicable water quality criterion for that pollutant; ( )

(3) Facility does not alter the identified intake pollutant chemically or physically to cause adverse water quality impacts that would not occur if the pollutants had not been removed from the body of water; ( )

(4) Timing and location of the discharge does not cause adverse water quality impacts to occur that would not occur if the identified intake pollutant had not been removed from the body of water; and ( )

(5) For determining water quality-based effluent limits, facility does not increase the identified intake pollutant concentration at the point of discharge as compared to the pollutant concentration in the intake water. ( )

iii. Where the conditions in Subsection 303.07.c.i. and ii are met, the Department may establish a water quality-based effluent limit allowing a facility to discharge a mass and concentration of the intake pollutant that are no greater than the mass and concentration found in the facility's intake water. A discharger may add mass of the pollutant to its waste stream if an equal or greater mass is removed before discharge, so there is no net addition of the pollutant in the discharge compared to the intake water. ( )

iv. Where intake water for a facility is provided by a municipal water supply system and the supplier provides treatment of the raw water that removes an intake water pollutant, the concentration of the intake water pollutant will be determined at the point where the water enters the water supplier's distribution system. ( )

v. Where a facility discharges intake pollutants from multiple sources that originate from the receiving water body and from other water bodies, the Department may derive an effluent limit reflecting the flow-weighted amount of each source of the pollutant if conditions in Subsection 303.07.c.ii. are met and adequate monitoring to determine compliance can be established and is included in the permit. ( )

vi. The permit will specify how compliance with mass and concentration-based limitations for the intake water pollutant will be assessed. This assessment may be based on the effluent limit on background concentration data. Alternatively, the Department may determine compliance by monitoring the pollutant concentrations in the intake water and effluent. Monitoring may be supplemented by monitoring internal waste streams or by a Department evaluation of the use of BMPs. ( )

vii. Effluent limits will be established to comply with all other applicable state and federal laws and regulations including technology-based requirements and anti-degradation policies. ( )

viii. When determining whether water quality based effluent limits are necessary, information from chemical-specific, WET and biological assessments will be considered independently. ( )

ix. Permit limits will be consistent with the assumptions and requirement of waste load allocations or other provisions in a TMDL that has been approved by the EPA. ( )

**08. Internal Waste Streams.** ( )

a. When permit effluent limits or standards imposed at the point of discharge are impractical or infeasible, effluent limits or standards for discharges of pollutants may be imposed on internal waste streams before mixing with other waste streams or cooling water streams. In those instances, the monitoring required by Section 304 will also be applied to the internal waste streams. ( )

b. Limits on internal waste streams will be imposed only when the fact sheet states the exceptional circumstances that make the limits necessary, such as: ( )

i. When the final discharge point is inaccessible (e.g., under ten (10) meters of water); ( )

ii. Wastes at the point of discharge are so diluted it makes monitoring impracticable; or ( )

iii. Interferences among pollutants at the point of discharge make detection or analysis impracticable. ( )

**09. Disposal of Pollutants into Wells, into POTWs, or by Land Application.** ( )

**a.** When part of a discharger’s process wastewater is not discharged into waters of the United States because it is disposed into a well, into a POTW, or by land application, reducing the flow or level of pollutants discharged into waters of the United States, applicable effluent standards and limits for the discharge in an IPDES permit will be adjusted to reflect the reduced raw waste resulting from the disposal. Effluent limits and standards in the permit are calculated by one (1) of the following methods: ( )

i. If none of the waste from a particular process is discharged into waters of the United States, and ELGs provide separate allocation for wastes from that process, allocations for the process are eliminated from calculation of permit effluent limits or standards; or ( )

ii. In all cases other than those described in Subsection 303.09.a.i., effluent limits are adjusted by multiplying the effluent limitation derived by applying ELGs to the total waste stream by the amount of wastewater flow to be treated and discharged into waters of the United States, and dividing the result by the total wastewater flow. Effluent limits and standards calculated may be further adjusted under 40 CFR Part 125, subpart D, to make them more or less stringent if discharges to wells, POTWs, or by land application change the character or treatability of the pollutants discharged to receiving waters. This method may be algebraically expressed as:

$P=(E \times N)/T$ ; where P is the permit effluent limit, E is the limit derived by applying effluent guidelines to the total waste stream, N is the wastewater flow to be treated and discharged to waters of the United States, and T is the total wastewater flow.
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

( )

**b.** Subsection 303.09.a. does not apply to the extent that promulgated ELGs: ( )

i. Control concentrations of pollutants discharged but not mass; or ( )

ii. Specify a different specific technique for adjusting effluent limits to account for well injection, land application, or disposal into POTWs. ( )

**c.** Subsection 303.09.a. does not alter a discharger’s obligation to meet more stringent requirements established under Sections 300 (Conditions Applicable to all Permits), 301 (Permit Conditions for Specific Categories), 40 CFR 122.42(e), and 302 (Establishing Permit Provisions). ( )

**d.** Disposal of discharge into injection wells is regulated by: ( )

i. Idaho Department of Water Resources, in compliance with the IDAPA 37.03.03, “Rules and Minimum Standards for the Construction and Use of Injection Wells,”; or ( )

ii. Health District with jurisdiction, in compliance with IDAPA 58.01.03, “Individual/Subsurface Sewage Disposal Rules,” for a Class V injection well. ( )

**e.** Disposal of discharge onto the surface of the land is regulated by the Department under IDAPA 58.01.17, “Recycled Water Rules.” ( )

**304. MONITORING AND REPORTING REQUIREMENTS.**

**01. Monitoring Requirements.** A permit will include: ( )

a. Requirements for the proper use, maintenance, and installation, when appropriate, of monitoring equipment or methods (including biological monitoring methods when appropriate); ( )

b. Type, intervals, and frequency of monitoring sufficient to yield data that represent the monitored activity including, when appropriate, continuous monitoring; ( )

c. Provisions for reporting the results of monitoring, including frequency, appropriate for the regulated activity based on the impact of that activity and as specified in 40 CFR Part 127 (NPDES Electronic Reporting). Reporting must be no less frequent than specified in 40 CFR 122.44; ( )

d. Mass (or other measurement specified in the permit) for each pollutant limited in the permit; ( )

e. Volume of effluent discharged from each outfall; ( )

f. Other measurements as appropriate, including; ( )

i. Pollutants in internal waste streams under Subsection 303.08; ( )

ii. Pollutants in intake water for net limits under Subsection 303.07; ( )

iii. Frequency, rate of discharge, etc., for non-continuous discharges under Subsection 303.05; ( )

iv. Pollutants subject to notification requirements under Subsection 301.01; and ( )

v. Pollutants in sewage sludge or other monitoring as specified in 40 CFR Part 503; or as determined to be necessary on a case-by-case basis under CWA Section 405(d)(4), Section 380 (Sewage Sludge) of these rules, and IDAPA 58.01.16.650, "Wastewater Rules"; ( )

g. According to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 for the analysis of pollutants or pollutant parameters, or another method required under 40 CFR Parts 401 through 471 or Part 501 through 503. Consistent with 40 CFR Part 136, applicants or permittees may provide matrix- or sample-specific minimum levels rather than the published levels. When an applicant or permittee can demonstrate that, despite a good faith effort to use a method that otherwise meets the definition of "sufficiently sensitive," the analytical results are not consistent with the QA/QC specifications for the method, then the Department may determine the method is not performing adequately and the Department will select a different method from the remaining EPA-approved methods that is sufficiently sensitive consistent with provisions outlined in Subsections 304.01.g.i. and ii. method is "sufficiently sensitive" when: ( )

i. The method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or ( )

ii. The method has the lowest ML of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapter N or O, for the measured pollutant or pollutant parameter; and ( )

h. For pollutants or pollutant parameters which have no approved methods under 40 CFR Part 136, or methods are not otherwise required under 40 CFR Part 401 through 471 or Part 501 through 503, monitoring must be conducted according to a test procedure specified in the permit for the pollutants or pollutant parameters. ( )

**02. Reporting Monitoring Results.** ( )

a. Except as provided in Subsections 304.02.d. and 304.02.e., the Department will establish requirements to report monitoring results on a case-by-case basis with a frequency dependent on the nature and effect of the discharge, but at least once a year. Results must be electronically reported in compliance with 40 CFR Part 127. ( )

b. For sewage sludge use or disposal practices, the Department will establish requirements to monitor

and report results on a case-by-case basis with a frequency dependent on the nature and effect of the sewage sludge use or disposal practice; minimally as specified in 40 CFR Part 503, Section 380 of these rules, and Idaho's Wastewater Rules, IDAPA 58.01.16.650, "Wastewater Rules," (where applicable), but at least once a year. Results must be electronically reported in compliance with 40 CFR Part 127. ( )

**c.** The Department will establish requirements to report monitoring results for storm water discharges associated with industrial activity subject to an ELG on a case-by-case basis with a frequency dependent on the nature and effect of the discharge, but at least once a year. ( )

**d.** The Department will establish requirements to report monitoring results for storm water discharges associated with industrial activity, other than those addressed in Subsection 304.02.c., on a case-by-case basis with a frequency dependent on the nature and effect of the discharge. At a minimum, a permit for a discharge will require the discharger to: ( )

**i.** Conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity; ( )

**ii.** Evaluate whether measures to reduce pollutant loadings identified in a storm water pollution prevention plan are adequate and properly implemented following the terms of the permit or whether additional control measures are needed; ( )

**iii.** Maintain for a period of three (3) years a record summarizing the results of the inspection and a certification that the facility is complying with the plan and the permit, and identifying incidents of noncompliance; ( )

**iv.** Sign the report and certification in accordance with Section 090; and ( )

**v.** For storm water discharges associated with industrial activity from inactive mining operations, where annual inspections are impracticable, may require certification that the facility is complying with the permit, or alternative requirements, once every three (3) years by an Idaho licensed professional engineer. ( )

**e.** A permit that does not require monitoring results reports at least annually must require the permittee to report, at least annually, all instances of noncompliance not reported under Subsection 300.12. ( )

### **305. COMPLIANCE SCHEDULES.**

**01. General.** An IPDES permit may, when appropriate, specify a schedule leading to compliance with the CWA and these rules. ( )

**a.** Compliance schedules require compliance as soon as possible. ( )

**b.** The first IPDES permit issued to a new source or a new discharger will contain a compliance schedule only when necessary to allow a reasonable opportunity to attain compliance with requirements issued or revised after construction commences, but less than three (3) years before discharge commences. ( )

**c.** For recommencing dischargers, a compliance schedule will be available only when necessary to allow a reasonable opportunity to comply with requirements issued or revised less than three (3) years before discharge recommences. ( )

**d.** If a permit establishes a compliance schedule that exceeds one (1) year from the date of permit issuance, the schedule will state interim requirements and dates for achieving the interim requirements. If the schedule includes interim requirements: ( )

**i.** The time between interim dates will not exceed one (1) year, except for a compliance schedule with standards for sewage sludge use and disposal, the time between interim dates will not exceed six (6) months; or ( )

ii. If the time to complete interim requirements ( e.g., construction of a control facility) is more than one (1) year and is not readily divisible into stages for completion, the permit will specify interim dates for submitting reports of progress toward completing the interim requirements and indicate a projected completion date. ( )

e. Within fourteen (14) days following each interim and final date of compliance, the permittee must notify the Department in writing of its compliance or noncompliance with the interim or final requirements, or submit progress reports if Subsection 305.01.d.ii. applies. ( )

f. Permits may incorporate compliance schedules allowing a discharger to phase in, over time, compliance with water quality-based effluent limits in accordance with IDAPA 58.01.02.400, "Water Quality Standards." ( )

**02. Alternative Compliance Schedules.** An IPDES permit applicant or permittee may cease conducting regulated activities (by terminating direct discharge for point sources) rather than continuing to operate and meet permit requirements as follows: ( )

a. If the permittee decides to cease conducting regulated activities at a given time within the term of a permit that has already been issued: ( )

i. The permit may be modified to contain a new or additional schedule leading to timely cessation of activities; or ( )

ii. The permittee must cease conducting permitted activities before noncompliance with any interim or final compliance schedule requirement already specified in the permit. ( )

b. If the decision to cease conducting regulated activities is made before issuing a permit with a termination date, the permit will contain a schedule leading to termination that will ensure timely compliance with requirements no later than the statutory deadline. ( )

c. If the permittee is undecided whether to cease conducting regulated activities, the Department may issue or modify a permit to contain two (2) schedules, as follows: ( )

i. Both schedules will contain an identical interim deadline requiring a final decision on whether to cease conducting regulated activities no later than a date that ensures sufficient time to comply with requirements in a timely manner if the decision is to continue conducting regulated activities; ( )

ii. The first schedule will lead to timely compliance with applicable requirements, no later than the statutory deadline; ( )

iii. The second schedule will cease regulated activities by a date that will ensure timely compliance with requirements no later than the statutory deadline; and ( )

iv. Each permit containing two (2) schedules shall include a requirement that after the permittee has made a final decision under Subsection 305.02.c., it shall follow the schedule leading to compliance if the decision is to continue conducting regulated activities, and follow the schedule leading to termination if the decision is to cease conducting regulated activities. ( )

d. The applicant's or permittee's decision to cease conducting regulated activities shall be evidenced by a firm public commitment satisfactory to the Department, such as a resolution of the board of directors of a corporation. ( )

**306. -- 309. (RESERVED)**

**310. VARIANCES.**

**01. Variance Requests by non-POTWs.** ( )

- a.** A discharger that is not a POTW may request a variance from otherwise applicable effluent limitations under the following statutory or regulatory provisions, within the times specified ( )
- i. The presence of fundamentally different factors from which the ELG was based must be filed as follows: ( )
- (1) For a request from best practicable control technology currently available (BPT), by the close of the public comment period under Section 109; or ( )
- (2) For a request from best available technology economically achievable (BAT) and/or best conventional pollutant control technology (BCT), by no later than one hundred eighty (180) days after the date on which an ELG is published in the Federal Register for a request based on an ELG promulgated on or after February 4, 1987. ( )
- ii. The request must explain how the regulatory and/or statutory criteria have been met. ( )
- b.** An applicant may request for non-conventional pollutants under this section: ( )
- i. A variance from the BAT requirements for CWA Section 301(b)(2)(F) pollutants (i.e., non-conventional pollutants) under CWA Section 301(c) because of the economic capability of the owner or operator; or ( )
- ii. A variance under CWA Section 301(g) provided: ( )
- (1) The variance may only be requested for ammonia; chlorine; color; iron; total phenols (4AAP), when determined by the EPA Administrator to be a pollutant covered by CWA Section 301(b)(2)(F); and ( )
- (2) Other pollutants the EPA Administrator lists under CWA Section 301(g)(4). ( )
- c.** The request for variance as outlined in Subsection 310.01.b. must be made as follows: ( )
- i. For effluent limits based on an ELG, by submitting an initial request to the Department no later than two hundred seventy (270) days after promulgation of the applicable ELG followed by a completed request no later than the close of the public comment period under Section 109. ( )
- (1) The initial request to the Department must contain: ( )
- (a) Name of the discharger; ( )
- (b) Permit number; ( )
- (c) Outfall number(s); ( )
- (d) Applicable ELG; and ( )
- (e) Whether the discharger is requesting a CWA Section 301(c) or 301(g) modification or both. ( )
- (2) The completed request must demonstrate the applicable requirements of 40 CFR Part 125 have been met. The complete application for a request under CWA Section 301(g) must be filed one hundred eighty (180) days before the Department makes a decision (unless the Department establishes a shorter or longer period). ( )
- ii. For effluent limits not based on ELGs, the request need only comply with Subsection 310.01.c.i(2) and need not be preceded by an initial request under Subsection 310.01.c.i(1). ( )
- d.** A modification under CWA Section 302(b)(2) of requirements under the CWA Section 302(a) for achieving water quality related effluent limits may be requested before the close of the public comment period under



Section 109 on the permit from which the modification is sought. ( )

**e.** A variance under CWA Section 316(a) for the thermal component of a discharge must be filed with a timely application for a permit under Section 105 of these rules, except that if thermal effluent limits are established under CWA Section 402(a)(1) or are based on water quality standards, the request for a variance may be filed by the close of the public comment period under Section 109. ( )

**02. Variance Requests by POTWs.** A discharger that is a POTW may request a variance, under CWA Section 302(b)(2), from the water quality-based effluent limits found at CWA Section 302(a). The variance must be requested before the close of the public comment period under Section 109 ( )

**03. Permit Variance Decision Process.** ( )

**a.** The Department may deny requests for variances. A variance that has been denied by the Department may be appealed according to the process identified in Section 204. ( )

**b.** The Department may grant variances (subject to EPA objection under Subsection 103.02 or 40 CFR 123.44): ( )

**i.** For extensions under CWA Section 301(i) based on delay in completing a POTW; ( )

**ii.** After consultation with EPA, extensions under CWA Section 301(k) based on the use of innovative technology; ( )

**iii.** Under CWA Section 316(a) for thermal pollution; or ( )

**iv.** From water quality standards under IDAPA 58.01.02.260. ( )

**c.** The Department may forward to EPA with or without a recommendation, a variance based on: ( )

**i.** Economic capability of the applicant under CWA Section 301(c); or ( )

**ii.** Water quality-related effluent limits under CWA Section 302(b)(2). ( )

**d.** The Department may forward to EPA with a written concurrence, a variance based on: ( )

**i.** Presence of fundamentally different factors from which the ELG was based (CWA Section 301(n)); or ( )

**ii.** Certain water quality factors under CWA Section 301(g). ( )

**e.** The EPA may grant or deny a request for a variance that is forwarded by the Department. If the EPA Administrator (or delegate) approves the variance, the Department will prepare a draft permit incorporating the variance. ( )

**f.** A public notice of a draft permit for which a variance or modification has been approved or denied will identify the procedures for appealing that decision under Section 204. ( )

**04. Expedited Variance Procedures and Time Extensions.** ( )

**a.** Considering the time requirements in Subsections 310.01 and 310.02, the Department may notify a permit applicant before a draft permit is issued under Section 108 that the draft permit will contain limits eligible for variances. ( )

**i.** In the notice, the Department may require the applicant, as a condition of a potential variance request, to explain how the requirements of 40 CFR Part 125, apply to the variance, have been met, and may require

submitting an explanation within a specified time after receipt of the notice. ( )

ii. The Department may send the notice before the permit application is submitted. The draft or final permit may contain the alternative limits that may become effective upon final grant of the variance. ( )

**b.** A discharger who cannot file a timely complete request required under Subsections 310.01.c.i.(2) or 310.01.c.ii. may request an extension that; ( )

i. May be granted or denied at the discretion of the Department. ( )

ii. Is no more than six (6) months in duration. ( )

**05. Special Procedures for Decisions on Thermal Variances.** ( )

**a.** If the Department makes a final decision on a thermal variance before a final permit is issued it will only consider whether alternative effluent limits are justified under CWA Section 316(a) or whether cooling water intake structures will use the best available technology under CWA Section 316(b). ( )

i. Permit applicants who wish an early decision on these issues may request that the Department provide supporting reasons when the permit applications are filed. ( )

ii. The Department will decide whether to make an early decision. If granted, the early decision on CWA Section 316 (a) or (b) issues and the grant of the balance of the permit will be: ( )

(1) Considered permit issuance under these regulations, and ( )

(2) Subject to the same requirements of public notice and comment and the same opportunity for an appeal. ( )

**b.** If the Department, on review of the administrative record, determines that the information necessary to decide whether the CWA Section 316(a) issue is not likely to be available in time for a decision on permit issuance, the Department may issue a permit for a term up to five (5) years. ( )

i. The permit will require achievement of the effluent limits initially proposed for the thermal component of the discharge, no later than the date otherwise required by law. ( )

ii. The permit will also afford the permittee an opportunity to file a demonstration under CWA Section 316(a), after conducting studies required under 40 CFR 125.70 through 125.73. ( )

iii. A new discharger may not exceed the thermal effluent limit initially proposed unless and until the CWA Section 316(a) variance request is approved. ( )

**c.** A proceeding held under Subsection 310.05.a. will be: ( )

i. Publicly noticed as required by Section 109, and ( )

ii. Conducted at a time allowing the permittee to take measures to meet the final compliance date if its request for modification of thermal limits is denied. ( )

**d.** Whenever the Department defers the decision under CWA Section 316(a), a decision under CWA Section 316(b) may be deferred. ( )

**311. -- 369. (RESERVED)**

**370. PRETREATMENT STANDARDS.**

**01. Purpose and Applicability.** This section and 40 CFR Part 403.1 through 40 CFR 403.3, and 40

CFR 403.5 through 40 CFR 403.18 apply to: ( )

**a.** Pollutants from non-domestic sources covered by Pretreatment Standards that are indirectly discharged into or transported by truck, rail, or otherwise introduced into POTWs as defined in Subsection 370.04 and 40 CFR 403.3; ( )

**b.** POTWs that receive wastewater from sources subject to National Pretreatment Standards; and ( )

**c.** A new or existing source subject to Pretreatment Standards. National Pretreatment Standards do not apply to sources discharging to a sewer that is not connected to a POTW. ( )

**02. Objectives of General Pretreatment Regulations.** This section and 40 CFR Part 403 fulfill three (3) objectives: ( )

**a.** To prevent the introduction of pollutants into POTWs that will interfere with operating a POTW, including interference with its use or disposal of municipal sludge; ( )

**b.** To prevent the introduction of pollutants into POTWs that will pass through the treatment works or otherwise be incompatible with the works; and ( )

**c.** To improve opportunities to recycle and reclaim municipal and industrial wastewaters and sludges. ( )

**03. Department Program in Lieu of a POTW Program.** 40 CFR 403.8(a) requires certain POTWs develop a pretreatment program. The Department may, on a case-by-case basis, assume responsibility for implementing the POTW pretreatment program requirements in 40 CFR 403.8(f) in lieu of requiring the POTW to develop a pretreatment program. This does not preclude POTWs from independently developing pretreatment programs. ( )

**371. -- 379. (RESERVED)**

**380. SEWAGE SLUDGE.**

**01. Purpose.** This section and 40 CFR Part 503: ( )

**a.** Establish standards, consisting of general requirements, pollutant limits, management practices, and operational standards, for the final use or disposal of sewage sludge, and include: ( )

**i.** Standards for sewage sludge applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.; ( )

**ii.** Pathogen and alternative vector attraction reduction requirements for sewage sludge applied to the land or placed on a surface disposal site; and ( )

**iii.** On a case-by-case basis, controls for storm water runoff from lands where sewage sludge or septage has been placed for treatment or disposal. ( )

**b.** Include the frequency of monitoring and recordkeeping requirements when sewage sludge is: ( )

**i.** Applied to the land; ( )

**ii.** Placed on a surface disposal site; or ( )

**iii.** Fired in a sewage sludge incinerator; and ( )

- c. Include reporting requirements for: ( )
- i. Class I sludge management facilities; ( )
- ii. POTWs with a design flow rate equal to or greater than one million gallons per day (1 MGD); and ( )
- iii. POTWs that serve ten thousand (10,000) people or more. ( )

**02. Applicability.** This section and 40 CFR Part 503 apply to: ( )

- a. A person, who prepares sewage sludge, applies sewage sludge to the land, or fires sewage sludge in a sewage sludge incinerator and to the owner or operator of a surface disposal site; ( )
- b. Sewage sludge applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator; ( )
- c. Exit gas from a sewage sludge incinerator stack; or ( )
- d. Land where sewage sludge is applied, to a surface disposal site, and to a sewage sludge incinerator. ( )

**03. Exceptions to Incorporation by Reference.** 40 CFR 503.1 (Purpose and Applicability) is excluded from incorporation by reference in Section 003. ( )

**381. -- 399. (RESERVED)**

**400. COMPLIANCE EVALUATION.**

**01. Non-compliance Actions.** When a permittee is or was not in compliance with conditions of the existing, terminated, or expired permit that has been administratively continued, the Department may choose to do one (1) or more of the following: ( )

- a. Initiate an enforcement action; ( )
- b. Issue a notice of intent to deny the new application. If the application is denied and the expired permit is no longer effective as provided in Subsection 101.02, the owner or operator must cease the activities authorized by the permit or be subject to enforcement action for operating without a permit; ( )
- c. Issue a new permit with appropriate conditions; or ( )
- d. Take other actions authorized by state law. ( )

**401. -- 499. (RESERVED)**

**500. ENFORCEMENT.**

**01. General Enforcement and Penalties.** A person who violates permit conditions, filing or reporting requirements, duty to allow or carry out inspections, entry or monitoring requirements, or other provisions in these rules is subject to administrative, civil, or criminal enforcement and those remedies authorized in the Environmental Protection and Health Act, Sections 39-101 et seq., Idaho Code, including without limitation, civil and criminal penalties as provided in Sections 39-108 and 39-117, Idaho Code. ( )

**02. Truth in Reporting.** It is a violation of these rules for a person to falsify, tamper with, or knowingly render inaccurate a monitoring device or method required to be maintained under an IPDES permit. In addition to other remedies available to the Department, a violation is punishable by a fine as provided in Section 39-117, Idaho Code. ( )

**03. False Statements.** It is a violation of these rules for a person to knowingly make a false statement, representation, or certification in a record or other document submitted or required to be maintained under an IPDES permit, including monitoring reports or reports of compliance or non-compliance. In addition to other remedies available to the Department, a violation is punishable by a fine as provided in Section 39-117, Idaho Code. ( )

**04. Public Participation in Enforcement.** The Department will provide for public participation in the state enforcement process by: ( )

- a. Investigating and providing written responses to citizen complaints; ( )
- b. Not opposing intervention by a citizen when permissive intervention may be authorized by statute, rule, or regulation; and ( )
- c. Publishing notice of and providing at least thirty (30) days for public comment on a proposed settlement of a state enforcement action. ( )

**501. -- 599. (RESERVED)**

**600. ADMINISTRATIVE RECORDS AND DATA MANAGEMENT.**

**01. Administrative Record for Draft Permits.** The provisions of a draft permit prepared by the Department under Subsection 108.01 are based on the administrative record defined in this section. ( )

- a. For a draft permit, the record consists of: ( )
  - i. Application, if required, and any supporting data furnished by the applicant; ( )
  - ii. Draft permit or notice of intent to deny the application or to terminate the permit; ( )
  - iii. Fact sheet; ( )
  - iv. All documents cited in the fact sheet; and ( )
  - v. Documents contained in the supporting file for the draft permit. ( )
- b. Material readily available at the Department or published material generally available, and included in the administrative record under Subsection 600.01, need not be physically included with the rest of the record if specifically referred to in the fact sheet. ( )
- c. Applies to draft permits when public notice was given after the effective date of these rules. ( )

**02. Administrative Record for Final Permits.** The Department will base final permit decisions on the administrative record. ( )

- a. The administrative record for a final permit, including issuance, denial, transfer, modification, revocation and reissuance, or termination, will consist of the administrative record for the draft permit and fact sheet, as defined in Subsection 600.01, the proposed permit and associated information, and ( )
  - i. Comments received during the public comment period provided under Section 109; ( )
  - ii. Record of, and written materials submitted as part of, meetings held under Section 109; ( )
  - iii. Application or notice of intent to obtain coverage under a general permit, notice of intent to deny the application, or to terminate the permit, and supporting data furnished by the applicant; ( )

- iv. Response to comments required by Subsections 109.02 and 109.03 and new material placed in the record under that section; and ( )
  - v. Relevant correspondence and documents. ( )
  - b. The final permit and fact sheet become part of the administrative record after the final permit is issued. ( )
  - c. The additional documents identified under Subsection 600.02.b., 107.03, and 109.02 will be added to the record as soon as possible after their receipt or publication by the Department. The record is complete on the date the final permit is issued. ( )
  - d. This subsection applies to all IPDES permits when the draft permit was included in a public notice. ( )
  - e. Material readily available from the Department or published materials that are generally available and included in the administrative record under Subsection 600.02 or Section 109, need not be physically included in the same file as the rest of the record if it is specifically referred to in the fact sheet or in the response to comments. ( )
- 03. Electronic Submittals.** Information the Department requires to be submitted electronically, with an electronic signature approved by the Department, will become part of the Administrative Record in accordance with Subsections 600.01 and 02. ( )

**601. -- 999. (RESERVED)**

[Agency redlined courtesy copy]

**58.01.25 – ~~RULES REGULATING THE~~ IDAHO POLLUTANT DISCHARGE  
ELIMINATION SYSTEM ~~PROGRAM~~ RULES**

**000. LEGAL AUTHORITY.**

~~The Department and the Board are authorized to formulate and adopt rules as are necessary to obtain approval of the IPDES program by EPA pursuant to Section 39-175C, Idaho Code. The Department is authorized to implement and enforce the rules in this chapter pursuant to the Sections 39-175A-C and the provisions of the Environmental Protection and Health Act, Sections 39-101 et seq., Idaho Code. The rules in this chapter are not effective until the requirements in Section 39-175C, Idaho Code, have been met and the United States EPA has approved, under 33 U.S.C. 1342(b), Idaho's administration of the IPDES program.~~ Sections 39-105, 39-107, and 39-175C, Idaho Code.  
(3-24-22)( )

**001. ~~TITLE AND SCOPE.~~**

**01. ~~Title.~~** ~~The rules are titled IDAPA 58.01.25, "Rules Regulating the Idaho Pollutant Discharge Elimination System Program."~~ (3-24-22)

**02. ~~Scope.~~** ~~These rules establish the procedures and requirements for the issuance~~ issuing ~~and maintenance of~~ maintaining IPDES permits for facilities or activities ~~for which a person is~~ required by Idaho Code and the Clean Water Act (CWA) to obtain authorization to discharge pollutants to waters of the United States. ~~These permits are referred to in these rules as "IPDES permits" or "permits."~~ (3-24-22)( )

**002. CONFIDENTIALITY OF RECORDS.**

**01. ~~Identifying Confidential Information.~~** Information obtained by the Department under these rules

is subject to public disclosure ~~pursuant to~~ under the provisions of Chapter 1, Title 74, Idaho Code, and IDAPA 58.01.23, "Contested Case Rules and Rules for Protection and Disclosure of Records." In accordance with Sections 74-101 through 74-119, Idaho Code, ~~any~~ information submitted to the Department ~~pursuant to~~ under these rules may be claimed as confidential by the submitter. ~~It is the responsibility of the submitter to give notice of the existence of a must claim of confidentiality on each page or on another portion of the information at the time of submittal and such person has the burden of demonstrating when submitted and has the burden to demonstrate~~ that the information is confidential. (3-24-22)(    )

~~**02. Denial of Confidential Claims.** In accordance with Section 74-114, Idaho Code, a claim of confidentiality, including but not limited to a claim as to information claimed confidential as a trade secret, will be denied and any person may inspect and copy:~~ (3-24-22)

~~**a.** The name and address of any IPDES applicant or permittee;~~ (3-24-22)

~~**b.** The content of any IPDES permit;~~ (3-24-22)

~~**c.** IPDES permit applications, and information required to be submitted by IPDES application forms under Section 105 (Application for an Individual IPDES Permit), or IPDES General Permit Notice of Intent, and information required to be submitted under Section 130 (General Permits), whether the information is submitted on the application forms themselves or in any attachments used to supply information required by the application forms; and~~ (3-24-22)

~~**d.** Effluent data as defined in 40 CFR 2.302.~~ (3-24-22)

**003. INCORPORATION BY REFERENCE OF FEDERAL REGULATIONS.**

~~**01. Availability of Reference Material.** Codes, standards and regulations may be incorporated by reference in this rule pursuant to Section 67-5229, Idaho Code. Codes, standards or regulations adopted by reference throughout this rule are available in the following locations:~~ (3-24-22)

~~**a.** Department of Environmental Quality, Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255.~~ (3-24-22)

~~**b.** Law Library, State Law Library, 451 W. State Street, P.O. Box 83720, Boise, ID 83720-0051.~~ (3-24-22)

~~**c.** Electronic Code of Federal Regulations (eCFR) <http://www.ecfr.gov/cgi-bin/ECFR>.~~ (3-24-22)

~~**021. Incorporation by Reference.** The following documents are incorporated by reference into these rules. Any reference in these rules to requirements, procedures, or specific forms contained in any section or subsection constitute the full adoption by reference of that section or subsection, including any notes and appendices therein, unless expressly provided otherwise in these rules:~~ (3-24-22)(    )

~~**a.** 40 CFR 122.21(r), revised as of July 1, ~~2020~~ 2023 (Application Requirements for Facilities with Cooling Water Intake Structures);~~ (3-24-22)(    )

~~**b.** 40 CFR 122.23, revised as of July 1, ~~2020~~ 2023 (Concentrated Animal Feeding Operations);~~ (3-24-22)(    )

~~**c.** 40 CFR 122.24, revised as of July 1, ~~2020~~ 2023 (Concentrated Aquatic Animal Production Facilities);~~ (3-24-22)(    )

~~**d.** 40 CFR 122.25, revised as of July 1, ~~2020~~ 2023 (Aquaculture Projects);~~ (3-24-22)(    )

~~**e.** 40 CFR 122.26(a) through (b) and 40 CFR 122.26(e) through (g), revised as of July 1, ~~2020~~ 2023 (Storm Water Discharges);~~ (3-24-22)(    )

- f. 40 CFR 122.27, revised as of July 1, ~~2020~~ 2023 (Silvicultural Activities); (3-24-22)( )
- g. 40 CFR 122.29(d), revised as of July 1, ~~2020~~ 2023 (Effect of Compliance with New Source Performance Standards); (3-24-22)( )
- h. 40 CFR 122.30 and 40 CFR 122.32 through 40 CFR 122.37, revised as of July 1, ~~2020~~ 2023 (Requirements and Guidance for Small Municipal Separate Storm Sewer Systems); (3-24-22)( )
- i. 40 CFR 122.42(e), revised as of July 1, ~~2020~~ 2023 (Additional Conditions Applicable to NPDES Permits for Concentrated Animal Feeding Operations); (3-24-22)( )
- j. Appendix A to 40 CFR 122, revised as of July 1, ~~2020~~ 2023 (NPDES Primary Industry Categories); (3-24-22)( )
- k. Appendix C to 40 CFR 122, revised as of July 1, ~~2020~~ 2023 (Criteria for Determining a Concentrated Aquatic Animal Production Facility); (3-24-22)( )
- l. Appendix D to 40 CFR 122, revised as of July 1, ~~2020~~ 2023 (NPDES Permit Application Testing Requirements); (3-24-22)( )
- m. Appendix J to 40 CFR 122, revised as of July 1, ~~2020~~ 2023 (NPDES Permit Testing Requirements for Publicly Owned Treatment Works); (3-24-22)( )
- n. 40 CFR 125.1 through 40 CFR 125.3 (Subpart A), revised as of July 1, ~~2020~~ 2023 (Criteria and Standards for Imposing Technology-Based Treatment Requirements Under Sections 301(b) and 402 of the Clean Water Act); (3-24-22)( )
- o. 40 CFR 125.10 through 40 CFR 125.11 (Subpart B), revised as of July 1, ~~2020~~ 2023 (Criteria for Issuance of Permits to Aquaculture Projects); (3-24-22)( )
- p. 40 CFR 125.30 through 40 CFR 125.32 (Subpart D), revised as of July 1, ~~2020~~ 2023 (Criteria and Standards for Determining Fundamentally Different Factors Under Sections 301(b)(1)(A) and 301(b)(2)(A) and (E) of the Clean Water Act); (3-24-22)( )
- q. 40 CFR 125.70 through 40 CFR 125.73 (Subpart H), revised as of July 1, ~~2020~~ 2023 (Criteria for Determining Alternative Effluent Limitations Under Section 316(a) of the Clean Water Act); (3-24-22)( )
- r. 40 CFR 125.80 through 40 CFR 125.89 (Subpart I), revised as of July 1, ~~2020~~ 2023 (Requirements Applicable to Cooling Water Intake Structures for New Facilities Under Section 316(b) of the Clean Water Act); (3-24-22)( )
- s. 40 CFR 125.90 through 40 CFR 125.99 (Subpart J), revised as of July 1, ~~2020~~ 2023 (Requirements Applicable to Cooling Water Intake Structures for Phase II Existing Facilities Under Section 316(b) of the Clean Water Act); (3-24-22)( )
- t. 40 CFR 127.11 through 40 CFR 127.16 (Subpart B), revised as of July 1, ~~2020~~ 2023 (Electronic Reporting of NPDES Information from NPDES-Regulated Facilities); (3-24-22)( )
- u. 40 CFR 129.1 through 40 CFR 129.105 (Subpart A), revised as of July 1, ~~2020~~ 2023 (Toxic Pollutant Effluent Standards and Prohibitions); (3-24-22)( )
- v. 40 CFR 133.100 through 40 CFR 133.105, revised as of July 1, ~~2020~~ 2023 (Secondary Treatment Regulation); (3-24-22)( )
- w. 40 CFR Part 136, revised as of July 1, ~~2020~~ 2023 (Guidelines Establishing Test Procedures for the Analysis of Pollutants, including Appendices A, B, C, and D); (3-24-22)( )



- x. 40 CFR Part 401, revised as of July 1, ~~2020~~ 2023 (General Provisions); (3-24-22)( )
- y. 40 CFR 403.1 through 40 CFR 403.3; 40 CFR 403.5 through 40 CFR 403.18, revised as of July 1, ~~2020~~ 2023 (General Pretreatment Regulations for Existing and New Sources of Pollution, including Appendices D, E, and G); (3-24-22)( )
- z. 40 CFR Part 405 through 40 CFR Part 471, revised as of July 1, ~~2020~~ 2023 (Effluent Limitations and Guidelines); and (3-24-22)( )
- aa. 40 CFR 503.2 through 40 CFR 503.48, revised as of July 1, ~~2020~~ 2023 (Sewage Sludge, including Appendices A and B). (3-24-22)( )
- bb. The term “Waters of the United States or waters of the U.S.,” as defined in ~~40 CFR 122.2, revised as of June 22, 2020, by 85 Federal Register 22250-22342 (April 21, 2020), unless said revision is stayed, overturned or invalidated by a court of law or withdrawn by EPA, in which case the Department incorporates by reference the term “Waters of the United States or waters of the U.S.” as defined in 40 CFR 122.2, revised as of 84 Federal Register 56626, 56669, October 22, 2019 (effective December 23, 2019).~~ 84 Federal Register 56626, 56669, October 22, 2019 (effective December 23, 2019). (3-24-22)( )
- 032. Term Interpretation.** For the federal regulations incorporated by reference into these rules, unless the context in which a term is used clearly requires a different meaning, terms in this section ~~have the following meanings:~~ have the following (3-24-22)( )
- a. ~~The term~~ Administrator or Regional Administrator means the EPA Region 10 Administrator; (3-24-22)( )
- b. Approval Authority means the Department of Environmental Quality; ( )
- c. Approved POTW Pretreatment Program or Program or POTW Pretreatment Program means a program administered by a POTW that meets the criteria established in 40 CFR 403.8 and 403.9, and has been approved by the Department in accordance with 40 CFR 403.1; ( )
- ~~bd.~~ The term Control Authority means the POTW for a facility with a Department-approved pretreatment program and the Department for a POTW without a Department-approved pretreatment program; (3-24-22)( )
- ~~ee.~~ The term Director, ~~or State Director,~~ or State Program Director, means the Director of the Department of Environmental Quality with an NPDES permit program approved pursuant to ~~section 402(b) of the Clean Water Act~~ CWA Section 402(b); (3-24-22)( )
- ~~df.~~ The term National Pollutant Discharge Elimination System (NPDES) means the Idaho Pollutant Discharge Elimination System (IPDES); (3-24-22)( )
- g. National Pretreatment Standard, Pretreatment Standard, or Standard means a regulation containing pollutant discharge limits promulgated by the EPA in accordance with CWA Sections 307 (b) and (c), which applies to Industrial Users. This term includes prohibited discharge limits established under 40 CFR 403.5 or following procedures outlined in 40 CFR 403.8; ( )
- ~~eh.~~ The term Permitting Authority (~~also preceded by the terms~~ NPDES or State) means the ~~Idaho~~ Department of Environmental Quality with an NPDES permit program approved pursuant to ~~section 402(b) of the Clean Water Act~~ CWA Section 402(b); and (3-24-22)( )
- i. Water Management Division Director means a Director of the Water Management Division within the US Environmental Protection Agency Region 10 office or this person’s delegated representative. ( )

**004. ADMINISTRATIVE PROVISIONS.**

Persons may be entitled to appeal final IPDES permit decisions ~~pursuant to~~ under Section 204 (~~Appeals Process~~) of ~~these rules.~~ (3-24-22)( )

**005. WRITTEN INTERPRETATIONS.**

As described in Section 67-5201(19)(b)(iv), Idaho Code, the Department of Environmental Quality may have written statements which pertain to the interpretation of these rules. If available, such written statements can be inspected and copied at cost at the Department of Environmental Quality, 1410 N. Hilton, Boise, Idaho 83706-1255. (3-24-22)

**006. OFFICE HOURS — MAILING ADDRESS AND STREET ADDRESS.**

The state office of the Department of Environmental Quality is located at 1410 N. Hilton, Boise, Idaho 83706, (208) 373-0502, [www.deq.idaho.gov](http://www.deq.idaho.gov). The office hours are 8 a.m. to 5 p.m. Monday through Friday. (3-24-22)

**007.5. -- 009. (RESERVED)**

**010. DEFINITIONS.**

For the purpose of the rules contained in IDAPA 58.01.25, “Rules Regulating the Idaho Pollutant Discharge Elimination System Program,” the following definitions apply. Terms not expressly defined in this section have the meaning provided by are defined in IDAPA 58.01.02, Section 010, “Water Quality Standards,” or IDAPA 58.01.16, Section 010, “Wastewater Rules.” (3-24-22)( )

**01. Animal Feeding Operation.** ~~A lot or facility (other than an aquatic animal production facility) where the following conditions are met:~~ (3-24-22)

~~**a.** Animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of forty five (45) days or more in any twelve (12) month period; and~~ (3-24-22)

~~**b.** Crops, vegetation, forage growth, or post harvest residues are not sustained in the normal growing season over any portion of the lot or facility. As defined in 40CFR 122.23.~~ (3-24-22)( )

**02. Applicable Standards and Limitations.** ~~All~~ State, interstate, and federal standards and limitations to which a discharge, ~~a~~ sewage sludge use or disposal practice, or ~~a~~ related activity is subject under the Clean Water Act CWA, including effluent limitations, water quality standards, standards of performance, toxic effluent standards or prohibitions, best management practices (BMP), pretreatment standards, and standards for sewage sludge use or disposal under ~~the Clean Water Act sections~~ CWA Sections 301, 302, 303, 304, 306, 307, 308, 402, and 405. (3-24-22)( )

**03. Application.** ~~The~~ IPDES forms for applying for a permit or the EPA equivalent ~~standard national~~ forms when deemed acceptable by the Department, including any additions, revisions, or modifications to the forms. (3-24-22)( )

**04. Approved Program or Approved State.** A state or interstate program ~~which has been~~ approved or authorized by EPA under 40 CFR Part 123. (3-24-22)( )

**05. Aquaculture Project.** ~~A defined managed water area which uses discharges of pollutants into that designated area for the maintenance or production of harvestable freshwater, estuarine, or marine plants or animals. As defined in CFR 122.25.~~ (3-24-22)( )

**06. Average Monthly Discharge Limitation.** The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. ( )

**07. Average Weekly Discharge Limitation.** The highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. ( )

**08. Background.** The biological, chemical or physical condition of waters measured at a point immediately upstream (up-gradient) of the influence of an individual point or nonpoint source discharge. If several discharges to the water exist or if an adequate upstream point of measurement is absent, the Department will determine where background conditions ~~should~~ will be measured. (3-24-22)( )

**09. Best Management Practices (BMPs).** ~~Schedules of activities, prohibitions of Scheduled activities, prohibited~~ practices, maintenance procedures, and other management practices ~~to which~~ prevent or reduce the pollution of waters of the United States. BMPs ~~also~~ include treatment requirements; operating procedures; and practices to control ~~plant~~ site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. (3-24-22)( )

**10. Biochemical Oxygen Demand (BOD).** ~~The measure of the amount of oxygen necessary to satisfy the biochemical oxidation requirements of organic materials at the time the sample is collected; unless otherwise specified, this term will mean the five (5) day BOD incubated at twenty (20) degrees C.~~ As defined in IDAPA 58.01.16. (3-24-22)( )

**11. Biological Monitoring or Biomonitoring.** ~~The use of a biological entity as a detector and its response as a measure to determine environmental conditions. Toxicity tests and biological surveys, including habitat monitoring, are common biomonitoring methods.~~ As defined in IDAPA 58.01.02. (3-24-22)( )

**12. Bypass.** The intentional diversion of wastewater from any portion of a treatment facility. ( )

**13. Chemical Oxygen Demand (COD).** A bulk parameter that measures the oxygen-consuming capacity of organic and inorganic matter present in water or wastewater. ~~It is,~~ expressed as the amount of oxygen consumed from a chemical oxidant in a specific test. (3-24-22)( )

**14. Class I Sludge Management Facility.** ~~Any~~ POTW, identified under 40 CFR 403.8(a), ~~as being~~ required to have an approved pretreatment program (including ~~such~~ POTWs ~~where for which~~ the Department has ~~elected to~~ assume local program responsibilities ~~pursuant to~~ under 40 CFR 403.10(e) and any other treatment works treating domestic sewage (TWTDS) classified as a Class I sludge management facility by the Department, because of the potential for its sludge use or disposal practices to adversely affect public health and the environment. (3-24-22)( )

**15. Clean Water Act (CWA).** Formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972. Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483 and Public Law 97-117, 33 U.S.C. 1251 et seq. (3-24-22)( )

**16. Clean Water Act and Regulations.** ~~The Clean Water Act and applicable regulations promulgated thereunder. In the case of an approved IPDES program, it includes Department program requirements.~~ (3-24-22)

**17. Compliance Schedule or Schedule of Compliance.** A schedule of remedial measures ~~included~~ in a permit, including an enforceable sequence of interim requirements (for example, e.g., actions, operations, or milestones ~~events~~) leading to compliance with the ~~Clean Water Act~~ CWA and these rules. (3-24-22)( )

**18. Concentrated Animal Feeding Operation (CAFO).** ~~Animal feeding operation that is defined as a Large CAFO in accordance with 40 CFR 122.23(b)(4), as a Medium CAFO in accordance with 40 CFR 122.23(b)(6), or that is designated as a CAFO in accordance with 40 CFR 122.23(c). Two (2) or more animal feeding operations under common ownership are considered to be a single animal feeding operation for the purposes of determining the number of animals at an operation, if they adjoin each other or if they use a common area or system for the disposal of wastes.~~ As defined in 40 CFR 122.23. (3-24-22)( )

**19. Concentrated Aquatic Animal Production (CAAP).** ~~A hatchery, fish farm, or other facility which meets the criteria in Appendix C of 40 CFR Part 122, or which the Department designates under 40 CFR 122.24(e).~~ As defined in CFR 122.24 (3-24-22)( )

**20. Continuous Discharge.** A discharge ~~which occurs~~ occurring without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities. (3-24-22)( )

**21. Daily Discharge.** The discharge of a pollutant measured during a calendar day or any twenty-four (24)-hour period that reasonably represents the calendar day for ~~purposes of~~ sampling. For pollutants with limitations

expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant discharged over the day. (3-24-22)( )

~~22.~~ **Department.** The Idaho Department of Environmental Quality. (3-24-22)

~~23~~**21.** **Design Flow.** The average or maximum point source discharge volume per unit time that a facility or system is constructed to accommodate. ( )

~~24~~**2.** **Direct Discharge.** The discharge of a pollutant to waters of the United States. ( )

~~25.~~ **Director.** The Director of the Idaho Department of Environmental Quality or authorized agent. (3-24-22)

~~26~~**3.** **Discharge Monitoring Report (DMR).** ~~The A required~~ facility or activity report containing monitoring and discharge quality and quantity information and data required to be, submitted periodically, as defined in the discharge permit. These reports must be submitted to the Department ~~on a Department~~ in an approved format. (3-24-22)( )

~~27~~**4.** **Discharge.** When used without qualification means the discharge of a pollutant. ( )

~~28~~**5.** **Discharge of a Pollutant.** Any addition of any pollutant or combination of pollutants to waters of the United States from any point source. This definition includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by any indirect discharger. (3-24-22)( )

~~29~~**6.** **Draft Permit.** A document prepared under these rules indicating the Department's tentative decision to issue or deny, modify, revoke and reissue, terminate, or reissue a permit. A notice of intent to terminate termination of a permit, and a notice of intent to deny a permit, as discussed in Subsections 107.01 and 203.02, are types of draft permits. ~~A d Denial~~ of a request for modification, revocation and reissuance, or termination, as discussed in Subsection 201.01, is not a draft permit. A proposed permit is not a draft permit. (3-24-22)( )

~~30~~**27.** **Effluent.** ~~Any d~~ Discharge of treated or untreated pollutants into waters of the United States. (3-24-22)( )

~~31~~**28.** **Effluent Limitation or Limit.** Any restriction imposed by the Department on quantities, discharge rates, and concentrations of pollutants ~~which that~~ are discharged from point sources into waters of the United States, in accordance with these rules and the ~~Clean Water Act~~ CWA. (3-24-22)( )

~~32~~**29.** **Effluent Limitations Guidelines (ELG).** A regulation published by ~~the~~ EPA under ~~the Clean Water Act section~~ CWA Section 304(b) to adopt or revise effluent limitations. (3-24-22)( )

~~33~~**0.** **Electronic Signature.** Information in digital form that is included in or associated with an electronic document ~~for the purpose of expressing that signifies~~ the same meaning and intention as ~~would~~ a handwritten signature. (3-24-22)( )

~~34.~~ **Environmental Protection Agency (EPA).** The United States Environmental Protection Agency. (3-24-22)

~~35~~**1.** **Equivalent Dwelling Unit (EDU).** A measure where one (1) EDU is equivalent to wastewater generated from one (1) single-family residence. For ~~the purposes of~~ assessing fees associated with publicly or privately owned domestic sewage treatment, the number of EDUs is calculated as the population served divided by the average household size as defined in the most recent US Census Bureau data (for that municipality, county, or average number of persons per household for the state of Idaho). For fees associated with industrial wastewater treatment owned by a municipality, EDUs are calculated ~~in accordance with to~~ the definition of EDU in IDAPA

58.01.16, ~~Section 010~~, “Wastewater Rules.” (3-24-22)( )

**362.** Existing Source. Any source ~~which that~~ is not a new source or a new discharger. (3-24-22)( )

**373.** Facilities or Equipment. Buildings, structures, process or production equipment or machinery ~~which that~~ form a permanent part of the new source and ~~which~~ will be used in its operation, if these facilities or equipment are of such value as to represent a substantial commitment to construct. It excludes facilities or equipment used in ~~connection with~~ feasibility, engineering, and design studies regarding the source or water pollution treatment for the source. (3-24-22)( )

**384.** Facility or Activity. Any point source or ~~any~~ other facility or activity (including land or appurtenances ~~thereto~~) ~~that is subject to~~ regulation ~~ed~~ under the IPDES program. (3-24-22)( )

**395.** Fundamentally Different Factors. The factors relating to a discharger's facilities, equipment, processes or other factors related to the discharger are fundamentally different from the factors considered by EPA in ~~developmenting of~~ the national effluent limits. (3-24-22)( )

**4036.** General Permit. An IPDES permit issued under Section 130 ~~(General Permits)~~ authorizing a category of discharges within a geographical area. (3-24-22)( )

**4137.** Hazardous Substance. Any substance designated under 40 CFR Part 116 pursuant to ~~the Clean Water Act s~~ Section 311. (3-24-22)( )

**4238.** Idaho Pollutant Discharge Elimination System (IPDES). Idaho's program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under these rules and ~~the Clean Water Act s~~ Sections 307, 402, 318, and 405. (3-24-22)( )

**439.** Indian Country. ( )

a. ~~All~~ Land within the limits of any Indian reservation under the jurisdiction of the ~~United States~~ Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation; (3-24-22)( )

b. ~~All~~ Dependent Indian communities within the borders of the United States, whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of the state; and (3-24-22)( )

c. ~~All~~ Indian allotments, the Indian titles to which have not been extinguished including rights-of-way running through the same. (3-24-22)( )

**440.** Indian Tribe. Any Indian tribe, band, group, or community recognized by the Secretary of the Interior and exercising governmental authority over a federal Indian reservation. ( )

**451.** Indirect Discharger. A nondomestic discharger introducing pollutants to a privately or publicly owned treatment works. ( )

**46.** ~~Industrial Wastewater~~. Any waste, together with such water as is present that is the by-product of industrial processes including, but not limited to, food processing or food washing wastewater (see Process Wastewater). (3-24-22)

**472.** Infiltration. Water other than wastewater that enters a sewer system (including sewer service connections and foundation drains) from the ground through ~~sources~~ such ~~means~~ as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow. (3-24-22)( )

**483.** Inflow. Water other than wastewater that enters a sewer system (including sewer service connections) from sources ~~such as~~ including, but not limited to, roof leaders, cellar drains, yard drains, area drains,

drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration. (3-24-22)( )

~~44. **Integrated Planning.** A voluntary plan developed by the permittee in consultation and coordination with the Department. The plan will be based on USEPA 2012 policy guidance as further codified by the America's Water Infrastructure Act of 2018, Public law: 115-270. Integrated Plans may include wastewater discharges from POTWs, reclaimed or recycled water from municipalities, MS4 storm water, nonpoint source municipal storm water, and municipal owned geothermal water. An Integrated Plan may also incorporate other watershed activities undertaken by municipalities such as beneficial reuse of biosolids, stream and restoration activities, and aquatic and riparian improvements. ( )~~

~~495. **Interstate Agency.** An agency of two (2) or more states established by or under an agreement or compact, or any other agency of two (2) or more states having substantial powers or duties pertaining to the control of pollution. ( )~~

~~50. **Load Allocation (LA).** The portion of a receiving water body's loading capacity that is attributed either to one (1) of its existing or future nonpoint sources of pollution or to natural background sources. (3-24-22)~~

~~5146. **Major Facility.** A facility or activity that is: (3-24-22)( )~~

~~a. A publicly or privately owned treatment works with a design flow equal to or greater than one million gallons per day (1 MGD), or serves a population of ten thousand (10,000) or more, or causes significant water quality impacts; or ( )~~

~~b. A non-municipal facility that equals or exceeds the eighty (80) point accumulation as described in the Score Summary of the NPDES Non-Municipal Permit Rating Work Sheet (June 27, 1990) or the Department equivalent guidance document. (3-24-22)( )~~

~~5247. **Maximum Daily Discharge Limitation.** The highest allowable daily discharge. ( )~~

~~5348. **Maximum Daily Flow.** The largest volume of flow to be discharged during a continuous twenty-four-hour period expressed as a volume per unit time. ( )~~

~~549. **Mixing Zone.** A defined area or volume of the receiving water surrounding or adjacent to a wastewater discharge where the receiving water, as a result of the discharge, may not meet all applicable water quality criteria or standards. It is considered a place where wastewater mixes with receiving water and not as a place where effluents are treated. As defined in IDAPA 58.01.02. (3-24-22)( )~~

~~550. **Municipality.** A city, town, county, district, association, or other public body created by or under state law and having with jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under the Clean Water Act sSection 208. (3-24-22)( )~~

~~561. **National Pollutant Discharge Elimination System (NPDES).** The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under the Clean Water Act sSections 307, 402, 318, and 405. (3-24-22)( )~~

~~572. **New Discharger.** Any building, structure, facility, or installation that: (3-24-22)( )~~

~~a. From which there is Discharge or may be a discharge of pollutants; (3-24-22)( )~~

~~b. That did not commence the discharge of pollutants at a particular site prior to before August 13, 1979; (3-24-22)( )~~

~~c. Which is not a new source; and (3-24-22)( )~~



d. ~~Which h~~Has never received an ~~finally~~ effective NPDES or IPDES permit for discharges at that site. (3-24-22)( )

e. This ~~definition~~ includes an indirect discharger which commences discharging into waters of the United States after August 13, 1979; ~~It also includes and~~ any existing mobile point source, such as an aggregate plant, that ~~begins~~ discharging ~~inges~~ at a site for which it does not have a permit; (3-24-22)( )

**583. New Source.** Any building, structure, facility, or installation ~~from which there is or may be a that~~ discharges ~~or may discharge~~ of pollutants, ~~the and~~ construction ~~of which has~~ commenced: (3-24-22)( )

a. After promulgation of performance standards ~~of performance~~ under ~~the~~ Clean Water Act ~~s~~Section 306 ~~which are~~ applicable to ~~such the~~ source; or (3-24-22)( )

b. After proposal of performance standards ~~of performance in accordance with the~~ under Clean Water Act ~~s~~Section 306 ~~which are~~ applicable to ~~such the~~ source, but only if the standards are promulgated ~~in accordance with section 306~~ within one hundred twenty (120) days of their proposal. (3-24-22)( )

**594. Notice of Intent to Deny.** A ~~type of~~ draft permit that ~~shall~~ convey s to a permit applicant or permittee; the Department's intent to not issue or renew an IPDES permit. (3-24-22)( )

**6055. Notice of Intent to Obtain Coverage under an IPDES General Permit.** An applicant seeking discharge coverage under an IPDES general permit ~~shall must~~ submit a notice of intent to obtain coverage for discharges to waters of the United States under general permit classifications, including, but not limited to: (3-24-22)( )

- a. Storm Water Construction General Permit (CGP); ( )
- b. Multi-sector General Permit (MSGP) for Industrial Storm Water Requirements; ( )
- c. Municipal Separate Storm Sewer System (MS4) General Permit; ( )
- d. Concentrated Animal Feeding Operation (CAFO) General Permit; ( )
- e. Concentrated Aquatic Animal Production (CAAP) Facility General Permit; ( )
- f. Ground Water Remediation General Permit; ( )
- g. Suction Dredge General Permit; or ( )
- h. Pesticide General Permit (PGP). ( )

**564. Notice of ~~Intent to Terminate~~ion.** A notice of ~~intent to terminate~~ion ~~shall~~ convey s: (3-24-22)( )

a. ~~Convey t~~Io a permittee, the Department's intent to terminate an existing IPDES permit for cause; (3-24-22)( )  
or

b. ~~Convey t~~Io the Department a permittee's intent to terminate coverage for an activity under an ~~individual or G~~general ~~P~~permit. A construction general permit holder ~~is obligated to must~~ submit a notice of ~~intent to terminate upon completion of~~ termination within 30 (thirty) days of completing construction activities and, ~~in the case of storm water control, that~~ final stabilization ~~has been achieved~~ for storm water control. (3-24-22)( )

**6257. Owner or Operator.** The person, company, corporation, district, association, or other organizational entity that is an owner or operator of any facility or activity subject to regulation under the IPDES program. ( )

**6358. Pesticide Discharges.** ~~The d~~Discharges that result from the application of biological pesticides,

and the application of chemical pesticides that leave a residue, from point sources to waters of the United States. ~~In the context of this definition of pesticide discharges,~~ This does not include agricultural storm water discharges and return flows from irrigated agriculture, ~~which that~~ are excluded by law (33 U.S.C. 1342(l); 33 U.S.C. 1362(14)).

(3-24-22)( )

**6459. Pesticide Residue.** ~~For the purpose of To~~ determining whether an IPDES permit is needed for discharges to waters of the United States from pesticide application, ~~means that the~~ portion of a pesticide application ~~that is~~ discharged from a point source to waters of the United States ~~and that~~ no longer provides pesticidal benefits. It ~~also~~ includes ~~any~~ degradation ~~byproducts~~ of the pesticide.

(3-24-22)( )

**650. Permit.** The authorization, license, or equivalent control document issued by the Department to implement ~~the requirements of~~ these rules. This does not include ~~any permit which has not yet been the subject of final Department action, such as~~ a draft permit or a proposed permit.

(3-24-22)( )

**661. Person.** An individual, public or private corporation, partnership, association, firm, joint stock company, joint venture, trust, estate, state, municipality, commission, political subdivision of the state, state or federal agency, department or instrumentality, special district, interstate body or ~~any~~ legal entity, or an agent or employee ~~thereof, which is~~ recognized by law as the subject of rights and duties.

(3-24-22)( )

**672. Point Source.** ~~Any~~ discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft ~~from which that discharges or may discharge~~ pollutants ~~are or may be discharged~~. This ~~term~~ does not include return flows from irrigated agriculture or agricultural storm water runoff ~~that are excluded by law (33 U.S.C. 1342(l); 33 U.S.C. 1362(14))~~.

(3-24-22)( )

**683. Pollutant.** Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does not mean: ( )

a. Sewage from vessels; or ( )

b. Water, gas, or other material ~~which is~~ injected into a well to facilitate production of oil or gas, or water ~~derived in association with~~ ~~resulting from~~ oil and gas production and disposed of in a well, if the well used ~~either to facilitate for~~ production or ~~for disposal purposes~~ is approved by authority of the state ~~in which where~~ the well is located, and if the state determines ~~that~~ the injection or disposal will not ~~result in the~~ degradation ~~of~~ ground or surface water resources.

NOTE: Radioactive materials covered by the Atomic Energy Act are ~~those~~ encompassed in its definition of source, byproduct, or special nuclear materials. Examples of materials not covered include radium and accelerator-produced isotopes. See Train v. Colorado Public Interest Research Group, Inc., 426 U.S. 1 (1976).

(3-24-22)( )

**694. Potable Water.** ~~Water which is free from impurities in such amounts that it is safe for human consumption without treatment~~ As defined in IDAPA 58.01.16.

(3-24-22)( )

**7065. Pretreatment.** ~~The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW. The reduction or alteration may be obtained by physical, chemical or biological processes, process changes or by other means, except as prohibited by 40 CFR 403.6(d). Appropriate pretreatment technology includes control equipment, such as equalization tanks or facilities, for protection against surges or slug loadings that might interfere with or otherwise be incompatible with the POTW. However, where wastewater from a regulated process is mixed in an equalization facility with unregulated wastewater or with wastewater from another regulated process, the effluent from the equalization facility must meet an adjusted pretreatment limit calculated in accordance with 40 CFR 403.6(e)~~ As defined in 40 CFR 403.3.

(3-24-22)( )

**7166. Primary Industry Category.** An industry category listed in Appendix A of 40 CFR Part 122. ( )



**7267. Privately Owned Treatment Works.** Any device or system ~~which is~~ used to treat wastes and is not a ~~p~~ublicly ~~O~~wned ~~T~~reatment ~~W~~orks (POTW). (3-24-22)(    )

**7368. Process Wastewater.** Any ~~w~~ater ~~which that~~, during manufacturing or processing, comes into direct contact with or results from ~~the~~ production ~~ing~~ or ~~using a of any~~ raw material, intermediate product, finished product, byproduct, or waste product ~~(see Industrial Wastewater definition)~~. (3-24-22)(    )

**7469. Proposed Permit.** An IPDES permit prepared after the ~~close of the~~ public comment period ~~closes~~ (and, when applicable, any public meeting and administrative appeals) ~~which that~~ is sent to EPA for review before final issuance by the Department. A proposed permit is not a draft permit. (3-24-22)(    )

**750. Proposed Settlement of a State Enforcement Action.** A Department consent order ~~or~~, compliance agreement schedule, ~~or compliance schedule order~~ issued in response to a notice of violation that ~~is to will~~ be signed by the Director. This does not include amendments or extensions of consent orders ~~or~~, compliance agreement schedules, ~~or compliance schedule orders~~. (3-24-22)(    )

**761. Publicly Owned Treatment Works (POTW).** ~~A treatment works as defined by the Clean Water Act section 212, which is owned by a state or municipality, as defined by the Clean Water Act section 502(4). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW treatment plant. The term also means the municipality as defined in the Clean Water Act section 502(4), which has jurisdiction over the indirect discharges to and the discharges from such a treatment works As defined in 40 CFR 403.3.~~ (3-24-22)(    )

**772. Receiving Waters.** ~~Those w~~aters of the United States to which there is a discharge of pollutants. (3-24-22)(    )

**783. Recommencing Discharger.** A source ~~which that~~ renews discharges after terminating operations. (3-24-22)(    )

**794. Regional Administrator.** The Region 10 Administrator of the US Environmental Protection Agency or the authorized representative of the Regional Administrator. (3-24-22)(    )

**8075. Secondary Industry Category.** Any industry category ~~which that~~ is not a primary industry category. (3-24-22)(    )

**8176. Secondary Treatment.** Technology-based requirements for direct discharging POTWs, based on the expected performance of a combination of physical and biological processes typical for the treatment of pollutants in municipal sewage. Standards are ~~expressed as a the~~ minimum level of effluent quality ~~in terms of~~, for BOD<sub>5</sub>, total suspended solids (TSS), and pH (except ~~as provided by for~~ treatment equivalent to secondary treatment and other special considerations). (3-24-22)(    )

**8277. Secretary.** ~~The~~ Secretary of the Army, acting through the Chief of Engineers. (3-24-22)(    )

**8378. Septage.** ~~The l~~iquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained. (3-24-22)(    )

**8479. Severe Property Damage.** Substantial physical damage to property, damage to the treatment facilities ~~which~~ causes ~~ing~~ them to become inoperable, or substantial and permanent loss of natural resources ~~which that~~ can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (3-24-22)(    )

**850. Sewage.** ~~The water carried human or animal waste from residences, buildings, industrial establishments or other places, together with such ground water infiltration and surface water as may be present As defined in IDAPA 58.01.16.~~ (3-24-22)(    )

**861. Sewage from Vessels.** Human body wastes and ~~the~~ wastes from toilets and other receptacles

intended to receive or retain body wastes that are discharged from vessels and regulated under ~~the Clean Water Act~~ Section 312. (3-24-22)( )

~~872.~~ **Sewage Sludge.** ~~Any solid, semi-solid, or liquid residue removed during the treatment of municipal wastewater or domestic sewage~~ treatment. Sewage sludge includes, but is not limited to, solids removed during primary, secondary, or advanced wastewater treatment; scum; septage; portable toilet pumpings; type III marine sanitation device pumpings (33 CFR Part 159); and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during the incineration of sewage sludge incineration. (3-24-22)( )

~~883.~~ **Sewage Sludge Use or Disposal Practice.** The collection, storage, treatment, transportation, processing, monitoring, use, or disposal of sewage sludge. ( )

~~894.~~ **Significant Industrial User.** (3-24-22)

~~a.~~ All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Parts 400 through 471; and (3-24-22)

~~b.~~ Any other industrial user that: (3-24-22)( )

~~i.a.~~ Discharge an average of twenty-five thousand (25,000) gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blowdown wastewater); ( )

~~ii.b.~~ Contributes a process waste stream which that makes up five percent (5%) or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or (3-24-22)( )

~~iii.c.~~ Is designated as such by the Control Authority on the basis that the industrial user has a based on reasonable potential for to adversely affecting the POTW's operation or for violating any violate a Pretreatment Standard or requirement (in accordance with 40 CFR 403.8(f)(6)). (3-24-22)( )

~~9085.~~ **Silvicultural Point Source.** ~~Any discernible, confined, and discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities which are operated in connection with silvicultural activities and from which pollutants are discharged into waters of the United States. The term does not include non-point source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance from which there is natural runoff. However, some of these activities (such as stream crossing for roads) may involve point source discharges of dredged or fill material which may require a Clean Water Act section 404 permit~~ As defined in 40 CFR 122.27. (3-24-22)( )

~~9186.~~ **Site.** ~~The land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.~~ (3-24-22)( )

~~92.~~ **Sludge.** ~~The semi-liquid mass produced and removed by the wastewater treatment process.~~ (3-24-22)

~~9387.~~ **Sludge-Only Facility.** ~~Any TWTDS whose methods of sewage sludge use or disposal are is subject to regulations promulgated pursuant to the under Clean Water Act sSection 405(d) and is required to obtain an IPDES permit.~~ (3-24-22)( )

~~9488.~~ **Source.** ~~Any building, structure, facility, or installation from which there is that discharges or may be discharge of pollutants.~~ (3-24-22)( )

~~895.~~ **Standards for Sewage Sludge Use or Disposal.** ~~Regulations promulgated pursuant to the under Clean Water Act sSection 405(d) and these rules which govern minimum requirements for sewage sludge quality, management practices, and monitoring and reporting applicable to sewage sludge or the use or disposal of sewage sludge by any person.~~ (3-24-22)( )

~~96.~~ **State.** ~~The state of Idaho.~~ (3-24-22)

~~97. State/EPA Agreement. An agreement between the EPA Regional Administrator and the state of Idaho which coordinates EPA and Department activities, responsibilities and programs including those under the Clean Water Act programs. (3-24-22)~~

~~980. Storm Water. Storm water runoff, snow melt runoff, and surface runoff and drainage. ( )~~

~~991. Technology-Based Effluent Limitation (TBEL). Treatment requirements under the Clean Water Act that represent the minimum level of control that must to be imposed in a permit issued under CWA sSection 402 of the Clean Water Act. (3-24-22)( )~~

~~10092. Total Dissolved Solids. The tTotal dissolved (filterable) solids as determined by use of the method specified in 40 CFR Part 136. (3-24-22)( )~~

~~10193. Toxic Pollutant. Any substance, material or disease-causing agent, or a combination thereof, which that after discharge to waters of the United States and upon exposure, ingestion, inhalation, or assimilation into any organism (including humans), either directly from the environment or indirectly by ingestion through food chains, will cause death, disease, behavioral abnormalities, malignancy, genetic mutation, physiological abnormalities (including reproductive malfunctions in reproduction) or physical deformations in affected organisms or their offspring. Toxic pollutants include, but are not limited to, the one hundred twenty-six (126) priority pollutants identified by EPA pursuant to the under Clean Water Act sSection 307(a), or in the case of, for sewage sludge use or disposal practices, any pollutant identified in regulations implementing the Clean Water Act sSection 405(d). (3-24-22)( )~~

~~10294. Treatment. A process or activity conducted for the purpose of removing pollutants from wastewater As defined in IDAPA 58.01.16. (3-24-22)( )~~

~~103. Treatment Facility. Any physical facility or land area for the purpose of collecting, treating, neutralizing, or stabilizing pollutants including treatment plants; the necessary collecting, intercepting, outfall and outlet sewers; pumping stations integral to such plants or sewers; disposal or reuse facilities; equipment and furnishing thereof; and their appurtenances. For the purpose of these rules, a treatment facility may also be known as a treatment system, a wastewater system, wastewater treatment system, wastewater treatment facility, wastewater treatment plant, or privately or publicly owned treatment works. (3-24-22)~~

~~10495. Treatment Works Treating Domestic Sewage (TWTDS). A POTW or any other sewage sludge or waste water treatment devices or systems, regardless of ownership (including federal facilities), used in the storageing, treatmenting, recycling, and reclamationing of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge disposal. This definition does not include septic tanks or similar devices. For purposes of this definition, dDomestic sewage includes waste and waste water from humans or household operations that are discharged to or otherwise enter a treatment works. (3-24-22)( )~~

~~10596. Upset. An exceptional incident resulting in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (3-24-22)( )~~

~~10697. User. A person served by a wastewater system. ( )~~

~~10798. Variance. Any mechanism or provision under the Clean Water Act sSection 301 or 316 or under, 40 CFR Part 125, or in the applicable effluent limitations guidelines ELGs allowing modification to or waiver of the generally applicable effluent limitation requirements or time deadlines of the Clean Water Act. This includes provisions which allow ing the establishment of alternative limitations based on fundamentally different factors or on Clean Water Act sSections 301(c), 301(g), 301(h), 301(i), or 316(a). (3-24-22)( )~~

~~10899. Wasteload Allocation (WLA). The portion of a receiving water's loading capacity that is allocated to one (1) of its existing or future point sources of pollution. (3-24-22)( )~~

~~1090.~~ **Wastewater.** ~~Any combination of liquid or water and pollutants from activities and processes occurring in dwellings, commercial buildings, industrial plants, institutions and other establishments, together with any ground water, surface water, and storm water that may be present; liquid or water that is chemically, biologically, physically or rationally identifiable as containing blackwater, gray water or commercial or industrial pollutants; and sewage. As defined in IDAPA 58.01.16.~~ (3-24-22)( )

~~1401.~~ **Water Pollution.** Any alteration of the physical, thermal, chemical, biological, or radioactive properties of ~~any~~ waters of the United States, or the discharge of ~~any~~ pollutant into the waters of the United States, ~~which that~~ will or is likely to create a nuisance or to render ~~such~~ waters harmful, detrimental, or injurious to public health, safety, or welfare, or to fish and wildlife, or to domestic, commercial, industrial, recreational, aesthetic, or other beneficial uses. (3-24-22)( )

~~1402.~~ **Water Quality-Based Effluent Limitation (WQBEL).** An effluent limitation determined by selecting the most stringent of the effluent limits calculated using all applicable water quality criteria (e.g., aquatic life, human health, wildlife, translation of narrative criteria) for a specific point source to a specific receiving water. (3-24-22)( )

~~1403.~~ **Water Transfer.** An activity that conveys or connects waters of the United States without subjecting the transferred water to intervening industrial, municipal, or commercial use. ( )

~~1404.~~ **Wetlands.** Areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands ~~generally~~ include swamps, marshes, bogs, and similar areas. (3-24-22)( )

~~1405.~~ **Whole Effluent Toxicity (WET).** The aggregate toxic effect of ~~an~~ effluent measured directly by a toxicity test. (3-24-22)( )

011. -- 049. (RESERVED)

#### 050. COMPUTATION OF TIME.

01. **Computing Time.** ~~In~~ ~~When~~ computing ~~any~~ period of time scheduled to begin after or before ~~the occurrence of~~ an act or event ~~occurs~~, the date of the act or event is not included. The last day of the period is included, unless it is a Saturday, ~~a~~ Sunday, or ~~a~~ legal holiday, in which case the period runs until the end of the next day which is neither a Saturday, ~~a~~ Sunday, ~~nor~~ holiday. The section does not apply to submission deadlines for twenty-four (24) hour reporting, permit applications, or notices of intent for coverage under a general permit (3-24-22)( )

02. **Notice by Mail.** When ~~ever~~ a party or interested person has the right or is required to act within a prescribed period after the service of notice or other paper and the notice or paper is served ~~upon him or her~~ by mail, three (3) days will be added to the prescribed time. (3-24-22)( )

051. -- 089. (RESERVED)

#### 090. SIGNATURE REQUIREMENTS.

01. **Permit Applications and Notices of Intent.** ~~All~~ IPDES permit applications and notices of intent must be signed by a certifying official as follows: (3-24-22)( )

a. For a corporation, a responsible corporate officer ~~shall~~ ~~must~~ sign the application or notice of intent. In this subsection, a responsible corporate officer means: (3-24-22)( )

i. ~~A~~ ~~p~~ President, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or ~~any~~ other person who performs similar policy- or decision-making functions for the corporation; or (3-24-22)( )

ii. ~~The m~~Manager of one (1) or more manufacturing, production, or operating facilities ~~or sites~~, if ~~the manager~~: (3-24-22)( )

(1) ~~The manager i~~s authorized to make management decisions that govern the operation of the regulated facility, including ~~having~~ the explicit or implicit duty of ~~making recommending~~ major capital investments ~~recommendations~~, and initiating and directing other comprehensive measures to ~~as~~ensure long-term environmental compliance with environmental statutes and regulations; (3-24-22)( )

(2) ~~The manager can e~~nsures ~~that~~ the necessary systems are established or actions taken to gather complete and accurate information for IPDES permit application requirements; and (3-24-22)( )

(3) ~~Authority~~Has been assigned or delegated authority to sign documents ~~has been assigned or delegated to the manager in accordance with~~ following corporate procedures; (3-24-22)( )

b. For a partnership or sole proprietorship, the general partner or ~~the~~ proprietor, respectively, ~~shall~~ signs the application; and (3-24-22)( )

c. For a municipality, state, or other public agency, either a principal executive officer or ranking elected official ~~shall~~ must sign the application. In this subsection, a principal executive officer of an agency means: (3-24-22)( )

i. ~~The e~~Chief executive officer of the agency; or (3-24-22)( )

ii. ~~A s~~Senior executive officer ~~having responsibility~~ responsible for the overall operations of a principal geographic unit or ~~division of the~~ agency ~~division~~. (3-24-22)( )

**02. Reports and Other Information Submitted.** ~~Any~~ report or information required by an IPDES permit, notice of intent, monitoring and reporting provisions, and ~~any~~ other information requested by the Department, must be signed by a person described in Subsection 090.01, or by a duly authorized representative of that person. A person is a duly authorized representative only if: (3-24-22)( )

a. ~~The a~~Authorization is made in writing by a person described in Subsection 090.01; (3-24-22)( )

b. ~~The a~~Authorization specifies either: (3-24-22)( )

i. An individual or a position ~~having responsibility~~ responsible for the overall operation of the regulated facility or activity, including ~~the position of a~~ manager, operator, superintendent, or position of equivalent responsibility; or (3-24-22)( )

ii. An individual or position ~~having overall responsibility~~ responsible for ~~overall~~ environmental matters for the company; and (3-24-22)( )

c. The written authorization is submitted to the Department. ( )

**03. New Authorization.** If an authorization is no longer accurate due to a change in staffing or personnel for the overall operation of the facility, a new authorization satisfying the requirements of Subsection 090.01 must be submitted to the Department before or ~~together~~ with ~~any~~ report, information, or application to be signed by an authorized representative. (3-24-22)( )

**04. Certification.** ~~Any~~ person signing a document under Subsections 090.01 or 090.02 ~~shall~~ must certify as follows: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." (3-24-22)( )

05. **Electronic Signatures.** The Department may require ~~any~~ signed, certified, or authorized information ~~required under these rules~~ to be submitted electronically, with an electronic signature approved by the Department. (3-24-22)( )

06. **Electronic Reporting.** When documents described in Subsection 090.01 or 090.02 ~~of this rule~~ are submitted electronically by or on behalf of the IPDES-regulated facility, ~~any~~ persons providing the electronic signature ~~for such documents shall~~ must meet ~~all the~~ relevant requirements of this section, and ~~shall~~ ensure ~~that all of~~ the relevant requirements of 40 CFR Part 3 (Cross-Media Electronic Reporting) and 40 CFR Part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (3-24-22)( )

091. -- 099. (RESERVED)

## 100. EFFECT OF A PERMIT.

01. **Rights.** The issuance of, or coverage under, an IPDES permit does not convey ~~any~~ property rights or ~~any~~ exclusive privilege nor does it authorize ~~any~~ injury to persons or property or invasion of other private rights, or ~~any~~ infringement of state or local law or regulations. ~~The issuance of, or coverage under, an IPDES permit~~ It does not constitute authorization of the permitted activities by ~~any~~ an other state or federal agency or private person or entity, and does not excuse the permit holder from the obligation to obtain ~~any~~ other necessary approvals, authorizations, or permits. (3-24-22)( )

02. **Compliance.** Except for ~~any~~ toxic effluent standards and prohibitions imposed under ~~the Clean Water Act section~~ CWA Section 307, and standards for sewage sludge use or disposal under ~~the Clean Water Act section~~ CWA Section 405(d), compliance with an IPDES permit during its term constitutes compliance, for ~~purposes of~~ enforcement, with ~~Clean Water Act sections~~ CWA Sections 301, 302, 306, 307, 318, 403, and 405(a) through (b). ~~However, a~~ A permit or coverage under a permit may be modified, revoked and reissued, or terminated during its term for cause as ~~set out~~ established in Sections 130 (General Permits), 201 (Modification, or Revocation and Reissuance of IPDES Permits), and 203 (Termination of IPDES Permits). (3-24-22)( )

## 101. DURATION.

01. **Permit Term.** IPDES permits ~~shall~~ will be issued for a ~~fixed~~ duration ~~not to exceed of~~ five (5) years or less. (3-24-22)( )

a. The Department may issue a permit for ~~a period of~~ less than five (5) years. ~~An explanation of~~ The reasoning behind issuing a permit for a shorter period ~~shall~~ will be provided in the fact sheet. (3-24-22)( )

b. The duration of a permit may not be modified to lengthen the effective term of the permit past the maximum five (5) year duration. ( )

c. A permit may be issued to expire on or after the statutory deadline ~~set forth in the Clean Water Act sections~~ established in CWA Sections 301(b)(2)(A), (C), and (E), if the permit includes effluent ~~limitations to meet the requirements of the Clean Water Act sections~~ limits required by CWA Sections 301(b)(2)(A), (C), (D), (E) and (F), whether or not ~~applicable effluent limitations guidelines~~ ELGs have been promulgated or approved. (3-24-22)( )

d. A determination that a particular discharger falls within a given industrial category for ~~purposes of~~ setting a permit expiration date under Subsection 101.01.c. is not conclusive as to the discharger's inclusion in that industrial category for any other purposes, and does not prejudice any rights to challenge or change that inclusion at the time that a permit based on that determination is formulated. (3-24-22)( )

e. A federally-issued NPDES permit, ~~the administration of which has been~~ transferred to the Department ~~upon or to administer~~ after EPA approval of the IPDES program, ~~shall~~ continues in effect and ~~be i-es~~ enforceable by the Department, subject to Subsections 101.02 and 101.03. (3-24-22)( )

02. **Continuation of Individual Permits.** The conditions of an expired individual ~~permit, whether a~~



federal NPDES permit (except for permits ~~over which~~ under EPA ~~retains~~ authority) or a state-issued IPDES permit, will remain fully effective and enforceable until the effective date of a new permit or the date of the Department's final decision to deny the application for the new permit, if: (3-24-22)( )

a. The permittee ~~has~~ submitted a timely and complete application for a new permit under Section 105 (~~Application for an Individual IPDES Permit~~); and (3-24-22)( )

b. The Department, because of time, resources, or other constraints, but through no fault of the permittee, does not issue a new permit with an effective date on or before the expiration date of the previous permit. (3-24-22)( )

**03. Continuation of General Permits.** The conditions of an expired general ~~permit, whether a federal~~ NPDES permit or a state-issued IPDES permit, will remain fully effective and enforceable (except for permits ~~over which~~ under EPA ~~retains~~ authority) until the date the authorization to discharge under the new permit is determined, if: (3-24-22)( )

a. The permittee ~~has~~ submitted a timely notice of intent to obtain coverage under the new general permit as specified in Section 130 (~~General Permits~~); and (3-24-22)( )

b. The Department, because of time, resources, or other constraints, but through no fault of the permittee, does not issue a new general permit with an effective date on or before the expiration date of the previous permit. (3-24-22)( )

**04. Continuation of Permits During an Appeal.** Whether the conditions of an expired permit remain effective and enforceable during an appeal of a new permit, or an appeal of the denial of a permit application, is governed by Section 204 (~~Appeals Process~~). (3-24-22)( )

## 102. OBLIGATION TO OBTAIN AN IPDES PERMIT.

**01. Persons Who Must Obtain a Permit.** Any person who discharges or proposes to discharge a pollutant from ~~any~~ point source into waters of the United States, or who owns or operates a sludge-only facility whose sewage sludge use or disposal practice is regulated by 40 CFR Part 503 or these rules, and who does not have an IPDES or NPDES permit in effect, ~~shall~~ must submit a complete IPDES permit application to the Department, unless the discharge, proposed discharge, or TWTDS is: (3-24-22)( )

a. ~~Is e~~ Ccovered by one (1) or more general permits in compliance with Section 130 (~~General Permits~~). Any applicant must complete a notice of intent for any discharge or proposed discharge ~~that is~~ covered by one (1) or more general permits; (3-24-22)( )

b. ~~Is e~~ Excluded from IPDES permit requirements under Subsection 102.05; (3-24-22)( )

c. ~~Is b~~ By a user to a privately owned treatment works, and the Department, under Section 370 (~~Pretreatment Standards~~), does not otherwise require the person to apply for a permit; or (3-24-22)( )

d. ~~Is a~~ A TWTDS facility that uses or disposes of sewage sludge ~~to which~~ where a standard applicable to its sewage sludge use or disposal practices ~~has e~~ s not been published. ~~Such~~ These facilities ~~shall~~ must submit limited background information, as specified in Subsection 105.17.o., within one (1) year after publication of applicable standards. (3-24-22)( )

**02. Operator's Duty to Obtain a Permit.** When a facility or activity is owned by one person but is operated by another person, it is the operator's duty to obtain a permit. ( )

**03. Permits Under ~~the Clean Water Act Section~~ CWA 405(f).** ~~All n~~ New and currently permitted TWTDS whose sewage sludge use or disposal practices are regulated by 40 CFR Part 503 must submit permit applications according to the ~~applicable~~ schedule in Subsection 105.17. The Department may require permit applications from ~~any~~ TWTDS at any time if the Department determines that a permit is necessary to protect public health and the environment from ~~any~~ potential adverse effects that may occur from toxic pollutants in sewage sludge.

(3-24-22)( )

**04. Designation of Small Municipal Separate Storm Sewer Systems (MS4s).** DEQ ~~shall~~ will designate a small MS4 that is not located in an urbanized area, as determined by the latest ~~D~~ecennial ~~C~~ensus by the US Census Bureau of Census, as a regulated small MS4 that must be covered by an IPDES permit if the Department determines that the storm water discharge: (3-24-22)( )

a. ~~The storm water discharge r~~Results in or has the potential to result in exceedance of water quality standards or other significant water quality impacts; or (3-24-22)( )

b. ~~The storm water discharge e~~Contributes substantially to the pollutant loadings of a physically interconnected ~~municipal separate storm sewer~~ MS4 that is regulated by the IPDES storm water program. (3-24-22)( )

**05. Exclusions from Permit.** A person ~~shall~~ must not discharge pollutants from ~~any~~ point source into waters of the United States without first obtaining an IPDES permit from the Department or coverage under an IPDES general permit, unless the discharge is excluded from IPDES permit requirements or the discharge is authorized by an IPDES or NPDES permit that continues in effect. The Department will not require persons to obtain IPDES permits for facilities or activities that are not required to obtain NPDES permits from EPA under the Clean Water Act and federal Clean Water Act CWA and CWA regulations. Discharges excluded from IPDES permit requirements, but that may be regulated by other state or federal regulations include: (3-24-22)( )

a. Any sSewage discharge from vessels and ~~any~~ effluent from properly functioning marine engines, laundry, shower and galley sink wastes, or ~~any~~ other discharge incidental to the normal operation of a vessel of the U.S. Armed Forces ~~within the meaning of the Clean Water Act section~~ under CWA Section 312, and a recreational vessel ~~within the meaning of the Clean Water Act section~~ under CWA Section 502(25). None of these exclusions apply to: (3-24-22)( )

i. Rubbish, trash, garbage, or other ~~such~~ materials discharged overboard; nor to (3-24-22)( )

ii. ~~Other d~~Discharges when the vessel is operating in a capacity other than as a means of transportation such as ~~when used as~~: (3-24-22)( )

(1) An energy or mining facility; ( )

(2) A storage facility, or when secured to a storage facility; or ( )

(3) When secured to the bed of the waters of the United States for ~~the purposes of~~ mineral or oil exploration or development; (3-24-22)( )

b. Any discharge of dredged or fill material into waters of the United States ~~that is~~ regulated under ~~the Clean Water Act section~~ CWA Section 404; (3-24-22)( )

c. Sewage, industrial wastes, or other pollutants discharged into publicly owned treatment works (POTWs) by an indirect discharger who has received a will-serve letter authorizing the discharge to the POTW. Plans or agreements to switch to this method of disposal in the future do not relieve dischargers of the obligation to have and comply with permits until all discharges of pollutants to waters of the United States are eliminated. This exclusion does not apply to ~~the introduction of~~ introducing pollutants to privately owned treatment works or to other discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other party not leading to treatment works; (3-24-22)( )

d. Any discharge in compliance with the instructions of an on-scene coordinator under 40 CFR Part 300 (The National Oil and Hazardous Substances Pollution Contingency Plan), or 33 CFR 153.10(e) (Control of Pollution by Oil and Hazardous Substances, Discharge Removal); (3-24-22)( )

e. Any iIntroduction of pollutants from non-point source agricultural and silvicultural activities, including storm water runoff from orchards, cultivated crops, pastures, range lands, and forest lands; however, this



exclusion does not apply to discharges from concentrated animal feeding operations (CAFO) as defined in 40 CFR 122.23, discharges from concentrated aquatic animal production (CAAP) facilities, discharges to aquaculture projects, and discharges from silvicultural point sources; (3-24-22)( )

f. ~~Any~~ Return flow from irrigated agriculture; (3-24-22)( )

g. Discharges into a privately owned treatment works, except as the Department may otherwise require under Subsection 302.15; and ( )

h. Discharges from a water transfer. This exclusion does not apply to pollutants introduced by the water transfer activity ~~itself~~ to the ~~transferred~~ water ~~being transferred~~. (3-24-22)( )

### 103. PERMIT PROHIBITIONS.

The Department will not issue an IPDES permit for a discharge: ( )

01. ~~Clean Water Act~~ **CWA Compliance.** Unless the conditions of the permit provide for compliance with the ~~applicable~~ requirements of IDAPA 58.01.02, "Water Quality Standards" and 58.01.25 "~~Rules Regulating the Idaho Pollutant Discharge Elimination System~~ **Program Rules**"; (3-24-22)( )

02. **EPA Objection.** When the Department has received written objection ~~pursuant to~~ under 40 CFR 123.44 from the EPA Regional Administrator ~~to issuance of the permit~~ and until the objections are resolved according to the process identified in the Memorandum of Agreement between EPA and the Department; (3-24-22)( )

03. **Water Quality Requirements.** When the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected states; ( )

04. **Anchorage and Navigation Impaired.** When, in the judgment of the Secretary of the United States Army through the Army Corp Chief of Engineers, anchorage and navigation in or on ~~any of~~ the waters of the United States ~~would~~ will be substantially impaired by the discharge; (3-24-22)( )

05. **Banned Content.** Of any radiological, chemical, or biological warfare agent or high level radioactive waste; ( )

06. **Area Wide Waste Treatment Management Plans.** That is inconsistent with a plan or plan amendment approved under ~~the Clean Water Act section~~ **CWA Section** 208(b); or (3-24-22)( )

07. **New Sources or New Dischargers.** For a new source or new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards. ( )

a. When the owner or operator of a new source or new discharge proposes to discharge into a water segment that does not meet ~~applicable~~ water quality standards, or that is not expected to meet those standards even after ~~the application of~~ applying the effluent limitations required by ~~Clean Water Act sections~~ **CWA Sections** 301(b)(1)(A) and (B), and for which the state or interstate agency has performed a pollutant load allocation for the pollutant to be discharged, then the owner or operator must demonstrate ~~that~~: (3-24-22)( )

i. ~~There are~~ sufficient remaining pollutant load allocations exist to allow for the discharge; and (3-24-22)( )

ii. The existing dischargers into ~~that~~ the segment are subject to compliance schedules ~~designed to that~~ bring the segment into compliance with ~~applicable~~ water quality standards. (3-24-22)( )

b. The Department may waive the submission of ~~the~~ information by the permit applicant required in Subsection 103.07.a. if the Department determines ~~that it already has~~ adequate information exists to evaluate the request. (3-24-22)( )

c. ~~An explanation of~~ The development of limitations to meet the criteria of this section is ~~to be included~~ explained in the fact sheet to the permit. (3-24-22)( )

**104. PRE-APPLICATION PROCESS.**

Any person who intends to apply for a permit or who proposes to discharge a pollutant into the waters of the United States ~~should~~ may contact the Department to schedule a meeting ~~prior to submitting to discuss~~ an application to discuss before submittal: (3-24-22)( )

**01. IPDES Permit Applicability.** Whether the actions or facility will require an IPDES permit, and whether other suitable permitting options are available; (3-24-22)( )

**02. Application Content.** The IPDES permit application requirements; and ( )

**03. Application Schedule.** The IPDES permit application submittal schedule. ( )

**105. APPLICATION FOR AN INDIVIDUAL IPDES PERMIT APPLICATIONS.**

**01. Electronic Submittals.** The Department may require an applicant to electronically submit information required by this section, ~~if the Department approves using~~ an approved electronic method ~~of submittal~~. (3-24-22)( )

**02. Application Retention Schedule.** An applicant must keep records of all data used to complete a permit application and ~~any~~ supplemental information submitted for ~~a period of~~ at least three (3) years from the date the application is signed. (3-24-22)( )

**03. Time to Apply.** Any person required under Subsections 102.01 through 102.03 to obtain an IPDES permit must submit a complete application for a permit to the Department ~~a complete application for a permit in compliance with following~~ the requirements of this subsection. A permit application must be signed and certified as required by Section 090 ~~(Signature Requirements)~~. (3-24-22)( )

**a.** A person proposing a new discharge must ~~submit an application~~ apply at least one hundred eighty (180) days before ~~the date on which~~ the discharge ~~is to~~ will commence, unless the Department ~~has granted~~ s permission to submit the application on a later date as specified in Subsections 105.03.e. and f. A facility proposing a new storm water discharge ~~of storm water associated with~~ from an industrial activity must ~~submit an application~~ apply one hundred eighty (180) days before that facility commences ~~industrial~~ activity that may result in a discharge of storm water ~~associated with that industrial activity~~, unless the Department ~~has granted~~ s permission to submit the application on a later date as specified in Subsections 105.03.e. and f. (3-24-22)( )

**b.** Facilities described under 40 CFR 122.26(b)(14)(x) or (b)(15)(i) must ~~submit an application~~ apply at least ninety (90) days before ~~the date on which~~ construction ~~is to~~ commences unless otherwise required by ~~the terms of an applicable~~ the general permit. (3-24-22)( )

**c.** Any TWTDS that commences operations after promulgation of ~~any applicable~~ "standard for sewage sludge use or disposal" must ~~submit an application~~ apply to the Department at least one hundred eighty (180) days ~~prior to the date~~ before commencing proposed ~~for commencing~~ operations. (3-24-22)( )

**d.** A person discharging from a permitted facility with ~~an currently~~ effective permit must ~~submit a new application~~ reapply at least one hundred eighty (180) days before the expiration ~~date~~ of the existing permit, unless the Department ~~has granted~~ s permission to submit the application on a later date as specified in Subsections 105.03.e. and f. (3-24-22)( )

**e.** ~~Permission may be granted by~~ The Department for submission of an application may grant permission to apply in less than one hundred eighty (180) days. The Department's prior approval must be ~~sought and obtained in advance of the~~ at least one hundred eighty (180) days before ~~expiration of~~ the existing permit ~~expires or commencement of~~ new discharge commences. (3-24-22)( )

**f.** The application will not be accepted as an application for permit renewal after ~~the permit~~ expiration ~~date of the existing permit as an application for renewal of the permit~~. Any ~~a~~ applications received after the permit expiration ~~of the permit~~ will be ~~received and~~ reviewed as an application for a new source or new discharger.

(3-24-22)( )

**04. Individual Permit Application Forms.** An applicant must ~~submit an application on~~ use one (1) or more Department-approved forms appropriate to the number and type of discharge or outfall at the applicant's facility. A person required by Subsections 102.01 through 102.03 to obtain an individual IPDES permit must submit an application to the Department providing the information required by this subsection and Subsections 105.05 through 105.19, ~~as applicable. The application must be submitted on one (1) or more of the EPA forms listed in this subsection, or on the Department equivalent of the listed EPA form:~~ (3-24-22)( )

a. ~~All a~~ Applicants, other than a POTW, TWTDS, and pesticide applicators (~~see~~ Subsection 105.06), EPA Form 1 equivalent and the following ~~additional~~ forms, if applicable: (3-24-22)( )

i. ~~Applicants for a concentrated animal feeding operation (CAFO; see (Subsection 105.09) or concentrated aquatic animal production (CAAP; see (Subsection 105.10) facility, EPA Form 2B~~ equivalent; (3-24-22)( )

ii. ~~Applicants for an e~~ Existing industrial facility, including manufacturing facilities, commercial facilities, mining activities, and silviculture activities (~~see~~ Subsection 105.07), EPA Form 2C equivalent; (3-24-22)( )

iii. ~~Applicants for a n~~ New industrial facility that discharges process wastewater (~~see~~ Subsection 105.16), EPA Form 2D equivalent; (3-24-22)( )

iv. ~~Applicants for a n~~ New or existing industrial facility that discharges only non-process wastewater (~~see~~ Subsection 105.08.a.), EPA Form 2E equivalent; (3-24-22)( )

v. ~~Applicants for a n~~ New or existing facility ~~whose with~~ discharge ~~is~~ composed entirely of storm water ~~associated with~~ from industrial activity (~~see~~ Subsection 105.19), EPA Form 2F equivalent unless the applicant is exempted by 40 CFR 122.26(c)(1)(ii). If the applicant's discharge is composed of storm water and non-storm water (~~see~~ Subsections 105.07, 105.08, and 105.16), EPA Forms 2C, 2D, or 2E, ~~as appropriate,~~ equivalent are also required; or (3-24-22)( )

vi. ~~Applicants that e~~ Operateing a sludge-only facility (~~see~~ Subsection 105.17), that currently does not have and is not applying for; an IPDES permit for a direct discharge to a surface water body, EPA Form 2S equivalent; (3-24-22)( )

b. ~~For an a~~ Applicant ~~that~~ is a new or existing POTW or privately owned treatment works (~~see~~ Subsections 105.11 through 105.15): (3-24-22)( )

i. EPA Form 2A equivalent; and (3-24-22)( )

ii. EPA Form 2S equivalent, if applicable. (3-24-22)( )

**05. Application Information for All Dischargers.** In addition to the application information required for specific dischargers, the Department may require the ~~submission of any following~~ information necessary to ensure compliance to comply with Section 103 (~~Permit Prohibitions~~). ~~Such information includes, but is not limited to and to:~~ (3-24-22)( )

a. ~~Information required to d~~ Determine compliance with the antidegradation policy and antidegradation implementation provisions ~~set forth~~ in IDAPA 58.01.02.051 and 052, "Water Quality Standards"; (3-24-22)( )

b. ~~Information required to d~~ Determine compliance with the mixing zone provisions ~~set forth~~ in IDAPA 58.01.02.060, "Water Quality Standards"; or (3-24-22)( )

c. ~~Information necessary for the Department to a~~ Authorize a compliance schedule under IDAPA

58.01.02.400, “Water Quality Standards.” (3-24-22)( )

**06. Application Requirements for Dischargers Other than Treatment Works Treating Domestic Sewage (TWTDS), Publicly Owned Treatment Works (POTWs), and Pesticide Applicators.** An applicant for an IPDES permit other than a POTW and ~~other~~ TWTDS, must provide the following information to the Department, using the ~~appropriate~~ forms specified in Subsection 105.04: (3-24-22)( )

- a. ~~The a~~ Applicant’s activity ~~that~~ requires ~~ing~~ an IPDES permit; (3-24-22)( )
- b. ~~The n~~ Name, mailing address, e-mail address, and location of the facility for ~~which~~ the ~~submitted~~ application ~~is submitted~~; (3-24-22)( )
- c. Up to four (4) Standard Industrial Classification (SIC) ~~or North American Industrial Classification System (NAICS)~~ codes ~~that best~~ identify ~~ing~~ the principal products or services provided by the facility; (3-24-22)( )
- d. ~~The e~~ Operator’s name, mailing address, e-mail address, telephone number, ownership status, Employer Identification Number (EIN) ~~or Department equivalent~~, and status as federal, state, private, public, or other entity; (3-24-22)( )
- e. ~~A s~~ Statement that the facility is ~~located not~~ in Indian country, if applicable; (3-24-22)( )
- f. ~~A l~~ Listing of ~~all~~ permits or construction approvals received or applied for under ~~any of the following programs~~: (3-24-22)( )
  - i. Hazardous waste management program under IDAPA 58.01.05, “Rules and Standards for Hazardous Waste”; ( )
  - ii. Underground injection control (UIC) program under the Idaho Department of Water Resources UIC program at IDAPA 37.03.03, “Rules and Minimum Standards for the Construction and Use of Injection Wells”; ( )
  - iii. IPDES program under IDAPA 58.01.25 “~~Rules Regulating the~~ Idaho Pollutant Discharge Elimination System ~~Program Rules~~”; (3-24-22)( )
  - iv. Prevention of significant deterioration (PSD) program under IDAPA 58.01.01, “Rules for Control of Air Pollution in Idaho”; ( )
  - v. Nonattainment program under IDAPA 58.01.01, “Rules for Control of Air Pollution in Idaho”; ( )
  - vi. National emission standards for hazardous pollutants (NESHAPS) preconstruction approval under IDAPA 58.01.01, “Rules for Control of Air Pollution in Idaho”; ( )
  - vii. Dredge or fill permits under the Clean Water Act section 404; or ( )
  - viii. Other relevant environmental permits, programs or activities, ~~including those~~ subject to state jurisdiction, approval, and permits, ~~including IDAPA 58.01.17, “Recycled Water Rules”~~; and (3-24-22)( )
- g. ~~A t~~ Topographic map, or other map if a topographic map is unavailable, extending one (1) mile beyond the property boundaries of the source, depicting ~~the~~: (3-24-22)( )
  - i. ~~The f~~ Facility and each of its intake and discharge structures; (3-24-22)( )
  - ii. ~~The l~~ Location of the facility’s hazardous waste treatment, storage, or disposal areas; (3-24-22)( )

- iii. ~~The~~ Location of each well where fluids from the facility are injected underground; and (3-24-22)( )
- iv. ~~The~~ Location of wells, springs, other surface water bodies, and drinking water wells listed in public records or ~~otherwise~~ known by the applicant to exist in the map area; and (3-24-22)( )
- h. ~~A brief~~ Description of the nature of the business; (3-24-22)( )
- i. ~~An indication of~~ Indicate whether the facility uses cooling water and the source of the cooling water; and (3-24-22)( )
- j. ~~An indication of~~ Indicate whether the facility is requesting any ~~of the~~ variances in Subsection 310.01 if known at the time of application. (3-24-22)( )

**07. Application Requirements for Existing Manufacturing, Commercial, Mining and Silviculture Dischargers.** ( )

a. Except for a facility subject to the requirements in Subsection 105.08, an applicant for an IPDES permit for an existing discharge from a manufacturing, commercial, mining, or silviculture facility or activity must provide the following information to the Department, using the ~~applicable~~ forms specified in Subsection 105.04: (3-24-22)( )

- i. For each outfall: ( )
  - (1) ~~The~~ Latitude and longitude to the nearest second (or equivalent) and the name of each receiving water; (3-24-22)( )
  - (2) ~~A narrative~~ Identifying each type of process, operation, or production area that contributes wastewater to the effluent from that outfall, including process wastewater, cooling water, and storm water runoff; processes, operations, or production areas may be described in general terms, such as dye-making reactor or distillation tower; (3-24-22)( )
  - (3) ~~The~~ Average flow that each process contributes and a description of the wastewater treatment ~~the wastewater receives~~, including the ultimate disposal of ~~any~~ solid or fluid wastes other than by discharge; (3-24-22)( )
  - (4) For a privately owned treatment works, ~~the identity of~~ identify each user of the treatment works; and (3-24-22)( )
  - (5) ~~The~~ Average flow of point sources composed of storm water. ~~For this subsection,~~ The average flow may be estimated, and the basis for the rainfall event with the method of estimation must be submitted; (3-24-22)( )
- ii. ~~A description of~~ Describe the frequency, duration, and flow rate of each ~~discharge~~ occurrence for any ~~of the discharges described~~ discharge specified in Subsections 105.07.a.i(2) through (5) that are intermittent or seasonal, except for storm water runoff, spillage, or leaks; (3-24-22)( )
- iii. ~~A~~ Reasonable measure of the applicant's actual production reported in the units used in the ~~applicable effluent guideline, ELG~~ if ~~an effluent guideline promulgated the ELG~~ under ~~the Clean Water Act section CWA Section~~ 304 applies to the applicant and is expressed ~~in terms of~~ as production or ~~another~~ measure of operation. The reported measure must reflect the actual production of the facility as required by Subsection 303.02.b.; (3-24-22)( )
- iv. If the applicant is subject to ~~any~~ present requirements or compliance schedules for construction, upgrading, or operation of waste treatment equipment, ~~an identification of~~ identify the abatement requirement, ~~a description of~~ describe the abatement project, and ~~a listing of~~ list the required and projected final compliance dates; (3-24-22)( )

- v. ~~A listing of any~~List the toxic pollutants ~~that~~ the applicant currently uses or manufactures as an intermediate or final product or byproduct, except ~~that~~ the Department may waive or modify this requirement; (3-24-22)( )
- (1) If the applicant demonstrates ~~that it would be unduly burdensome~~ an undue burden to identify each toxic pollutant; and (3-24-22)( )
- (2) The Department has adequate information to issue the permit; ( )
- vi. ~~An identification of any~~Identify biological toxicity tests ~~that~~ the applicant knows or ~~has reason to believe have been~~ believes was made within the last three (3) years on ~~any of~~ the applicant's discharges or on discharges to a receiving water in relation to a discharge; and (3-24-22)( )
- vii. ~~The identity of~~Identify each laboratory or firm and the analyses performed, if a contract laboratory or consulting firm performed ~~any of~~ the analyses required by Subsection 105.07.c. through m. (3-24-22)( )
- b. ~~The o~~Wowner or operator of a facility ~~subject to this subsection~~ must submit, with an application, a line drawing of the water flow through the facility with a water balance, showing operations contributing wastewater to the effluent and treatment units. (3-24-22)( )
- i. In the line drawing, similar processes, operations, or production areas may be indicated as a single unit, labeled to correspond to the more detailed identification under Subsections 105.07.a.i(2) through (5). ( )
- ii. ~~The w~~Water balance must show approximate average flows at intake and discharge points and between units, including treatment units. (3-24-22)( )
- iii. If a water balance cannot be determined for certain activities, the applicant may ~~instead~~ provide a pictorial description of the nature and amount of ~~any~~ sources of water and ~~any~~ collection and treatment measures. (3-24-22)( )
- c. In addition to the ~~items of~~ information listed in Subsections 105.07.a. through 105.07.b., and except for information on storm water discharges required by 40 CFR 122.26, an applicant for an IPDES permit for an existing facility described in Subsection 105.07.a. must: (3-24-22)( )
- i. Collect, prepare, and submit information ~~regarding on~~ the effluent characteristics and discharge of pollutants specified in this section; and (3-24-22)( )
- ii. When quantitative data for a pollutant are required, collect a sample of effluent and analyze it for the pollutant ~~in accordance with following the~~ analytical methods approved ~~under in~~ 40 CFR Part 136, except ~~that~~ when no analytical method is approved, the applicant may use and must describe any suitable method ~~but must describe the method.~~ (3-24-22)( )
- d. An applicant under this subsection must: ( )
- i. Use grab samples ~~in to~~ providinge information ~~regarding on~~ cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*), enterococci (previously known as fecal streptococcus), and volatile organics; temperature, pH, and dissolved oxygen, ~~and r~~ Residual chlorine effluent data may be obtained from grab samples or from calibrated and properly maintained continuous monitors; (3-24-22)( )
- ii. For all other pollutants, use twenty-four (24) hour composite samples, unless specified otherwise at 40 CFR Part 136, with ~~a minimum of at least~~ four (4) grab samples, except ~~that a minimum of at least~~ one (1) grab sample may be taken for effluents from holding ponds or other impoundments with a retention period greater than twenty-four (24) hours; (3-24-22)( )
- e. For ~~purposes of~~ Subsection 105.07.c., exceptions to testing and data provision requirements for effluent characteristics include: (3-24-22)( )



i. When an applicant has two (2) or more outfalls with substantially identical effluents, the Department may allow the applicant to test only one (1) outfall and ~~report that~~ the quantitative data ~~reported will~~ also apply to the substantially identical outfall; and (3-24-22)( )

ii. An applicant's duty under Subsections 105.07.j., k., and l. to provide quantitative data for certain pollutants known or believed to be present does not apply to pollutants present in a discharge solely ~~as the result of~~ ~~resulting from~~ their presence in intake water; however, an applicant must report ~~that~~ those pollutants are present. (3-24-22)( )

f. For storm water discharges, associated with an existing facility described in Subsection 105.07.a., from storm events ~~which that~~ yield more than one-tenth (0.1) inch of rainfall: (3-24-22)( )

i. ~~All-s~~ Samples must be collected from the discharge resulting from a storm event and at least seventy-two (72) hours after the previously measurable storm event exceeding one-tenth (0.1) inch rainfall. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed fifty percent (50%) from the average or median rainfall event in that area; and (3-24-22)( )

ii. For all applicants, a flow-weighted composite sample must be taken for either the entire discharge or for the first three (3) hours of the discharge, except for ~~the following~~: (3-24-22)( )

(1) ~~The-s~~ Sampling may be conducted with a continuous sampler or ~~as~~ a combination of ~~a minimum of~~ ~~at least~~ three (3) sample aliquots taken in each hour of discharge for the entire discharge or for the first three (3) hours of the discharge, with each aliquot ~~being~~ separated by ~~a minimum period of~~ ~~at least~~ fifteen (15) minutes. If the Department approves, an applicant for a storm water discharge permit under Subsection 105.18 may collect flow-weighted composite samples using different protocols with respect to the time duration between the collection of sample aliquots; (3-24-22)( )

(2) A minimum of one (1) grab sample may be taken for storm water discharges from holding ponds or other impoundments with a retention period greater than twenty-four (24) hours; or ( )

(3) For a flow-weighted composite sample, only one (1) analysis of the composite of aliquots is required; ( )

iii. For samples taken from discharges associated with industrial activities, quantitative data must be reported for the grab sample taken during the first thirty (30) minutes, or as soon ~~there~~after as practicable, of the discharge for ~~all~~ pollutants specified in Subsection 105.19 except ~~that~~ for all storm water permit applicants taking flow-weighted composites, quantitative data must be reported for ~~all~~ pollutants specified in 40 CFR 122.26(a) through (b) and (e) through (g), Subsections 105.18 and 105.19, but not for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*), and enterococci (previously known as fecal streptococcus); (3-24-22)( )

iv. The Department may, on a case-by-case basis, allow or establish appropriate site-specific sampling procedures or requirements, including: ( )

(1) Sampling locations; ( )

(2) ~~The-s~~ Season in which the sampling takes place; (3-24-22)( )

(3) ~~The-m~~ Minimum duration between the previous measurable storm event and the sampled storm event; (3-24-22)( )

(4) ~~The-m~~ Minimum or maximum level of precipitation required for an appropriate storm event; (3-24-22)( )

(5) ~~The-f~~ Form of precipitation sampled, whether snow melt or rain fall; (3-24-22)( )

- (6) Protocols for collecting samples under 40 CFR Part 136; and ( )
- (7) Additional time for submitting data; and ( )
- v. An applicant ~~is deemed to~~ knows or ~~have reason to~~ believes ~~that~~ a pollutant is present in an effluent if an evaluation of the expected use, production, or storage of the pollutant, or ~~any~~ previous analyses for the pollutant, shows ~~that~~ the pollutant's presence. (3-24-22)( )
- g. Unless a reporting requirement is waived under Subsection 105.07.h., ~~every~~ applicants subject to this subsection must report quantitative data for the following pollutants for every outfall: (3-24-22)( )
- i. 5-day biochemical oxygen demand (BOD5); ( )
- ii. Chemical oxygen demand (COD); ( )
- iii. Total organic carbon (TOC); ( )
- iv. Total suspended solids (TSS); ( )
- v. Ammonia, as N; ( )
- vi. Temperature (both winter and summer); and ( )
- vii. pH. ( )
- h. The Department may waive the reporting requirements under Subsection 105.07.g. for individual point sources or for a particular industry category for one (1) or more of the pollutants listed in Subsection 105.07.g. if the applicant demonstrates that information adequate to support ~~issuance of~~ issuing a permit can be obtained with less stringent requirements. (3-24-22)( )
- i. Except as provided in Subsection 105.07.o., an applicant with an existing facility described in Subsection 105.07.a. that has processes that qualify in one (1) or more of the primary industry categories shown in Appendix A to 40 CFR Part 122 contributing to a discharge, must report quantitative data for pollutants in each outfall containing process wastewater as follows: ( )
- i. Data for the organic toxic pollutants listed in Table II of Appendix D to 40 CFR Part 122 in the fractions designated in Table I of Appendix D to 40 CFR Part 122. ~~For purposes of~~ In this subsection: (3-24-22)( )
- (1) Table II of Appendix D to 40 CFR Part 122, lists the organic toxic pollutants in each fraction that result from the sample preparation required by the analytical procedure ~~that uses~~ using gas chromatography/mass spectrometry; and (3-24-22)( )
- (2) If the Department determines ~~that~~ an applicant falls within an industrial category for ~~the purposes of~~ selecting fractions for testing, ~~that the~~ determination does not establish the applicant's category for any other purpose; ~~see~~ (Notes 2 and 3 to 40 CFR 122.21); and (3-24-22)( )
- ii. Data for the toxic metals, cyanide, and total phenols listed in Table III of Appendix D to 40 CFR Part 122. ( )
- j. An applicant ~~under this section~~ must disclose whether ~~the applicant~~ he knows or ~~has reason to~~ believes that any of the conventional and nonconventional pollutants in Table IV of Appendix D to 40 CFR Part 122 are discharged from each outfall. If an ~~applicable effluent limitations guideline~~ ELG limits the pollutant either directly or indirectly by express ~~limitations~~ on an indicator, the applicant must report quantitative data. For every pollutant discharged that is not limited in an ~~effluent limitations guideline~~ ELG, the applicant must either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged. (3-24-22)( )



**k.** An applicant ~~under this subsection~~ must disclose whether ~~the applicant~~ he knows or ~~has reason to believe~~ s that any of the organic toxic pollutants listed in Table II or the toxic metals, cyanide, or total phenols listed in Table III of Appendix D to 40 CFR Part 122 for which quantitative data are not otherwise required under Subsection 105.07.i., are discharged from each outfall. Unless ~~an applicant~~ qualifies d as a small business under Subsection 105.07.o., the applicant must: (3-24-22)(    )

i. Report quantitative data for every pollutant expected to be discharged in concentrations of ten (10) parts per billion or greater; ( )

ii. Report quantitative data for acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4, 6 dinitrophenol, if any of these four (4) pollutants are expected to be discharged in concentrations of one hundred (100) parts per billion or greater; and ( )

iii. For every pollutant expected to be discharged in concentrations less than ten (10) parts per billion, or ~~in the case of~~ for acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4, 6 dinitrophenol, in concentrations less than one hundred (100) parts per billion, either submit quantitative data, or ~~briefly~~ describe the reasons the pollutant is expected to be discharged and submit ~~any~~ supporting documentation. (3-24-22)(    )

**l.** An applicant ~~under this subsection~~ must disclose whether ~~the applicant~~ he knows or ~~has reason to believe~~ s that asbestos or ~~any of~~ the hazardous substances listed in Table V of Appendix D to 40 CFR Part 122 are discharged from each outfall. For every pollutant expected to be discharged, the applicant must ~~briefly~~ describe the reasons the pollutant is expected to be discharged and report ~~any~~ quantitative data ~~it has~~ for any pollutant. (3-24-22)(    )

**m.** An ~~applicant under this subsection~~ must disclose and report qualitative data, generated using a screening procedure not calibrated with analytical standards, for 2,3,7, 8-tetrachlorodibenzo-p-dioxin (TCDD) if the applicant: (3-24-22)(    )

i. Uses or manufactures ~~the following~~: (3-24-22)(    )

(1) 2,4,5-trichlorophenoxy acetic acid (2,4,5,-T); ( )

(2) 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5,-TP); ( )

(3) 2-(2,4,5-trichlorophenoxy) ethyl, 2,2-dichloropropionate (Erbon); ( )

(4) o,o-dimethyl o-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel); ( )

(5) 2,4,5-trichlorophenol (TCP); or ( )

(6) Hexachlorophene (HCP); or ( )

ii. Knows or ~~has reason to believe~~ s that TCDD is or may be present in an effluent. (3-24-22)(    )

**n.** Where quantitative data are required in Subsections 105.07.c. through m., existing data may be used, if available, in lieu of sampling done solely for ~~the purpose of~~ the application, provided ~~that all~~: (3-24-22)(    )

i. ~~All d~~ A data requirements are met; sampling was performed, collected, and analyzed no more than four and one-half (4 ½) years ~~prior to~~ before submission; (3-24-22)(    )

ii. ~~All d~~ A data are representative of the discharge; and (3-24-22)(    )

iii. ~~All a~~ A available representative data are considered in the values reported. (3-24-22)(    )

**o.** An applicant ~~under this subsection~~ is exempt from the quantitative data requirements in Subsections 105.07.i. or 105.07.j. for the organic toxic pollutants listed in Table II of Appendix D to 40 CFR Part

122, if ~~that applicant~~ he qualifies as a small business under one (1) of the following criteria: (3-24-22)( )

i. ~~The applicant is a~~ e Coal mine with an expected total annual production of less than one hundred thousand (100,000) tons per year; or (3-24-22)( )

ii. ~~The applicant has~~ g Gross total annual sales averaging less less than two hundred eighty-seven thousand, three hundred dollars (\$287,300) per year in 2014 dollars. (3-24-22)( )

p. In addition to the information reported on the application ~~form~~, an applicant ~~under this subsection~~ must provide at the Department's request, ~~any~~ other information ~~that may be reasonably~~ required to assess the discharges of the facility and to determine whether to issue an IPDES permit. ~~The additional~~ This information may include ~~additional~~ quantitative data and bioassays to assess the relative toxicity of discharges to aquatic life and ~~information required~~ to determine the cause of the toxicity. (3-24-22)( )

**08. Application Requirements for New or Existing Manufacturing, Commercial, Mining, and Silviculture Facilities that Discharge only ~~Non-Process~~ Non-process Wastewater.** (3-24-22)( )

a. An applicant that is a manufacturing, commercial, mining, or silvicultural discharger that discharges only non-process wastewater not regulated by an ~~effluent limitations guideline~~ ELG or new source performance standard must provide the following information to the Department for all discharges, except for storm water discharges, using the ~~applicable~~ forms specified in Subsection 105.04: (3-24-22)( )

i. ~~The n~~ Number of each outfall, ~~the~~ latitude and longitude to the nearest second (or equivalent), and ~~the~~ name of each receiving water; (3-24-22)( )

ii. For a new discharger, the date of expected commencement of discharge; ( )

iii. ~~An identification of~~ Identify the general type of waste discharged, or expected to be discharged upon commencement of operations, including sanitary wastes, restaurant or cafeteria wastes, or non-contact cooling water; (3-24-22)( )

iv. ~~An identification of~~ Identify cooling water additives, ~~if any~~, that are used or expected to be used upon commencement of operations, ~~along~~ with their composition if existing composition is available; (3-24-22)( )

v. Effluent characteristics prepared and submitted as described in Subsections 105.08.b. and 105.08.c.; ( )

vi. ~~A description of~~ Describe the frequency of flow and duration of ~~any~~ seasonal or intermittent discharge, except for storm water runoff, leaks, or spills; (3-24-22)( )

vii. ~~A brief description of any~~ Describe the treatment system used or to be used; (3-24-22)( )

viii. ~~Any a~~ Additional information the applicant ~~wishes to be~~ wants considered, such as influent data for ~~the purpose of~~ obtaining net credits under Subsection 303.07; and (3-24-22)( )

ix. ~~The s~~ Signature of the certifying official under Section 090-~~(Signature Requirements)~~. (3-24-22)( )

b. Except as otherwise provided in Subsections 105.08.d. through g., an application for a discharger described in Subsection 105.08.a. must include quantitative data for ~~the following pollutants or parameters~~: (3-24-22)( )

i. 5-day biochemical oxygen demand (BOD5); ( )

ii. Total suspended solids (TSS); ( )

- iii. Fecal coliform (including *E. coli*), if believed present or if sanitary waste is or will be discharged; ( )
- iv. Total residual chlorine (TRC), if chlorine is used; ( )
- v. Oil and grease; ( )
- vi. Chemical oxygen demand (COD), if non-contact cooling water is or will be discharged; ( )
- vii. Total organic carbon (TOC), if non-contact cooling water is or will be discharged; ( )
- viii. Ammonia, as N; ( )
- ix. Discharge flow; ( )
- x. pH; and ( )
- xi. Temperature, both in winter and summer, ~~respectively.~~ (3-24-22)( )
- c. ~~For purposes of the d~~Data required under Subsection 105.08.b.: (3-24-22)( )
  - i. Grab samples must be used for oil and grease, fecal coliform (including *E. coli*), and volatile organics. Temperature, pH, and TRC effluent data may be obtained from grab samples or from calibrated and properly maintained continuous monitors; ( )
  - ii. Twenty-four (24) hour composite samples must be used for pollutants listed in Subsection 105.08.b., other than those specified in Subsection 105.08.c.i., unless specified otherwise ~~at in~~ 40 CFR Part 136. Twenty-four (24) hour composite samples must ~~comprise~~, ~~at a minimum, be composed of least~~ four (4) grab samples unless specified otherwise ~~at in~~ 40 CFR Part 136. For a composite sample, only one (1) analysis of the composite aliquots is required; (3-24-22)( )
  - iii. The quantitative data may be collected over the past three hundred sixty-five (365) days, ~~as long as~~ ~~if the data is representative of~~ ~~represents~~ current operations, and must include maximum daily value, average daily value, and number of measurements taken; and (3-24-22)( )
  - iv. The applicant must collect and analyze samples in accordance with 40 CFR Part 136. ( )
- d. The Department may waive the testing and reporting requirements for ~~any of~~ the pollutants or flow listed in Subsection 105.08.c. if the applicant requests a waiver ~~before or~~ with its application ~~or earlier~~, and demonstrates that information adequate to support permit issuance can be obtained through less stringent requirements. (3-24-22)( )
- e. If the applicant is a new discharger, the applicant must: ( )
  - i. Complete and submit Item IV of EPA Form 2E, ~~or the Department~~ equivalent, ~~according to in~~ ~~accordance with~~ Subsection 105.04.a.iv., by providing quantitative data ~~in compliance~~ ~~that complies~~ with ~~that~~ section no later than two (2) years after the discharge commences, except ~~that~~ the applicant ~~does not need~~ ~~not to~~ complete ~~those~~ portions of Item IV requiring tests ~~that the applicant has~~ already performed and reported under the discharge monitoring requirements of ~~its the~~ IPDES or NPDES permit; and (3-24-22)( )
  - ii. Include estimates and the source of each estimate instead of sampling data for the pollutants or parameters listed in Subsection 105.08.b.; ( )
  - f. For ~~purposes of~~ the ~~required~~ data ~~required under this subsection~~, ~~all~~ pollutant levels must be reported or estimated as concentration and as total mass, except for flow, pH, and temperature. Submittal of ~~all~~ estimated data must be accompanied by documents supporting the estimated value. (3-24-22)( )

g. An applicant's duty, under Subsections 105.08.b., c., and e., to provide quantitative data or estimates of certain pollutants does not apply to pollutants present in a discharge solely ~~as a result of~~ resulting from their presence in intake water. ~~However, an~~ An applicant must report the presence of those pollutants. If the requirements of Subsection 303.07 are met, net credit may be provided for the presence of pollutants in intake water. (3-24-22)( )

**09. Application Requirements for New and Existing Concentrated Animal Feeding Operations (CAFO).** An applicant for an IPDES permit for a new or existing CAFO, as defined in 40 CFR 122.23(b) must provide the following information to the Department, using the ~~applicable~~ forms specified in Subsection 105.04: (3-24-22)( )

a. ~~The n~~ Name of the owner ~~or~~ and operator; (3-24-22)( )

b. ~~The f~~ Facility location and mailing addresses; (3-24-22)( )

c. Latitude and longitude of the production area to the nearest second (or equivalent), measured at the entrance to the production area; (3-24-22)( )

d. ~~A t~~ Topographic map of the geographic area ~~in which~~ where the ~~concentrated animal feeding operation~~ CAFO is located, showing the specific location of the production area; (3-24-22)( )

e. Specific information about the number and type of animals, including, if applicable: beef cattle, broilers, layers, swine weighing fifty-five (55) pounds or more, swine weighing less than fifty-five (55) pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, ducks, turkeys, or other animals, whether in open confinement or housed under roof; ( )

f. ~~The t~~ Type of containment and total capacity in tons or gallons of any anaerobic lagoon, roofed storage shed, storage pond, under-floor pit, above-ground storage tank, below-ground storage tank, concrete pad, impervious soil pad, or other structure or area used for containment and storage of manure, litter, and process wastewater; (3-24-22)( )

g. ~~The t~~ Total number of acres available and under the applicant's control for land application of manure, litter, or process wastewater; (3-24-22)( )

h. Estimated amounts of manure, litter, and process wastewater generated per year in tons or gallons; ( )

i. Estimated amounts of manure, litter, and process wastewater transferred to other persons per year in tons or gallons; and ( )

j. A completed nutrient management plan that ~~has been completed and~~ will be implemented upon the date of permit coverage. A nutrient management plan must meet, at a minimum, the requirements specified in 40 CFR 122.42(e), including ~~for~~ all CAFOs subject to 40 CFR 412.30 through 412.37, 412.40 through 412.47, or the requirements of 40 CFR 412.4(c), ~~as applicable~~. (3-24-22)( )

**10. Application Requirements for New and Existing Concentrated Aquatic Animal Production (CAAP) Facilities.** An applicant for an IPDES permit for a new or existing CAAP facility must provide the following information, using the ~~applicable~~ forms specified in Subsection 105.04: (3-24-22)( )

a. ~~The m~~ Maximum daily and average monthly flow from each outfall; (3-24-22)( )

b. ~~The n~~ Number of ponds, raceways, and similar structures; (3-24-22)( )

c. ~~The n~~ Name of the receiving water and the source of intake water; (3-24-22)( )

d. ~~For~~ Total yearly and maximum harvestable weight for each species of aquatic animal, ~~the total yearly and maximum harvestable weight~~; and (3-24-22)( )

- e. ~~The e~~Calendar month of maximum feeding and the total mass of food fed during that month. (3-24-22)( )

**11. Application Requirements for New and Existing POTWs and Other Dischargers Designated by the Department.** ( )

a. Except as provided in Subsection 105.11.b., an applicant that is a POTW and any other discharger designated by the Department must provide the information in this subsection, using the ~~applicable~~ forms specified in Subsection 105.04.b. An applicant ~~under this subsection~~ must submit all information available at the time of application; ~~however, they and~~ may ~~provide information by referencing~~ reference information previously submitted to the Department. (3-24-22)( )

b. The Department may waive any requirement of this subsection if it has access to substantially identical information or if that information is not of material concern for a specific permit, if approved by the EPA Regional Administrator. The waiver request to the Regional Administrator must include the Department's justification for the waiver. A Regional Administrator's disapproval of ~~a~~the Department's proposed waiver does not constitute final agency action, but does provide notice to the state and permit applicant(s) that EPA may object to any state-issued permit issued in the absence of the required information. (3-24-22)( )

- c. An applicant under this subsection must provide: ( )

i. Name, mailing address, and location of the facility ~~for which the application is submitted~~; (3-24-22)( )

ii. Name, mailing address, e-mail address, EIN or Department equivalent, and telephone number of the applicant, and ~~a statement~~ whether the applicant is the facility's owner, operator, or both; (3-24-22)( )

iii. A list of all environmental permits or construction approvals received or applied for, including dates, under ~~any of the following programs or types of activities~~: (3-24-22)( )

(1) Hazardous waste management program under IDAPA 58.01.05, "Rules and Standards for Hazardous Waste"; ( )

(2) Underground injection control (UIC) program under the Idaho Department of Water Resources UIC program at IDAPA 37.03.03, "Rules and Minimum Standards for the Construction and Use of Injection Wells"; ( )

(3) IPDES program under IDAPA 58.01.25, "~~Rules Regulating the~~ Idaho Pollutant Discharge Elimination System Program Rules"; (3-24-22)( )

(4) Prevention of significant deterioration (PSD) program under IDAPA 58.01.01, "Rules for the Control of Air Pollution in Idaho"; ( )

(5) Nonattainment program under IDAPA 58.01.01, "Rules for the Control of Air Pollution in Idaho"; ( )

(6) National emission standards for hazardous pollutants (NESHAPS) preconstruction approval under IDAPA 58.01.01, "Rules for the Control of Air Pollution in Idaho"; ( )

(7) Dredge or fill permits under ~~the Clean Water Act section~~ CWA Section 404; (3-24-22)( )

(8) Sludge Management Program under IDAPA 58.01.16.650, "Wastewater Rules," and Section 380 (Sewage Sludge) of these rules; and (3-24-22)( )

(9) Other relevant environmental permits, programs, or activities, including those subject to state jurisdiction, approval, and permits; ( )

iv. ~~The n~~Name, population, and EDUs of each municipal entity served by the facility, including unincorporated connector districts, ~~a statement~~ whether each municipal entity owns or maintains the collection system and, if the information is available, whether the collection system is a separate sanitary sewer or a combined storm and sanitary sewer; (3-24-22)( )

v. ~~A s~~Statement whether the facility is ~~located~~ in Indian country and whether the facility discharges to a receiving stream that flows through Indian country; (3-24-22)( )

vi. ~~The f~~Facility's design flow rate, or the wastewater flow rate the plant was built to handle, annual average daily flow rate, and maximum daily flow rate for each of the previous three (3) years; (3-24-22)( )

vii. ~~A s~~Statement identifying the types of collection systems, either separate sanitary sewers or combined storm and sanitary sewers, used by the treatment works, and an estimate of the percent of sewer line ~~that~~ each type comprises; (3-24-22)( )

viii. ~~The following i~~Information for outfalls to waters of the United States and other discharge or disposal methods: (3-24-22)( )

(1) For effluent discharges to waters of the United States, the total number and types of outfalls including treated effluent, combined sewer overflows, bypasses, constructed emergency overflows; ( )

(2) For wastewater discharged to surface impoundments, the location of each surface impoundment, the average daily volume discharged to each surface impoundment, and ~~a statement~~ whether the discharge is continuous or intermittent; (3-24-22)( )

(3) For wastewater applied to the land, the location of each ~~land~~ application site, the size in acres of each ~~land~~ application site, the average daily volume in gallons per day applied to each ~~land~~ application site, and ~~a statement~~ whether the ~~land~~ application is continuous or intermittent; (3-24-22)( )

(4) For effluent sent to another facility for treatment ~~prior to~~ ~~before~~ discharge, the ~~means by which method~~ the effluent is transported; ~~the~~ name, mailing address, e-mail address, contact person, and phone number of the organization transporting the discharge, if the transport is provided by a party other than the applicant; ~~the~~ name, mailing address, e-mail address, contact person, phone number, and IPDES or NPDES permit number, if any, of the receiving facility; ~~and the~~ average daily flow rate from this facility into the receiving facility in million gallons per day (MGD); and (3-24-22)( )

(5) For wastewater disposed of in a manner not included in Subsections 105.11.c.viii(1) through (4), including underground percolation and underground injection, a description of the disposal method, the location and size of each disposal site, if applicable, the annual average daily volume in gallons per day disposed of by this method, and ~~a statement~~ whether disposal by this method is continuous or intermittent; and (3-24-22)( )

ix. ~~The n~~Name, mailing address, e-mail address, telephone number, and responsibilities of ~~all~~ contractors responsible for ~~any operational~~ ~~operating~~ or ~~maintenance aspects of~~ ~~maintaining~~ the POTW facility. (3-24-22)( )

x. ~~An indication of~~ ~~Indicate~~ whether applicant is operating under or requesting to operate under a variance as specified in Subsection 310.02 if known at the time of application. (3-24-22)( )

d. In addition to the information described in Subsection 105.11.c., an applicant ~~under this subsection~~ with a design flow greater than or equal to zero point one (0.1) million gallons per day (MGD) must provide: (3-24-22)( )

i. ~~The e~~Current average daily volume in gallons per day of inflow and infiltration, and ~~a statement describing~~ ~~describe~~ steps the facility is taking to minimize inflow and infiltration; (3-24-22)( )

ii. ~~A t~~Topographic map, or other map if a topographic map is unavailable, extending at least one (1)



mile beyond property boundaries of the treatment plant including ~~all~~ unit processes, and showing: (3-24-22)( )

- (1) ~~The~~ ~~T~~ Treatment plant area and unit processes; (3-24-22)( )
- (2) ~~The~~ ~~m~~ Major pipes or other structures through which wastewater enters the treatment plant and the pipes or other structures through which treated wastewater is discharged from the treatment plant, including outfalls from bypass piping, if applicable; (3-24-22)( )
- (3) Each well where fluids from the treatment plant are injected underground; ( )
- (4) Wells, springs, and other surface water bodies listed in public records or ~~otherwise~~ known to the applicant within one-quarter (1/4) mile of the property boundaries of the treatment works; (3-24-22)( )
- (5) Sewage sludge management facilities including on-site treatment, storage, and disposal sites; and ( )
- (6) Each location at which waste classified as hazardous under IDAPA 58.01.05, "Rules and Standards for Hazardous Waste," enters the treatment plant by truck, rail, or dedicated pipe; ( )

iii. ~~A~~ ~~p~~ Process flow diagram or schematic as follows: (3-24-22)( )

(1) ~~A~~ ~~d~~ Diagram showing the processes of the treatment plant, including ~~all~~ bypass piping and ~~all~~ backup power sources or redundancy in the system, ~~including~~ a water balance showing ~~all~~ treatment units, ~~including~~ ~~and~~ disinfection, and ~~showing~~ daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units; and (3-24-22)( )

(2) ~~A~~ ~~n~~ Narrative description of the diagram; and (3-24-22)( )

iv. ~~The~~ ~~following~~ ~~i~~ Information regarding scheduled improvements: (3-24-22)( )

- (1) ~~The~~ ~~e~~ Outfall number of each affected outfall; (3-24-22)( )
- (2) ~~A~~ ~~n~~ Narrative description of each required improvement; (3-24-22)( )
- (3) Scheduled dates for ~~commencement and completion of~~ ~~commencing and completing~~ construction, ~~commencement of~~ ~~commencing~~ discharge and ~~attainment of~~ ~~attaining~~ operational level, and actual completion date for ~~any~~ ~~events~~ ~~s~~ listed ~~in this subsection that has been completed~~; and (3-24-22)( )

(4) ~~A~~ ~~d~~ Description of permits and authorizations ~~concerning~~ ~~for~~ other federal and state requirements. (3-24-22)( )

e. An applicant ~~under this subsection~~ must provide the following information for each outfall, including bypass points, through which effluent is discharged, as applicable: (3-24-22)( )

i. For each outfall: ( )

- (1) ~~The~~ ~~e~~ Outfall number; (3-24-22)( )
- (2) ~~The~~ ~~e~~ County, and city or town in which the outfall is located; (3-24-22)( )
- (3) ~~The~~ ~~l~~ Latitude and longitude, to the nearest second; (3-24-22)( )
- (4) ~~The~~ ~~d~~ Distance from shore and depth below surface; (3-24-22)( )
- (5) ~~The~~ ~~a~~ Average daily flow rate, in million gallons per day (MGD); (3-24-22)( )
- (6) If the outfall has a seasonal or periodic discharge, the number of times per year the discharge

occurs, ~~the~~ duration of each discharge, ~~the~~ flow of each discharge, and ~~the~~ months ~~in which~~ when discharge occurs; and (3-24-22)( )

(7) ~~A s~~ Statement whether the outfall is equipped with a diffuser and the type of diffuser used, such as high-rate; (3-24-22)( )

ii. For each outfall discharging effluent to waters of the United States, the following receiving water information, if ~~the information is~~ available: (3-24-22)( )

(1) ~~The n~~ Name of each receiving water; (3-24-22)( )

(2) ~~The e~~ Critical flow of each receiving ~~stream~~ water; and (3-24-22)( )

(3) ~~The t~~ Total hardness of the receiving ~~stream~~ water at critical low flow; and (3-24-22)( )

iii. For each outfall discharging to waters of the United States, the following information describing the treatment of the discharges: ( )

(1) ~~The h~~ Highest level of treatment, including primary, equivalent to secondary, secondary, advanced, or other treatment level provided for: (3-24-22)( )

(a) ~~The d~~ Design biochemical oxygen demand removal percentage; (3-24-22)( )

(b) ~~The d~~ Design suspended solids removal percentage; (3-24-22)( )

(c) ~~The d~~ Design phosphorus removal percentage; (3-24-22)( )

(d) ~~The d~~ Design nitrogen removal percentage; and (3-24-22)( )

(e) ~~Any o~~ Other removals that an advanced treatment system is designed to achieve; and (3-24-22)( )

(2) ~~A description of the t~~ Type of disinfection used, and ~~a statement~~ whether the treatment plant de-chlorinates, if disinfection is accomplished through chlorination. (3-24-22)( )

f. In addition to Subsection 105.11.a., and except as provided in Subsection 105.11.h., an applicant ~~under this subsection~~ must undertake sampling and analysis and submit effluent monitoring information for samples taken from each outfall ~~through which~~ where effluent is discharged to waters of the United States, except for combined sewer overflows, including ~~the following if applicable~~: (3-24-22)( )

i. ~~Sampling and analysis for the p~~ Pollutants listed in Appendix J, Table 1A to 40 CFR Part 122; (3-24-22)( )

ii. For an applicant with a design flow greater than or equal to zero point one (0.1) million gallons per day (MGD), ~~sampling and analysis for the~~ pollutants listed in Appendix J, Table 1 to 40 CFR Part 122, except ~~that~~ a facility that does not use chlorine for disinfection, does not use chlorine elsewhere in the treatment process, and has no reasonable potential to discharge chlorine in the facility's effluent, is not required to sample or analyze chlorine; (3-24-22)( )

iii. ~~Sampling and analysis for the p~~ Pollutants listed in Appendix J, Table 2 to 40 CFR Part 122 and ~~for any~~ other pollutants ~~for which~~ the state or EPA has established water quality standards ~~applicable to~~ for the receiving waters if the facility is a POTW: (3-24-22)( )

(1) ~~A POTW that has~~ With a design flow rate equal to or greater than one (1) million gallons per day (MGD); (3-24-22)( )

(2) ~~A POTW that has~~ With an approved pretreatment program; (3-24-22)( )



- (3) ~~A POTW that is r~~Required to develop a pretreatment program; or (3-24-22)( )
- (4) ~~Any POTW, as required by t~~The Department ~~to ensure re~~ compliance with these rules; (3-24-22)( )
- iv. Sampling and analysis for additional pollutants, as the Department may require, on a case-by-case basis; ( )
- v. Data from ~~a minimum of at least~~ three (3) samples taken within four and one-half (4 ½) years before the date of the permit application; to meet this requirement: (3-24-22)( )
- (1) Samples must ~~be representative of~~ represent the seasonal variation in the discharge from each outfall; (3-24-22)( )
- (2) Existing data may be used, if available, in lieu of sampling done solely for ~~the purpose of~~ this application; and (3-24-22)( )
- (3) Additional samples may be required by the Department on a case-by-case basis; and ( )
- vi. ~~All e~~Existing data for pollutants specified in Subsections 105.11.f.i. through iv. collected within four and one-half (4 ½) years of the application. This data must be included in the pollutant data summary submitted by the applicant, except ~~that~~ if the applicant samples for a specific pollutant on a monthly or more frequent basis, only the data collected for that pollutant within one (1) year of the application must be provided. (3-24-22)( )
- g. To meet the information requirements of Subsection 105.11.f., an applicant must: ( )
- i. Collect samples of effluent and analyze the samples for pollutants ~~in accordance with~~ following the analytical methods approved under 40 CFR Part 136 unless an alternative is specified in the existing IPDES or NPDES permit; (3-24-22)( )
- ii. Use the following methods: ( )
- (1) Grab samples for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*), and volatile organics. Temperature, pH, dissolved oxygen, and residual chlorine data may be obtained from grab samples or from calibrated and properly maintained continuous monitors; ( )
- (2) Twenty-four (24) hour composite samples for ~~all~~ other pollutants, unless specified otherwise at 40 CFR Part 136, using ~~a minimum of at least~~ four (4) grab samples; for a composite sample, only one (1) analysis of the composite of aliquots is required; and (3-24-22)( )
- iii. Provide at least the following information for each parameter: ( )
- (1) Maximum daily discharge, expressed as concentration or mass, based upon actual sample values; ( )
- (2) Average daily discharge for all samples, expressed as concentration or mass, and the number of samples used to obtain this value; ( )
- (3) ~~The a~~Analytical method used; and (3-24-22)( )
- (4) ~~The t~~Threshold level, such as the method detection limit, minimum level, or other designated method endpoint for the analytical method used; and (3-24-22)( )
- iv. Report metals as total recoverable, unless the Department requires otherwise. ( )
- h. When an applicant ~~under this subsection~~ has two (2) or more outfalls with substantially identical

effluent discharging to the same receiving water segment, the Department may, on a case-by-case basis, allow the applicant to submit sampling data for only one (1) outfall. The Department may also allow an applicant to composite samples from one (1) or more outfalls that discharge into the same mixing zone, ~~pursuant to~~ under IDAPA 58.01.02, "Water Quality Standards." For POTWs applying ~~prior to commencement of~~ before commencing discharge, data must be submitted no later than twenty-four (24) months after ~~the commencement of~~ discharge commences. (3-24-22)( )

**12. Whole Effluent Toxicity (WET) Monitoring for POTWs.** ( )

**a.** An applicant for a permit under Subsection 105.11 must submit information on effluent monitoring for WET, ~~including an identification of any~~ by identifying WET tests conducted during the four and one-half (4 ½) years before the application ~~date of the application on any of the applicant's~~ discharges or on ~~any~~ receiving water near the discharge. For POTWs applying ~~prior to~~ before discharge ~~commencements of discharge~~, data must be submitted no later than twenty-four (24) months after ~~the commencement of~~ discharge commences. (3-24-22)( )

**b.** An applicant under Subsection 105.11 must submit to the Department, in compliance with Subsections 105.12.c. through f., the results of valid WET tests for acute or chronic toxicity for samples taken from each outfall ~~through which~~ where effluent is discharged to surface waters, except for combined sewer overflows, if the applicant: (3-24-22)( )

i. Has a design flow rate greater than or equal to one (1) million gallons per day (MGD); ( )

ii. Has an approved pretreatment program or is required to develop a pretreatment program; or ( )

iii. Is required to comply with this subsection by the Department, based on consideration of ~~the~~ the following factors: (3-24-22)( )

(1) ~~The~~ Variability of the pollutants or pollutant parameters in the POTW effluent based on chemical-specific information, ~~the~~ type of treatment plant, and types of industrial contributors; (3-24-22)( )

(2) ~~The~~ Ratio of effluent flow to receiving stream flow; (3-24-22)( )

(3) Existing controls on point or non-point sources, including total maximum daily load (TMDL) calculations for the receiving stream segment and the relative contribution of the POTW; (3-24-22)( )

(4) Receiving water characteristics, including possible or known water quality impairment, and whether the POTW discharges to a water designated as an outstanding natural resource water; or ( )

(5) Other considerations, including the history of toxic impacts and compliance problems at the POTW that the Department determines ~~could~~ may cause or contribute to adverse water quality impacts. (3-24-22)( )

**c.** When an applicant under Subsection 105.11 has two (2) or more outfalls with substantially identical effluent discharging to the same receiving water segment, the Department may, on a case-by-case basis, allow the applicant to submit ~~whole effluent toxicity~~ WET data for only one (1) outfall. The Department may also allow an applicant to composite samples from one (1) or more outfalls that discharge into the same mixing zone. (3-24-22)( )

**d.** An applicant under Subsection 105.12.b. that is required to perform WET testing must provide: ( )

i. Results of ~~a minimum of~~ at least four (4) quarterly tests for a year, from the year preceding the permit application or results from four (4) tests performed at least annually in the four and one-half (4 ½) year period before the application, if the results show no appreciable toxicity using a safety factor determined by the Department; (3-24-22)( )

ii. ~~The~~ number of chronic or acute ~~whole effluent toxicity~~ WET tests ~~that have been~~ conducted since

the last permit reissuance; (3-24-22)( )

iii. ~~The r~~Results using the form provided by the Department, or test summaries, if available and comprehensive, for each WET test conducted ~~under this subsection for which~~ if the information has not been reported previously to the Department; (3-24-22)( )

iv. For WET data submitted to the Department within four and one-half (4 ½) years before the date of the application, the dates on which the data were submitted and a summary of the results; and ( )

v. ~~Any i~~Information on the cause of toxicity and written details of any toxicity reduction evaluation conducted, if ~~any~~ WET tests conducted within the past four and one-half (4 ½) years revealed toxicity. (3-24-22)( )

e. An applicant under Subsection 105.11 must conduct tests with no less than two (2) species, including fish, invertebrate, or plant, and test for acute or chronic toxicity, depending on the range of receiving water dilution. Unless the Department directs otherwise, an applicant must conduct acute or chronic testing based on ~~the following dilutions:~~ (3-24-22)( )

i. Acute toxicity testing if the dilution of the effluent is greater than a ratio of one thousand to one (1,000:1) at the edge of the mixing zone; ( )

ii. Acute or chronic toxicity testing, if the dilution of the effluent is between a ratio of one hundred to one (100:1) and one thousand to one (1,000:1) at the edge of the mixing zone; acute testing may be more appropriate at the higher end of this range (one thousand to one ~~(1,000:1)~~), and chronic testing may be more appropriate at the lower end of this range (one hundred to one (100:1)); or (3-24-22)( )

iii. Chronic testing if the dilution of the effluent is less than a ratio of one hundred to one (100:1) at the edge of the mixing zone. ( )

f. For ~~purposes of~~ the WET testing required by this section, an applicant must conduct testing using methods approved under 40 CFR Part 136. (3-24-22)( )

**13. Application Requirements for POTWs Receiving Industrial Discharges.** ( )

a. An applicant for an IPDES permit as a POTW under Subsection 105.11 must state in its application the number of significant industrial users (SIU) and non-significant categorical industrial users (NSCIU), as defined at 40 CFR 403.3(v), including SIUs and NSCIUs that truck or haul waste, discharging to the POTW. A POTW with one (1) or more SIUs must provide the following information for each SIU that discharges to the POTW: ( )

i. ~~The n~~Name and mailing address of the SIU; (3-24-22)( )

ii. ~~A d~~Description of all industrial processes that affect or contribute to the SIU's discharge; (3-24-22)( )

iii. ~~The p~~Principal products and raw materials of each SIU that affects or contributes to that SIU's discharge; (3-24-22)( )

iv. ~~The a~~Average daily volume of wastewater discharged by the SIU, indicating the amount attributable to process flow and non-process flow; (3-24-22)( )

v. ~~A s~~atement ~~w~~Whether the SIU is subject to local limits; (3-24-22)( )

vi. ~~A s~~atement ~~w~~Whether the SIU is subject to one (1) or more categorical standards, and if so, under which category and subcategory; and (3-24-22)( )

vii. ~~A s~~atement ~~w~~Whether ~~any~~ problems at the POTW, including upsets, pass-through, or interference have been attributed to the SIU in the past four and one-half (4 ½) years. (3-24-22)( )

b. The ~~Department~~ Department may waive information required in Subsection 105.13.a. ~~may be waived by the Department~~ for a POTW with a pretreatment program if the applicant ~~has~~ submitted either of the following that contains information substantially identical to the information required in Subsection 105.13.a.: (3-24-22)( )

i. ~~An a~~ Annual report submitted within one (1) year of the application; or (3-24-22)( )

ii. ~~A p~~ Pretreatment program. (3-24-22)( )

**14. Application Requirements for POTWs Receiving Discharges from Hazardous Waste Generators and from Waste Cleanup or Remediation Sites.** ( )

a. ~~A~~ POTWs receiving hazardous or corrective action wastes or wastes generated at another type of cleanup or remediation site must provide ~~the following information:~~ (3-24-22)( )

i. If ~~the a~~ a POTW receives, or has been notified that it will receive by truck, rail, or dedicated pipe, ~~any~~ wastes ~~that are~~ regulated as hazardous wastes under 40 CFR Part 261 and IDAPA 58.01.05, "Rules and Standards for Hazardous Waste," the applicant must report ~~the following:~~ (3-24-22)( )

(1) ~~The method of delivery,~~ How waste is delivered, including by truck, rail, or dedicated pipe, ~~by which the waste is received;~~ and (3-24-22)( )

(2) ~~The applicable h~~ Hazardous waste number designated in IDAPA 58.01.05, "Rules and Standards for Hazardous Waste" for the transported waste, and the amount received annually of each hazardous waste; and (3-24-22)( )

ii. If the POTW receives, or has been notified that it will receive, wastewater that originates from remedial activities, including those undertaken under Comprehensive Environmental Response, Compensation, and Liability Act, and the Resource Conservation and Recovery Act ~~s~~ Sections 3004(u) or 3008(h), the applicant must report ~~the following:~~ (3-24-22)( )

(1) ~~The i~~ Identify and description of each site or facility at which the wastewater originates; (3-24-22)( )

(2) The identity of ~~any~~ known hazardous constituents specified in IDAPA 58.01.05, "Rules and Standards for Hazardous Waste," in the wastewater; and (3-24-22)( )

(3) ~~The e~~ Extent of ~~any~~ treatment the wastewater receives or will receive before entering the POTW. (3-24-22)( )

b. An applicant ~~under this subsection~~ is exempt from the requirements of Subsection 105.14.a.ii. if ~~the applicant~~ he receives no more than fifteen (15) kilograms per month of hazardous wastes, unless the wastes are acute hazardous wastes as specified in IDAPA 58.01.05, "Rules and Standards for Hazardous Waste." (3-24-22)( )

**15. Application Requirements for POTWs with Combined Sewer Systems and Overflows.** A POTW applicant with a combined sewer system must provide the following information on the combined sewer system and outfalls: ( )

a. ~~A s~~ System map indicating the location of: (3-24-22)( )

i. ~~All e~~ Combined sewer overflow discharge points; (3-24-22)( )

ii. ~~Any s~~ Sensitive use areas potentially affected by combined sewer overflows including beaches, drinking water supplies, shellfish beds, and sensitive aquatic ecosystems; (3-24-22)( )

iii. Outstanding national resource waters potentially affected by combined sewer overflows; and ( )

- iv. Waters supporting threatened and endangered species potentially affected by combined sewer overflows; ( )
- of: b. ~~A s~~System diagram of the combined sewer collection system ~~that includes~~ including the locations (3-24-22)( )
- i. Major sewer trunk lines, both combined and separate sanitary; ( )
- ii. Points where separate sanitary sewers feed into the combined sewer system; ( )
- iii. In-line and off-line storage structures; ( )
- iv. Flow-regulating devices; and ( )
- v. Pump stations; ( )
- c. Information on each outfall for each combined sewer overflow discharge point covered by the permit application, including: ( )
- i. ~~The o~~Outfall number; (3-24-22)( )
- ii. ~~The e~~County and city or town ~~in which~~ where the outfall is located; (3-24-22)( )
- iii. ~~The l~~Latitude and longitude, to the nearest second ~~(or equivalent)~~; and (3-24-22)( )
- iv. ~~The d~~Distance from shore and depth below surface; (3-24-22)( )
- d. ~~A s~~Statement whether the applicant monitored ~~any of~~ the following in the past year for a combined sewer overflow: (3-24-22)( )
- i. Rainfall; ( )
- ii. Overflow volume; ( )
- iii. Overflow pollutant concentrations; ( )
- iv. Receiving water quality; ( )
- v. Overflow frequency; and ( )
- vi. ~~The n~~Number of storm events monitored in the past year; (3-24-22)( )
- e. Information ~~regarding about~~ the number of combined sewer overflows from each outfall in the past year and, if available: (3-24-22)( )
- i. ~~The a~~Average duration per event; (3-24-22)( )
- ii. ~~The a~~Average volume for each event; and (3-24-22)( )
- iii. ~~The m~~Minimum rainfall that caused a combined sewer overflow event in the last year; (3-24-22)( )
- f. ~~The n~~Name of each receiving water; (3-24-22)( )
- g. ~~A d~~Description of ~~any~~ known water quality impact caused by the combined sewer overflow operations, including permanent or intermittent beach closings, permanent or intermittent shellfish bed closings, fish

kills, fish advisories, other recreational loss, or the exceedance of ~~any applicable~~ state water quality standards, on the receiving water; and (3-24-22)( )

h. ~~All a~~ Applicants must provide the name, mailing address, e-mail address, telephone number, and responsibilities of ~~all~~ contractors responsible for ~~any operational~~ operating or ~~maintenance aspects of~~ maintaining the facility. (3-24-22)( )

**16. Application Requirements for New Sources and New Discharges. ( )**

a. An applicant for an IPDES permit for a new manufacturing, commercial, mining, silviculture, or other discharge, except for a new discharge from a facility subject to the requirements of Subsection 105.08 or a new discharge of storm water associated with industrial activity ~~that is~~ subject to the requirements of Subsection 105.19, except as provided by Subsection 105.19.c., must provide the following information to the Department, using the ~~applicable~~ forms specified in Subsection 105.04.b.: (3-24-22)( )

i. ~~The~~ Latitude and longitude to the nearest second (or equivalent) of the expected outfall location and the name of each receiving water; (3-24-22)( )

ii. ~~The~~ expected date the discharge will commence; (3-24-22)( )

iii. ~~The following~~ information on flows, sources of pollution, and treatment technologies: (3-24-22)( )

(1) ~~A narrative describing the~~ Describe treatment ~~that~~ the wastewater will receive, identifying ~~all~~ operations contributing wastewater to the effluent, stating e the average flow contributed by each operation, and describing e the ultimate disposal of ~~any~~ solid or liquid wastes not discharged; (3-24-22)( )

(2) ~~A~~ Line drawing of the water flow through the facility with a water balance as described in Subsection 105.07.b.; and (3-24-22)( )

(3) If ~~any of~~ the expected discharges will be intermittent or seasonal, ~~a description of~~ describe the frequency, duration, and maximum daily flow rate of each discharge occurrence, except for storm water runoff, spillage, or leaks; (3-24-22)( )

iv. If a new source performance standard promulgated under ~~the Clean Water Act section~~ CWA Section 306 or an ~~effluent limitation guideline~~ ELG applies to the applicant and is expressed ~~in terms of~~ by production or an other measure of operation, a reasonable calculation of the applicant's expected actual production reported in the units used in the ~~applicable effluent guideline~~ ELG or new source performance standard, as required by Subsection 303.02.b., for each of the first three (3) years. The applicant may submit alternative estimates if production is likely to vary; (3-24-22)( )

v. ~~The~~ effluent characteristics ~~information~~ as described in Subsection 105.16.b.; (3-24-22)( )

vi. ~~The~~ existence of ~~any~~ technical evaluations concerning the applicant's wastewater treatment, ~~along~~ with the name and location of similar plants of which the applicant has knowledge; (3-24-22)( )

vii. ~~Any~~ eOptional information the permittee wishes the Department to consider. (3-24-22)( )

b. ~~An a~~ Applicant ~~under this section~~ must provide the following effluent characteristics information: (3-24-22)( )

i. Estimated daily maximum, daily average, and the source of that information for each outfall for ~~the~~ the following pollutants or parameters: (3-24-22)( )

(1) Five (5)-day biochemical oxygen demand (BOD5); ( )

(2) Chemical oxygen demand (COD); ( )

- (3) Total organic carbon (TOC); ( )
- (4) Total suspended solids (TSS); ( )
- (5) Flow; ( )
- (6) Ammonia, as N; ( )
- (7) Temperature, in both winter and summer; and ( )
- (8) pH. ( )

ii. Estimated daily maximum, daily average, and the source of that information for each outfall for all ~~the~~ conventional and nonconventional pollutants in Table IV of Appendix D to 40 CFR Part 122, if the applicant knows or ~~has reason to believe~~ s ~~any of~~ the pollutants will be present or if ~~any of~~ the pollutants are limited by an effluent limitation guideline ELG or new source performance standard either directly or indirectly through limitations on an indicator pollutant; (3-24-22)( )

iii. Estimated daily maximum, daily average, and the source of that information for the following pollutants for each outfall, if the applicant knows or ~~has reason to believe~~ s the pollutants will be present in the discharge from any outfall: (3-24-22)( )

- (1) ~~All~~ Pollutants in Table IV of Appendix D to 40 CFR Part 122; (3-24-22)( )
- (2) ~~The~~ Toxic metals, total cyanide, and total phenols listed in Table III of Appendix D to 40 CFR Part 122; (3-24-22)( )
- (3) ~~The~~ Organic toxic pollutants in Table II of Appendix D to 40 CFR Part 122 except bis (chloromethyl) ether, dichlorofluoromethane, and trichlorofluoromethane; however, this requirement is waived for: (3-24-22)( )

(a) ~~An~~ Applicant with expected gross sales of less than two hundred eighty-seven thousand three hundred dollars (\$287,300) per year in 2014 dollars for the next three (3) years (~~see also~~ Subsection 105.07.o.ii.); or (3-24-22)( )

(b) ~~A~~ Coal mine with expected average production of less than one hundred thousand (100,000) tons of coal per year (~~see also~~ Subsection 105.07.o.i.); (3-24-22)( )

iv. The information that 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) may be discharged if the applicant uses or manufactures one (1) of the following compounds, or if the applicant knows or ~~has reason to believe~~ s that TCDD will or may be present in an effluent: (3-24-22)( )

- (1) 2,4,5-trichlorophenoxy acetic acid (2,4,5-T); Chemical Abstract Service (CAS) #93-76-5; ( )
- (2) 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP) (CAS #93-72-1); ( )
- (3) 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) (CAS #136-25-4); ( )
- (4) o,o-dimethyl o-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel) (CAS #299-84-3); ( )
- (5) 2,4,5-trichlorophenol (TCP) (CAS #95-95-4); or ( )
- (6) Hexachlorophene (HCP) (CAS #70-30-4); and ( )

v. The potential presence of ~~any of~~ the pollutants listed in 40 CFR Part 122, Appendix D, Table V ~~of~~



~~Appendix D to 40 CFR Part 122~~ if the applicant believes these pollutants will be present in any outfall, except ~~that~~ quantitative estimates are not required unless ~~they are~~ already available ~~at the time when~~ the applicant applies for the permit. (3-24-22)( )

c. No later than twenty-four (24) months after ~~the commencement of~~ commencing discharge from the proposed facility, the applicant ~~is required to~~ must complete and submit Items V and VI of EPA application Form 2C ~~or the Department~~ equivalent. The applicant need not complete those portions of Item V or the Department equivalent requiring tests already performed and reported under the discharge monitoring requirements of its permit. (3-24-22)( )

d. The effluent characteristics requirements in Subsections 105.08.b., c., and e. that an applicant must provide estimates of certain pollutants expected to be present do not apply to pollutants present in a discharge based solely ~~as a result of~~ on their presence in intake water. ~~However, a~~ An applicant must report that a pollutant is present. ~~For purposes of this subsection, n~~ Net credits may be provided for the presence of pollutants in intake water if the requirements of Subsection 303.07 are met, and (except for discharge flow, temperature, and pH) all levels must be estimated as concentration and as total mass. (3-24-22)( )

e. The Department may waive the reporting requirements for any of the pollutants and parameters in Subsection 105.16.b. if the applicant requests a waiver with its application, or earlier, and demonstrates that information adequate to support ~~issuance of~~ issuing the permit can be obtained through less stringent reporting requirements. (3-24-22)( )

**17. Application Requirements for Treatment Works Treating Domestic Sewage (TWTDS).** All TWTDS with a currently effective NPDES or IPDES permit must submit a permit application ~~at the time of~~ during the next IPDES permit renewal ~~application~~, using EPA Form 2S ~~or another application form approved by the Department equivalent~~. New applicants must submit all information available at the time of permit application. The information may be provided by referencing information previously submitted to the Department. (3-24-22)( )

a. The Department may waive ~~any~~ requirements of this subsection if there is access to substantially identical information. The Department may also waive ~~any~~ requirements of this subsection that ~~is~~ are not of material concern for a specific permit, if approved by the EPA Regional Administrator. The waiver request to the Regional Administrator must include the Department's justification for the waiver. An EPA Regional Administrator's disapproval of ~~a the~~ Department's proposed waiver does not constitute final agency action; but does ~~provide notice to~~ notify the state and permit applicant(s) that EPA may object to ~~any~~ state-issued permit ~~issued~~ in the absence of the required information. (3-24-22)( )

b. All a Applicants must submit ~~the following information~~: (3-24-22)( )

i. ~~The n~~ Name, mailing address, and location of the TWTDS ~~for which~~ where the application is submitted; (3-24-22)( )

ii. ~~The n~~ Name, mailing address, e-mail address, ~~EIN or Department equivalent~~, and telephone number of the applicant, ~~and indication~~ ing whether the applicant is the owner, operator, or both; (3-24-22)( )

iii. Whether the facility is a Class I Sludge Management Facility; ( )

iv. ~~The d~~ Design flow rate in million gallons per day (MGD); (3-24-22)( )

v. ~~The t~~ Total population and ~~equivalent dwelling units~~ (EDUs) served; and (3-24-22)( )

vi. ~~The~~ TWTDS's status as federal, state, private, public, or other entity. (3-24-22)( )

c. All a Applicants must submit the facility's NPDES or IPDES permit number, if applicable, and a listing of ~~all other~~ federal, state, and local permits or construction approvals received or applied for under ~~any of the following programs~~: ( )

i. Hazardous waste management program under IDAPA 58.01.05, "Rules and Standards for



- Hazardous Waste”; ( )
- ii. Underground injection control (UIC) program under the Idaho Department of Water Resources UIC program at IDAPA 37.03.03, “Rules and Minimum Standards for the Construction and Use of Injection Wells”; ( )
  - iii. IPDES program under IDAPA 58.01.25, “~~Rules Regulating the~~ Idaho Pollutant Discharge Elimination System ~~Program Rules~~”; (3-24-22)( )
  - iv. Prevention of significant deterioration (PSD) program under IDAPA 58.01.01, “Rules for the Control of Air Pollution in Idaho”; ( )
  - v. Nonattainment program under IDAPA 58.01.01, “Rules for the Control of Air Pollution in Idaho”; ( )
  - vi. National emission standards for hazardous pollutants (NESHAPS) preconstruction approval under IDAPA 58.01.01, “Rules for the Control of Air Pollution in Idaho”; ( )
  - vii. Dredge or fill permits under ~~the Clean Water Act section~~ CWA Section 404; (3-24-22)( )
  - viii. Sludge Management Program under IDAPA 58.01.16.650, “Wastewater Rules,” and Section 380 (~~Sewage Sludge~~) of these rules; and (3-24-22)( )
  - ix. Other relevant environmental permits, programs, or activities, ~~including those~~ subject to state jurisdiction, approval, and permits. (3-24-22)( )
- d. ~~All a~~ Applicants must identify ~~any~~ the generation, treatment, storage, land application, or disposal of sewage sludge that occurs in Indian country. (3-24-22)( )
  - e. ~~All a~~ Applicants must submit a topographic map (or other map if a topographic map is unavailable) extending one (1) mile beyond property boundaries of the facility and showing ~~the following information~~: (3-24-22)( )
    - i. ~~All s~~ Sewage sludge management facilities, including on-site treatment, storage, and disposal sites; and (3-24-22)( )
    - ii. Wells, springs, and other surface water bodies that are within one-quarter (¼) mile of the property boundaries and listed in public records or ~~otherwise~~ known to the applicant. (3-24-22)( )
  - f. ~~All a~~ Applicants must submit a line drawing and/or a narrative description ~~that identifies all~~ identifying sewage sludge management practices employed during the term of the permit, including all units used for collecting, dewatering, storing, or treating sewage sludge, the destination ~~(s)~~ of ~~all~~ liquids and solids leaving each ~~such~~ unit, and all processes used for pathogen reduction and vector attraction reduction. (3-24-22)( )
  - g. ~~The a~~ Applicant must submit sewage sludge monitoring data ~~for the~~ quantifying pollutants ~~for which with~~ limits in sewage sludge ~~have been~~ established in 40 CFR Part 503 for the applicant's use or disposal practices on the date of permit application. (3-24-22)( )
    - i. The Department may require sampling for additional pollutants, as appropriate, on a case-by-case basis; ( )
    - ii. Applicants must provide data from ~~a minimum of at least~~ three (3) samples taken within four and one-half (4 ½) years ~~prior to before~~ the date of the permit application. Samples must ~~be representative of~~ represent the sewage sludge and ~~should be taken be collected~~ at least one (1) month apart. Existing data may be used in lieu of sampling done solely for ~~the purpose of~~ this application; (3-24-22)( )
    - iii. Applicants must collect and analyze samples ~~in accordance with~~ following analytical methods

approved under SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods) unless an alternative ~~has been~~ was specified in an existing sewage sludge permit; and (3-24-22)( )

- iv. ~~The m~~Monitoring data provided must include at least the following information for each parameter: (3-24-22)( )
- (1) Average monthly concentration for all samples (mg/kg dry weight), based upon actual sample values; ( )
- (2) ~~The a~~Analytical method used; and (3-24-22)( )
- (3) ~~The m~~Method detection level. (3-24-22)( )

**h.** If the applicant is either the person who generates sewage sludge during the treatment of domestic sewage in a treatment works or the person who derives a material from sewage sludge, the following information must be provided: ( )

i. If the applicant's facility generates sewage sludge, the total dry metric tons per three hundred sixty-five (365)-day period generated at the facility; ( )

ii. If the applicant's facility receives sewage sludge from another facility, the following information for each facility from which sewage sludge is received: ( )

- (1) ~~The n~~Name, mailing address, and location of the other facility; (3-24-22)( )
- (2) ~~The t~~Total dry metric tons per three hundred sixty-five (365)-day period received from the other facility; and (3-24-22)( )
- (3) ~~A d~~Description of ~~any~~ treatment processes occurring at the other facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics; (3-24-22)( )

iii. If the applicant's facility changes the quality of sewage sludge through blending, treatment, or other activities, the following information must be submitted: ( )

(1) Whether the Class A pathogen reduction requirements in 40 CFR 503.32(a) or the Class B pathogen reduction requirements in 40 CFR 503.32(b) are met, and a description of ~~any~~ treatment processes used to reduce pathogens in sewage sludge; (3-24-22)( )

(2) Whether ~~any of~~ the vector attraction reduction options of 40 CFR 503.33(b)(1) through (b)(8) are met, and a description of ~~any~~ treatment processes used to reduce vector attraction properties in sewage sludge; and (3-24-22)( )

(3) ~~A d~~Description of ~~any other~~ blending, treatment, or other activities that change the quality of sewage sludge; (3-24-22)( )

iv. If sewage sludge from the applicant's facility meets the ceiling concentrations in 40 CFR 503.13(b)(1), the pollutant concentrations in 40 CFR 503.13(b)(3), the Class A pathogen requirements in 40 CFR 503.32(a), and one (1) of the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (b)(8), and if the sewage sludge is applied to the land, the applicant must provide the total dry metric tons per three hundred sixty-five (365)-day period of sewage sludge subject to this subsection that is applied to the land; ( )

v. If sewage sludge from the applicant's facility is sold or given away in a bag or other container for land application ~~to the land~~, and the sewage sludge is not subject to Subsection 105.17.h.iv., the applicant must provide ~~the following information~~: (3-24-22)( )

(1) ~~The t~~Total dry metric tons per three hundred sixty-five (365)-day period of sewage sludge subject to this subsection that is sold or given away in a bag or other container for land application ~~to the land~~; and

(3-24-22)( )

- (2) ~~A~~Copy of ~~all~~ labels or notices that accompany the sewage sludge ~~being~~ sold or given away; and  
(3-24-22)( )

vi. If sewage sludge from the applicant's facility is provided to another person who generates sewage sludge during the treatment of domestic sewage in a treatment works or a person who derives a material from sewage sludge, and the sewage sludge is not subject to Subsection 105.17.h.iv., the applicant must provide the following information for each facility receiving the sewage sludge: ( )

- (1) ~~The n~~Name, e-mail address, and mailing address of the receiving facility; (3-24-22)( )

(2) ~~The t~~Total dry metric tons per three hundred sixty-five (365)-day period of sewage sludge subject to this subsection that the applicant provides to the receiving facility; (3-24-22)( )

(3) ~~A d~~Description of ~~any~~ treatment processes occurring at the receiving facility, including blending activities and treatment to reduce pathogens or vector attraction characteristic; (3-24-22)( )

(4) ~~A e~~Copy of the notice and necessary information that the applicant is required to provide the receiving facility under 40 CFR 503.12(g); and (3-24-22)( )

(5) If the receiving facility places sewage sludge in bags or containers for sale or give-away to application to the land, a copy of any labels or notices that accompany the sewage sludge. (3-24-22)( )

i. If sewage sludge from the applicant's facility is applied to the land in bulk form, and is not subject to Subsection 105.17.h.iv., v., or vi., the applicant must provide ~~the following information~~: (3-24-22)( )

i. ~~The t~~Total dry metric tons per three hundred sixty-five (365)-day period of sewage sludge subject to this subsection that is applied to the land; (3-24-22)( )

ii. If ~~any~~ land application sites are ~~located~~ in states other than the state where the sewage sludge is prepared, a description of how the applicant will notify the permitting authority for the state(s) where the land application sites are located; (3-24-22)( )

iii. The following information for each land application site ~~that has been~~ identified at the time of permit application: (3-24-22)( )

- (1) ~~The n~~Name (if any), and location for the land application site; (3-24-22)( )

(2) ~~The site's t~~Latitude and longitude to the nearest second (or equivalent), and method of determination; (3-24-22)( )

(3) ~~A t~~Topographic map (or an other map if a topographic map is unavailable) ~~that~~ shows the site's location; (3-24-22)( )

(4) ~~The n~~Name, mailing address, e-mail address, and telephone number of the site owner, if different from the applicant; (3-24-22)( )

(5) ~~The n~~Name, mailing address, e-mail address, and telephone number of the person who applies sewage sludge to the site, if different from the applicant; (3-24-22)( )

(6) Whether the site is agricultural land, forest, a public contact site, or a reclamation site, as ~~such site types are~~ defined under 40 CFR 503.11; (3-24-22)( )

(7) ~~The t~~Type of vegetation grown on the site, if known, and the nitrogen requirement for ~~this~~ the vegetation; (3-24-22)( )

(8) Whether ~~either of~~ the vector attraction reduction options of 40 CFR 503.33(b)(9) or (b)(10) ~~is~~ are met at the site, and a description of ~~any~~ procedures employed ~~at the time of~~ during use to reduce vector attraction properties in sewage sludge; and (3-24-22)( )

(9) Other information ~~that describes~~ describing how the site will be managed, as specified by the permitting authority. (3-24-22)( )

iv. The following information for each land application site ~~that has been~~ identified ~~at the time of~~ during permit application, if the applicant intends to apply bulk sewage sludge subject to the cumulative pollutant loading rates in 40 CFR 503.13(b)(2) to the site: (3-24-22)( )

(1) Whether the applicant ~~has~~ contacted the permitting authority in the state where the bulk sewage sludge subject to 40 CFR 503.13(b)(2) will be applied, to ascertain whether bulk sewage sludge subject to 40 CFR 503.13(b)(2) has been applied to the site on or since July 20, 1993, and if so, the name of the permitting authority and the name, phone number, and e-mail address, if available, of a contact person at the permitting authority; (3-24-22)( )

(2) Identification of facilities other than the applicant's facility that have sent, or are sending, sewage sludge subject to the cumulative pollutant loading rates in 40 CFR 503.13(b)(2) to the site since July 20, 1993, if, based on the inquiry in Subsection 105.17.i.iv(1) bulk sewage sludge subject to cumulative pollutant loading rates in 40 CFR 503.13(b)(2) has been applied to the site since July 20, 1993; ( )

v. If ~~not~~ all land application sites have ~~not~~ been identified ~~at the time of~~ during permit application, the applicant must submit a land application plan that, at a minimum: (3-24-22)( )

(1) Describes the geographical area covered by the plan; ( )

(2) Identifies the site selection criteria; ( )

(3) Describes how the site ~~(s)~~ will be managed; (3-24-22)( )

(4) Provides for advance notice to the permit authority of specific land application sites and reasonable time for the permit authority to object ~~prior to~~ before land ~~application of~~ applying the sewage sludge; and (3-24-22)( )

(5) Provides for advance public notice of land application sites in the manner prescribed by state and local law. When state or local law does not require advance public notice, it must be provided in a manner ~~reasonably calculated to apprise~~ that informs the ~~general~~ public of the planned land application. (3-24-22)( )

j. If sewage sludge from the applicant's facility is placed on a surface disposal site, the applicant must provide ~~the following information~~: (3-24-22)( )

i. ~~The~~ Total dry metric tons of sewage sludge from the applicant's facility that is placed on surface disposal sites per three hundred sixty-five (365)-day period; (3-24-22)( )

ii. The following information for each surface disposal site receiving sewage sludge from the applicant's facility that the applicant does not own or operate: ( )

(1) ~~The~~ site name or number, contact person, mailing address, e-mail address, and telephone number for the surface disposal site; and (3-24-22)( )

(2) ~~The~~ total dry metric tons from the applicant's facility per three hundred sixty-five (365)-day period placed on the surface disposal site; (3-24-22)( )

iii. The following information for each active sewage sludge unit at each surface disposal site that the applicant owns or operates: ( )

- (1) ~~The n~~Name or number and ~~the~~ location of the active sewage sludge unit; (3-24-22)( )
- (2) ~~The unit's~~Latitude and longitude to the nearest second (or equivalent), and method of determination; (3-24-22)( )
- (3) If not already provided, a topographic map (or other map if a topographic map is unavailable) that shows the unit's location; ( )
- (4) ~~The t~~Total dry metric tons placed on the active sewage sludge unit per three hundred sixty-five (365)-day period; (3-24-22)( )
- (5) ~~The t~~Total dry metric tons placed on the active sewage sludge unit over the life of the unit; (3-24-22)( )
- (6) ~~A d~~Description of ~~any the~~ liner for the active sewage sludge unit, including whether it has a maximum permeability of  $1 \times 10^{-7}$  cm/sec; (3-24-22)( )
- (7) ~~A d~~Description of ~~any~~ leachate collection system for the active sewage sludge unit, including the method used for leachate disposal, and ~~any~~ federal, state, and local permit number(s) for leachate disposal; (3-24-22)( )
- (8) If the active sewage sludge unit is less than one hundred fifty (150) meters from the property line of the surface disposal site, the actual distance from the unit boundary to the site property line; ( )
- (9) ~~The r~~Remaining capacity (dry metric tons) for the active sewage sludge unit; (3-24-22)( )
- (10) ~~The d~~Date on which the active sewage sludge unit is expected to close, if ~~such~~ a date has been identified; (3-24-22)( )
- (11) The following information for ~~any~~ other facility~~s~~ that sends sewage sludge to the active sewage sludge unit: (3-24-22)( )
  - (a) ~~The n~~Name, contact person, and mailing address of the facility; and (3-24-22)( )
  - (b) ~~Available i~~Information ~~regarding about~~ the quality of the sewage sludge received from the facility, including any treatment at the facility to reduce pathogens or vector attraction characteristics; (3-24-22)( )
- (12) Whether ~~any of~~ the vector attraction reduction options of 40 CFR 503.33(b)(9) through (b)(11) ~~is~~ are met at the active sewage sludge unit, and a description of ~~any~~ procedures employed at the time of disposal to reduce vector attraction properties in sewage sludge; (3-24-22)( )
- (13) The following information, as applicable to ~~any~~ ground water monitoring occurring at the active sewage sludge unit: (3-24-22)( )
  - (a) ~~A d~~Description of ~~any~~ ground water monitoring occurring at the active sewage sludge unit; (3-24-22)( )
  - (b) ~~Any available g~~Ground water monitoring data, ~~with a description of~~ describing the well locations and approximate depth to ground water; (3-24-22)( )
  - (c) ~~A e~~Copy of ~~any~~ ground water monitoring plan ~~that has been~~ prepared for the active sewage sludge unit; and (3-24-22)( )
  - (d) ~~A e~~Copy of ~~any~~ certification ~~that has been~~ obtained from a qualified ground water scientist that the aquifer has not been contaminated; and (3-24-22)( )
- (14) If site-specific pollutant limits are ~~being~~ sought for the sewage sludge placed on this active sewage

sludge unit, information to support ~~such a~~ the request.

(3-24-22)( )

k. If sewage sludge from the applicant's facility is fired in a sewage sludge incinerator, the applicant must provide ~~the following information:~~

(3-24-22)( )

i. ~~The t~~ Total dry metric tons of sewage sludge from the applicant's facility that is fired in sewage sludge incinerators per three hundred sixty-five (365)-day period;

(3-24-22)( )

ii. The following information for each sewage sludge incinerator firing the applicant's sewage sludge that the applicant does not own or operate:

( )

(1) ~~The n~~ Name ~~and/~~ or number, contact person, mailing address, e-mail address, and telephone number of the sewage sludge incinerator; and

(3-24-22)( )

(2) ~~The t~~ Total dry metric tons from the applicant's facility per three hundred sixty-five (365)-day period fired in the sewage sludge incinerator;

(3-24-22)( )

iii. The following information for each sewage sludge incinerator that the applicant owns or operates:

( )

(1) ~~The n~~ Name ~~and/~~ or number and the location of the sewage sludge incinerator;

(3-24-22)( )

(2) ~~The i~~ ncinerator's ~~L~~atitude and longitude to the nearest second (or equivalent), and method of determination;

(3-24-22)( )

(3) ~~The t~~ Total dry metric tons per three hundred sixty-five (365)-day period fired in the sewage sludge incinerator;

(3-24-22)( )

(4) Information, test data, and documentation of ongoing operating parameters indicating that compliance with the National Emission Standard for Beryllium in 40 CFR Part 61 will be achieved;

( )

(5) Information, test data, and documentation of ongoing operating parameters indicating that compliance with the National Emission Standard for Mercury in 40 CFR Part 61 will be achieved;

( )

(6) ~~The d~~ispersion factor for the sewage sludge incinerator, ~~as well as~~ and modeling results and supporting documentation;

(3-24-22)( )

(7) ~~The e~~ontrol efficiency for parameters regulated in 40 CFR 503.43, ~~as well as~~ and performance test results and supporting documentation;

(3-24-22)( )

(8) Information used to calculate the risk specific concentration (RSC) for chromium, including the results of incinerator stack tests for hexavalent and total chromium concentrations, if the applicant is requesting a chromium limit based on a site-specific RSC value;

( )

(9) Whether the applicant monitors total hydrocarbons (THC) or ~~C~~arbon ~~M~~onoxide (CO) in the exit gas for the sewage sludge incinerator;

(3-24-22)( )

(10) ~~The t~~ype of sewage sludge incinerator;

(3-24-22)( )

(11) ~~The m~~aximum performance test combustion temperature, ~~as~~ obtained during the performance test of the sewage sludge incinerator to determine pollutant control efficiencies;

(3-24-22)( )

(12) The following information on the sewage sludge feed rate used during the performance test:

( )

(a) Sewage sludge feed rate in dry metric tons per day;

( )

- (b) ~~Identification of~~ Identify whether the feed rate submitted is average use or maximum design; and (3-24-22)( )
- (c) ~~A description of~~ Describe how the feed rate was calculated; (3-24-22)( )
- (13) ~~The i~~ncinerator stack height in meters for each stack, ~~including identification of and identify~~ whether actual or creditable stack height was used; (3-24-22)( )
- (14) ~~The o~~perating parameters for the sewage sludge incinerator air pollution control device(s), as obtained during the performance test of the sewage sludge incinerator to determine pollutant control efficiencies; (3-24-22)( )
- (15) ~~Identification of~~ Identify the monitoring equipment in place, including, (but not limited to), equipment to monitor ~~the following~~: (3-24-22)( )
- (a) Total hydrocarbons or ~~C~~carbon ~~M~~monoxide; (3-24-22)( )
- (b) Percent ~~O~~xygen; (3-24-22)( )
- (c) Percent moisture; and ( )
- (d) Combustion temperature; and ( )
- (16) ~~A list of all~~ List of air pollution control equipment used with this sewage sludge incinerator. (3-24-22)( )
- l.** If sewage sludge from the applicant's facility is sent to a municipal solid waste landfill (MSWLF), the applicant must provide the following information for each MSWLF ~~to which sewage sludge is sent~~: (3-24-22)( )
- i. ~~The n~~Name, contact person, mailing address, e-mail address location, and ~~all applicable MSWLF permit numbers of the MSWLF~~; (3-24-22)( )
- ii. ~~The t~~Total dry metric tons per three hundred sixty-five (365)-day period sent from this facility to the MSWLF; (3-24-22)( )
- iii. ~~A d~~Determination of whether the sewage sludge meets ~~applicable the~~ requirements for MSWLF disposal of sewage sludge in a MSWLF, including the results of the paint filter liquids test and ~~any~~ additional requirements that apply on a site-specific basis; and (3-24-22)( )
- iv. Information, if known, indicating whether the MSWLF complies with criteria ~~set forth~~ in 40 CFR Part 258. (3-24-22)( )
- m.** ~~All applicants must provide the n~~Name, mailing address, e-mail address, telephone number, and responsibilities of ~~all contractors responsible for any operational that operate or maintenance aspects of the maintain a~~ facility related to sewage sludge generation, treatment, use, or disposal. (3-24-22)( )
- n.** At the request of the Department, the applicant must provide ~~any other~~ information necessary to determine the appropriate standards for permitting under 40 CFR Part 503 and ~~any other information necessary~~ to assess the sewage sludge use and disposal practices, determine whether to issue a permit, or identify appropriate permit requirements. (3-24-22)( )
- o.** TWTDS facilities using or disposing of sewage sludge ~~to which where~~ a standard applicable to its sewage sludge use or disposal practices ~~have~~s been published must submit the following information on EPA Form 2S, Part I, ~~or on the Department~~ equivalent form: (3-24-22)( )
- i. ~~The~~TWTDS's name, mailing address, location, and status as federal, state, private, public, or other



- entity; (3-24-22)( )
- ii. ~~The a~~Applicant's name, address, e-mail address, telephone number, and ownership status; (3-24-22)( )
- iii. ~~A d~~Description of the sewage sludge use or disposal practices. Unless the sewage sludge meets the requirements of Subsection 105.17.h.iv., the description must include the name and address of ~~any facility facilities~~ where sewage sludge is sent for treatment or disposal, and the locations ~~s~~ of ~~any~~ land application sites; (3-24-22)( )
- iv. Annual amount of sewage sludge generated, treated, used or disposed (estimated dry weight basis); and ( )
- v. ~~The m~~Most recent data the TWTDS may have on the quality of the sewage sludge. (3-24-22)( )

**18. Application Requirements for Municipal Separate Storm Sewer (MS4) Discharges.** The operator of a discharge from a large or medium ~~municipal separate storm sewer MS4~~ or an ~~municipal separate storm sewer that is MS4~~ designated by the Department under 40 CFR 122.26(a)(1)(v); may submit a jurisdiction-wide or system-wide permit application. Where more than one (1) public entity owns or operates an ~~municipal separate storm sewer MS4s~~ within a geographic area (including adjacent or interconnected ~~municipal separate storm sewer systems MS4s~~), ~~such an~~ operators may be ~~a~~ co-applicant to the same application. Permit applications for discharges from large and medium ~~municipal storm sewers MS4s~~ or ~~municipal storm sewers MS4s~~ designated under 40 CFR 122.26 (a)(1)(v) must include: (3-24-22)( )

- a. In Part 1 of the application: ( )
- i. ~~The applicants'~~Applicant's name, address, e-mail address, ~~EIN or Department equivalent~~, telephone number of contact person, ownership status and status as a state or local government entity; (3-24-22)( )
- ii. ~~A d~~Description of existing legal authority to control discharges to the ~~municipal separate storm sewer system MS4~~. When existing legal authority is not sufficient to meet the criteria provided in Subsection 105.18.b.i., the description must list additional authorities ~~as will be necessary to meet the criteria~~ and include a schedule and commitment to seek ~~such the~~ additional authority that will be needed to meet the criteria; (3-24-22)( )
- iii. ~~A d~~Description of the historic use of ordinances, guidance or other controls ~~which that~~ limited the discharge of non-storm water discharges to ~~any~~ POTW serving the same area as the ~~municipal separate storm sewer system MS4~~, including ~~all of the following~~:
- (1) ~~A~~USGS seven point five (7.5) minute topographic map (or equivalent topographic map with a scale between one to ten thousand (~~[1:10,000]~~) and one to twenty-four thousand (~~[1:24,000]~~) if cost effective) extending one (1) mile beyond the service boundaries of the ~~municipal storm sewer system MS4~~ covered by the permit application; (3-24-22)( )
- (2) ~~The l~~Location of known ~~municipal storm sewer system MS4~~ outfalls discharging to waters of the United States; (3-24-22)( )
- (3) ~~A d~~Description of the land use activities (~~e.g.~~ divisions indicating undeveloped, residential, commercial, agricultural, and industrial uses) accompanied with estimates of population densities and projected growth for a ten (10) year period within the drainage area served by the ~~separate storm sewer MS4~~ and an estimate of an average runoff coefficient for each land use type; (3-24-22)( )
- (4) ~~The l~~Location and ~~a~~ description of the activities ~~of the facility~~ of each currently operating or closed municipal landfill or other treatment, storage, or disposal facility for municipal waste; (3-24-22)( )
- (5) ~~The l~~Location and ~~the~~ permit number of ~~any~~ known discharges to the ~~municipal storm sewer MS4~~



- that ~~has~~ve been issued a NPDES or IPDES permit; (3-24-22)( )
- (6) ~~The~~ Location of major structural controls for storm water discharge (retention basins, detention basins, ~~and~~ major infiltration devices, ~~etc.~~); and (3-24-22)( )
- (7) ~~The~~ Identification of publicly owned parks, recreational areas, and other open lands. (3-24-22)( )
- iv. ~~A~~Description of the discharge including: (3-24-22)( )
- (1) Monthly mean rain and snow fall estimates (or summary of weather bureau data) and the monthly average number of storm events; ( )
- (2) Existing quantitative data describing the volume and quality of discharges from the ~~municipal storm sewer~~ MS4, including a description of the outfalls sampled, sampling procedures and analytical methods used; (3-24-22)( )
- (3) ~~A~~List of water bodies that receive discharges from the ~~municipal separate storm sewer system~~ MS4, including downstream segments, lakes, and estuaries; where pollutants from the system discharges may accumulate and cause water degradation, and a ~~brief~~ description of known water quality impacts. At a minimum, the description of impacts must include ~~a description of~~ whether the water bodies receiving ~~such the~~ discharges have been: (3-24-22)( )
- (a) Assessed ~~and reported in the Clean Water Act section~~ for CWA Section 305(b) reports submitted by the Department, the basis for the assessment (evaluated or monitored), a summary of designated use support and attainment of ~~Clean Water Act~~ CWA goals (fishable and swimmable waters), and causes of nonsupport of designated uses; (3-24-22)( )
- (b) Listed under ~~the Clean Water Act section~~ CWA Section 304(l)(1)(A)(i), 304(l)(1)(A)(ii), or 304(l)(1)(B) that is not expected to meet water quality standards or water quality goals; (3-24-22)( )
- (c) Listed in state Nonpoint Source Assessments required by ~~the Clean Water Act section~~ CWA Section 319(a), without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain water quality standards due to storm sewers, construction, highway maintenance, and runoff from municipal landfills and municipal sludge adding significant pollution (or contributing to a violation of water quality standards); (3-24-22)( )
- (d) Identified and classified according to eutrophic condition of publicly owned lakes listed in state reports required under ~~the Clean Water Act section~~ CWA Section 314(a) (~~include the following: A~~ including a description of those publicly owned lakes for which uses are known to be impaired, ~~a~~ description of procedures, processes and methods to control the discharge of pollutants from ~~municipal separate storm sewers~~ MS4s into ~~such~~ lakes, and ~~a~~ description of methods and procedures to restore the ~~lakes'~~ quality of ~~such~~ lakes); (3-24-22)( )
- (e) Recognized by the applicant as highly valued or sensitive waters; ( )
- (f) Defined by the state as wetlands; and ( )
- (g) Found to have pollutants in bottom sediments, fish tissue, or biosurvey data. ( )
- (4) Results of a field screening analysis for illicit connections and illegal dumping for either selected field screening points or major outfalls covered in the permit application. At a minimum, a screening analysis includes a narrative description, for either each field screening point or major outfall, of visual observations made during dry weather periods. If ~~any~~ flow is observed, two (2) grab samples ~~are to will~~ be collected during a twenty-four (24)-hour period with ~~a minimum period of~~ at least four (4) hours between samples. For ~~all such the~~ samples, a narrative description of the color, odor, turbidity, ~~the~~ presence of an oil sheen or surface scum ~~as well as any~~ and other relevant observations ~~regarding about~~ the potential presence of non-storm water discharges or illegal dumping must be provided. In addition, a narrative description of the results of a field analysis using suitable methods to estimate

pH, total chlorine, total copper, total phenol, and detergents (or surfactants) must be provided ~~along~~ with a description of the flow rate. Where the field analysis does not involve analytical methods approved under 40 CFR Part 136, the applicant must provide a description of the method used including the name of the manufacturer of the test method ~~along~~ with the range and accuracy of the test. Field screening points are either major outfalls or other outfall points (or ~~any~~ ~~another~~ point of access such as manholes) randomly located throughout the storm sewer system by placing a grid over a drainage system map and identifying those cells of the grid ~~which that~~ contain a segment of the storm sewer system or major outfall. The field screening points are established using the following guidelines and criteria:

(3-24-22)(    )

(a) Overlay a grid system consisting of perpendicular north-south and east-west lines spaced one-quarter (1/4) mile apart on a map of the ~~municipal storm sewer system MS4~~, creating a series of cells;

(3-24-22)(    )

(b) Identify ~~all~~ cells that contain a segment of the ~~storm sewer system MS4~~; select one (1) field screening point in each cell; major outfalls may be used as field screening points;

(3-24-22)(    )

(c) ~~FLocate~~ field screening points ~~should be located~~ downstream of ~~any~~ sources of suspected illegal or illicit activity;

(3-24-22)(    )

(d) Locate field screening points to the degree practicable at the farthest manhole or other accessible location downstream in the system, within each cell; however, ~~consider the~~ safety of personnel and accessibility of the location ~~should be considered~~ in making this determination;

(3-24-22)(    )

(e) Hydrologic~~al~~ conditions, total drainage area of the site, population density of the site, traffic density, age of the structures or buildings in the area, history of the area, and land use types;

(3-24-22)(    )

(f) For medium ~~municipal separate storm sewer systems MS4s~~, no more than two hundred fifty (250) cells need to have identified field screening points; in large ~~municipal separate storm sewer systems MS4s~~, no more than five hundred (500) cells need to have identified field screening points; cells established by the grid that contain no storm sewer segments will be eliminated from consideration; if fewer than two hundred fifty (250) cells in medium municipal sewers are created, and fewer than 500 in large systems are created by the overlay on the municipal sewer map, then ~~all~~ those cells ~~which that~~ contain a segment of the sewer system are subject to field screening (unless access to the separate storm sewer system is impossible); and

(3-24-22)(    )

(g) Large or medium ~~municipal separate storm sewer systems which MS4s that~~ are unable to utilize the procedures described in Subsection 105.18.a.iv(4)(a) through (f), because a sufficiently detailed map of the separate storm sewer systems is unavailable, must field screen no more than five hundred (500) or two hundred fifty (250) major outfalls respectively (or ~~all~~ major outfalls in the system, if less). In ~~such these~~ circumstances, the applicant must establish a grid system consisting of north-south and east-west lines spaced one-quarter (1/4) mile apart as an overlay to the boundaries of the ~~municipal storm sewer system MS4~~, thereby creating a series of cells. The applicant will ~~then~~ select major outfalls in as many cells as possible until at least five hundred (500) major outfalls (large municipalities) or two hundred fifty (250) major outfalls (medium municipalities) are selected; a field screening analysis must occur at these major outfalls; and

(3-24-22)(    )

(5) Information and a proposed program to meet the requirements of Subsection 105.18.b.iii., including at least: the location of outfalls or field screening points appropriate for representative data collection under Subsection 105.18.b.iii(1), a description of why the outfall or field screening point is representative, the seasons ~~during which when~~ sampling is intended, ~~and~~ a description of the sampling equipment. The proposed ~~sampling~~ locations of outfalls or field screening points ~~for such sampling should must~~ reflect water quality concerns (see Subsection 105.18.a.iv(3)) ~~to the extent practicable~~;

(3-24-22)(    )

v. ~~A d~~ Description of the existing management programs to control pollutants from the ~~municipal separate storm sewer system MS4~~ including existing source controls and operation and maintenance measures for structural controls that are currently ~~being~~ implemented. ~~Such The~~ controls may include, but are not limited to: procedures to control pollution resulting from construction activities; floodplain management controls; wetland protection measures; ~~best management practices BMPs~~ for new subdivisions; and emergency spill response programs. The description may address controls established under state law ~~as well as~~ ~~and~~ local requirements;

(3-24-22)( )

vi. ~~A d~~Description of the existing program to identify illicit connections to the ~~municipal storm sewer system MS4~~ that includes inspection procedures and methods for detecting and preventing illicit discharges and describes areas where this program has been implemented; and (3-24-22)( )

vii. ~~A d~~Description of the financial resources currently available to the municipality to complete part 2 of the permit application. A description of the municipality's budget for existing storm water programs, including an overview of the municipality's financial resources and budget, including overall indebtedness and assets, and sources of funds for storm water programs. (3-24-22)( )

b. In Part 2 of the application: ( )

i. ~~A demonstration that~~Demonstrate the applicant can operate ~~pursuant to~~ under legal authority established by statute, ordinance, or series of contracts ~~which that~~ authorizes or enables the applicant at a minimum to: (3-24-22)( )

(1) Control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the ~~municipal storm sewer MS4~~ by storm water discharges associated with industrial activity and the quality of storm water discharged from sites of industrial activity; (3-24-22)( )

(2) Prohibit through ordinance, order or similar means, illicit discharges to the ~~municipal separate storm sewer MS4~~; (3-24-22)( )

(3) Control through ordinance, order or similar means the discharge to ~~an municipal separate storm sewer MS4~~ of spills, dumping or disposal of materials other than storm water; (3-24-22)( )

(4) Control through interagency agreements among co-applicants the contribution of pollutants from a portion of the municipal system to another portion of the municipal system; ( )

(5) Require compliance with conditions in ordinances, permits, contracts or orders; and ( )

(6) ~~Carry out all~~Complete inspection, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including ~~the prohibition on~~ prohibiting illicit discharges to the ~~municipal separate storm sewer MS4~~. (3-24-22)( )

ii. ~~The~~Location of ~~any~~ major outfall ~~that~~ discharges to waters of the United States that ~~was were~~ not reported under Subsection 105.18.a.iii(2). Provide an inventory, organized by watershed, of the name, ~~and~~ address, and a description (~~such as~~ Standard Industrial Classification ([SIC]) codes) ~~which that~~ best reflects the principal products or services provided by each facility ~~which that~~ may discharge, to the ~~municipal separate storm sewer MS4~~, ~~and the~~ storm water associated with industrial activity; (3-24-22)( )

iii. When quantitative data for a pollutant are required under Subsection 105.18.b.iii(1)(c), the applicant must collect a sample of effluent in accordance with Subsection 105.07.c. through 105.07.m. and analyze it for the pollutant ~~in accordance with~~ following the analytical methods approved under 40 CFR Part 136. When no analytical method is approved, the applicant may use ~~any~~ suitable method but must provide a description of the method. The applicant must provide information characterizing the quality and quantity of discharges covered in the permit application, including: (3-24-22)( )

(1) Quantitative data from representative outfalls designated by the Department ~~and~~ developed as follows (based on information received in part 1 of the application. The Department will designate between five (5) and ten (10) outfalls or field screening points as representative of the commercial, residential and industrial land use activities of the drainage area contributing to the system or, where there are less than five (5) outfalls covered in the application, the Department will designate all outfalls): (3-24-22)( )

(a) For each outfall or field screening point designated under this subsection, samples must be collected of storm water discharges from three (3) storm events occurring at least one (1) month apart in accordance

with ~~the requirements at~~ Subsection 105.07.c. through 105.07.m. (the Department may allow exemptions to sampling three (3) storm events when climatic conditions create good cause for ~~such the~~ exemptions); (3-24-22)( )

(b) A narrative description must be provided of the date and duration of the storm event(s) sampled, rainfall estimates of the storm event ~~which that~~ generated the sampled discharge and the duration between the storm event sampled and the end of the previous measurable (greater than one-tenth (~~[0.1]~~) inch rainfall) storm event; (3-24-22)( )

(c) For samples collected and described under Subsections 105.18.b.iii(1)(a) and (b), quantitative data will be provided for the organic pollutants listed in Table II and the pollutants listed in Table III (toxic metals, cyanide, and total phenols) of ~~40 CFR Part 122, Appendix D of 40 CFR Part 122,~~ and for the following pollutants: (3-24-22)( )

- (i) Total suspended solids (TSS); ( )
- (ii) Total dissolved solids (TDS); ( )
- (iii) Chemical oxygen demand (COD); ( )
- (iv) Five (5)-day biochemical oxygen demand (BOD5); ( )
- (v) Oil and grease; ( )
- (vi) Fecal coliform (including *E. coli*); ( )
- (vii) Enterococci (previously known as fecal streptococcus); ( )
- (viii) pH; ( )
- (ix) Total Kjeldahl nitrogen; ( )
- (x) Nitrate plus nitrite; ( )
- (xi) Total ammonia plus organic nitrogen; ( )
- (xii) Dissolved phosphorus; and ( )
- (xiii) Total phosphorus; ( )

(d) Additional ~~limited~~ quantitative data required by the Department for determining permit conditions (the Department may require that quantitative data be provided for additional parameters, and may establish sampling conditions such as the location, season of sample collection, form of precipitation (snow melt, rainfall) and other parameters necessary to ~~insure~~ representativeness); (3-24-22)( )

(2) Estimates of the annual pollutant load of the cumulative discharges to waters of the United States from ~~all~~ identified municipal outfalls and the event mean concentration of the cumulative discharges to waters of the United States from ~~all~~ identified municipal outfalls during a storm event for BOD5, COD, TSS, dissolved solids, total nitrogen, total ammonia plus organic nitrogen, total phosphorus, dissolved phosphorus, cadmium, copper, lead, and zinc. Estimates must be accompanied by a description of the procedures for estimating constituent loads and concentrations, including ~~any~~ modelling, data analysis, and calculation methods; (3-24-22)( )

(3) A proposed schedule to provide estimates for each major outfall identified in ~~either~~ Subsection 105.18.b.ii. or 105.18.a.iii(2) of the seasonal pollutant load and of the event mean concentration of a representative storm for ~~any~~ constituents ~~s~~ detected in ~~any~~ samples ~~s~~ required under Subsection 105.18.b.iii(1); and (3-24-22)( )

(4) A proposed monitoring program for representative data collection for the term of the permit that describes the location of outfalls or field screening points to be sampled (or the location of instream stations), why the

location is representative, the frequency of sampling, parameters to be sampled, and a description of sampling equipment; ( )

iv. A proposed management program covering the duration of the permit, that includes a comprehensive planning process ~~involving with~~ public participation and where necessary intergovernmental coordination, to reduce the discharge of pollutants to the maximum extent practicable using management practices, control techniques and system, design and engineering methods, and ~~such~~ other appropriate provisions ~~which are appropriate~~. The program must also include a description of staff and equipment available to implement the program. Separate proposed programs may be submitted by each co-applicant. Proposed programs may impose controls on a system wide basis, a watershed basis, a jurisdiction basis, or on individual outfalls. Proposed programs will be considered by the Department when developing permit conditions to reduce pollutants in discharges to the maximum extent practicable. Proposed management programs must describe priorities for implementing controls. ~~Such programs must be based on:~~ (3-24-22)( )

(1) A description of structural and source control measures, implemented during the life of the permit, to reduce pollutants ~~from in~~ runoff from commercial and residential areas that are discharged from the ~~municipal storm sewer system that are to be implemented during the life of the permit, accompanied MS4~~ with an estimate of the expected reduction of pollutant loads, and a proposed schedule for implementing ~~such the~~ controls. At a minimum, the description must include: (3-24-22)( )

(a) ~~A description of m~~Maintenance activities and a ~~maintenance~~ schedule for structural controls to reduce pollutants (including floatables) in discharges from ~~municipal separate storm sewers MS4s;~~ (3-24-22)( )

(b) ~~A description of p~~Planning procedures including a comprehensive master plan to develop, implement, and enforce controls to reduce the discharge of pollutants from ~~municipal separate storm sewers which MS4s that~~ receive discharges from areas of new development and significant redevelopment. ~~Such~~The plan must address controls to reduce pollutants in discharges from ~~municipal separate storm sewers MS4s~~ after construction is completed (controls to reduce pollutants in discharges ~~from municipal separate storm sewers MS4s~~ containing construction site runoff are addressed in Subsection 105.18.b.iv(4)); (3-24-22)( )

(c) ~~A description of p~~Practices for operating and maintaining public streets, roads, and highways and procedures for reducing the impact on receiving waters of discharges from ~~municipal storm sewer systems MS4s,~~ including pollutants discharged ~~as a result of from~~ deicing activities; (3-24-22)( )

(d) ~~A description of p~~Procedures to ~~assure that ensure~~ flood management projects assess the impacts on the water quality of receiving water bodies and ~~that~~ existing structural flood control devices have been evaluated to determine if retrofitting the device to provide additional pollutant removal from storm water is feasible; (3-24-22)( )

(e) ~~A description of a p~~Program to monitor pollutants in runoff from operating or closed municipal landfills or other treatment, storage, or disposal facilities for municipal waste that identifies priorities and procedures for inspections and ~~establishing and implementing establishes~~ control measures for ~~such the~~ discharges (this program can be coordinated with the program developed under Subsection 105.18.b.iv(3)); and (3-24-22)( )

(f) ~~A description of a p~~Program to reduce, to the maximum extent practicable, pollutants in discharges from ~~municipal separate storm sewers associated with the application of MS4s from~~ pesticides, herbicides, and fertilizer application, which will include, as appropriate, including controls such as educational activities, permits, certifications, and other measures for commercial applicators and distributors, and ~~controls for application in~~ public right-of-ways and ~~at~~ municipal facilities; (3-24-22)( )

(2) ~~A description of a p~~Program, including a schedule, to detect and remove (or require the discharger to the ~~municipal separate storm sewer MS4~~ to obtain a separate IPDES permit for) illicit discharges and improper disposal into the storm sewer. The proposed program must include, including: (3-24-22)( )

(a) ~~A description of a p~~Program, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the ~~municipal separate storm sewer system MS4~~. This program description must address all ~~types of~~ illicit discharges; however, the following categories of non-storm water



discharges or flows must be addressed where ~~such~~ discharges are identified by the municipality as sources of pollutants to waters of the United States: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (~~as~~ defined in Section 010) to separate storm sewers, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (program descriptions must address discharges or flows from firefighting only where ~~such the~~ discharges or flows are identified as significant sources of pollutants to waters of the United States); ~~(3-24-22)( )~~

(b) ~~A description of p~~Procedures to conduct on-going field screening activities during the life of the permit, including areas or locations that will be evaluated by ~~such the~~ field screens; ~~(3-24-22)( )~~

(c) ~~A description of p~~Procedures ~~to be followed~~ to investigate portions of the ~~separate storm sewer system MS4~~ that, based on the results of the field screen, or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of non-storm water (~~such~~ procedures may include: sampling procedures for constituents such as fecal coliform (including *E. coli*), enterococci (previously known as fecal streptococcus), surfactants (~~methylen blue active substance [MBAS]~~), residual chlorine, fluorides and potassium; testing with fluorometric dyes; or conducting ~~in~~ storm sewer inspections where safety and other considerations allow. Such description must include the location of storm sewers ~~that have been~~ identified for ~~such~~ evaluation); ~~(3-24-22)( )~~

(d) ~~A description of p~~Procedures to prevent, contain, and respond to spills that may discharge into the ~~municipal separate storm sewer MS4~~; ~~(3-24-22)( )~~

(e) ~~A description of a p~~Program to promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from ~~municipal separate storm sewers MS4s~~; ~~(3-24-22)( )~~

(f) ~~A d~~Description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials; and ~~(3-24-22)( )~~

(g) ~~A d~~Description of controls to limit infiltration of seepage from municipal sanitary sewers to ~~municipal separate storm sewer systems MS4s~~ where necessary; ~~(3-24-22)( )~~

(3) ~~A d~~Description of a program to monitor and control pollutants in storm water discharges to municipal systems from municipal landfills, hazardous waste treatment, disposal and recovery facilities, industrial facilities that are subject to ~~s~~Section 313 of ~~t~~Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), and industrial facilities that the municipal permit applicant determines are contributing a substantial pollutant loading to the ~~municipal storm sewer system MS4~~. The program must: ~~(3-24-22)( )~~

(a) Identify priorities and procedures for inspections and establishing and implementing control measures for ~~such the~~ discharges; and ~~(3-24-22)( )~~

(b) Describe a monitoring program for storm water discharges ~~associated with the from~~ industrial facilities identified in Subsection 105.18.b.iv(3), ~~to be~~ implemented during the term of the permit, including ~~the submission of submitting~~ quantitative data on the following constituents: ~~any~~ pollutants limited in ~~effluent guidelines ELGs~~ subcategories, where applicable; ~~any~~ pollutant listed in an existing NPDES or IPDES permit for a facility; oil and grease, COD, pH, BOD5, TSS, total phosphorus, total Kjeldahl nitrogen, nitrate plus nitrite nitrogen, and ~~any~~ information on discharges required under Subsections 105.07.j. through l.; ~~(3-24-22)( )~~

(4) ~~A d~~Description of a program to implement and maintain structural and non-structural ~~best management practices BMPs~~ to reduce pollutants in storm water runoff from construction sites to the ~~municipal storm sewer system MS4~~ that includes: ~~(3-24-22)( )~~

(a) ~~A description of p~~Procedures for site planning ~~which incorporate consideration of that considers~~ potential water quality impacts; ~~(3-24-22)( )~~

- (b) ~~A description of~~ Requirements for nonstructural and structural ~~best management practices~~ BMPs; (3-24-22)( )
- (c) ~~A description of~~ Procedures for identifying priorities for ~~inspecting sites~~ site inspections and enforcing control measures ~~which that~~ consider the nature of the construction activity, topography, and ~~the~~ characteristics of soils and receiving water quality; and (3-24-22)( )
- (d) ~~A description of appropriate~~ Educational and training measures for construction site operators; (3-24-22)( )
- v. Estimated reductions in pollutant loadings ~~of pollutants~~ from ~~discharges of municipal storm sewer constituents from municipal storm sewer systems expected~~ the constituents discharged from MS4s as the result of the municipal storm water quality management program. The assessment must also identify known impacts of storm water controls on ground water; (3-24-22)( )
- vi. For each fiscal year to be covered by the permit, a fiscal analysis of the necessary capital and operation and maintenance expenditures necessary to accomplish the activities of the programs under Subsections 105.18.b.iii. and iv. ~~Such~~ The analysis must ~~include a description of~~ describe the source of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of ~~such the~~ funds; (3-24-22)( )
- vii. ~~Where~~ en more than one (1) legal entity submits an application, the application must ~~contain a description of~~ describe the roles and responsibilities of each legal entity and procedures to ensure effective coordination; and (3-24-22)( )
- viii. Where requirements under Subsections 105.18.a.iv.(5), 105.18.b.ii., 105.18.b.iii.(2), and 105.18.b.iv. are not practicable or ~~are not~~ applicable, the Department may exclude any operator of a discharge from ~~an municipal separate storm sewer which is MS4~~ designated under 40 CFR 122.26(a)(1)(v), (b)(4)(ii) or (b)(7)(ii) from ~~such the~~ requirements. The Department may not exclude the operator of a discharge from ~~an municipal separate storm sewer MS4~~ identified in 40 CFR Part 122, Appendix F, G, H or I ~~of 40 CFR Part 122~~, from ~~any of~~ the permit application requirements under this subsection except where authorized under this section. (3-24-22)( )

**19. Application Requirements for Industrial and Construction Storm Water Discharges.**

Application requirements for storm water discharges associated with industrial activity and storm water discharges associated with small construction activity. ( )

a. Dischargers of storm water associated with industrial activity and ~~with~~ small construction activity ~~are required to~~ must apply for an individual permit or seek coverage under a ~~promulgated~~ storm water general permit. Facilities ~~that are~~ required to obtain an individual permit or ~~any~~ discharge of storm water ~~which that~~ the Department is evaluating for designation (~~see~~ Section 130, ~~General Permits~~) under 40 CFR 122.26(a)(1)(v) and is not ~~an municipal storm sewer MS4~~, must submit an IPDES application ~~in accordance with~~ following the requirements of Section 105 (~~Application for an Individual IPDES Permit~~) ~~as modified and consistent with this subsection.~~ (3-24-22)( )

b. Except as provided in Subsections 105.19.c. through e., the operator of a storm water discharge associated with industrial activity subject to this section must provide: ( )

i. ~~A~~ Site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) of the facility including: (3-24-22)( )

(1) Each of its drainage and discharge structures; ( )

(2) ~~The~~ drainage area of each storm water outfall; (3-24-22)( )

(3) Paved areas and buildings within the drainage area of each storm water outfall, each past or present area used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners, and fertilizers are applied, each of its hazardous waste treatment, storage, or disposal facilities

(including each area not required to have a Resource Conservation and Recovery Act permit ~~which is used~~ for accumulating hazardous waste under 40 CFR 262.34); (3-24-22)( )

- (4) Each well where fluids from the facility are injected underground; and ( )
- (5) Springs, and other surface water bodies ~~which receive~~ receiving storm water discharges from the facility; (3-24-22)( )

ii. An estimate of the area of impervious surfaces (including paved areas and building roofs) and the total area drained by each outfall (within a mile radius of the facility) and a narrative description of the following: (3-24-22)( )

(1) Significant materials that in the three (3) years ~~prior to~~ before the submittal of this application have been treated, stored, or disposed in a manner to allow exposure to storm water; (3-24-22)( )

(2) Method of treatment, storage, or disposal of ~~such~~ materials; materials management practices employed, in the three (3) years ~~prior to~~ before the submittal of this application, to minimize contact by these materials with storm water runoff; (3-24-22)( )

(3) Materials loading and access areas; ( )

(4) ~~The~~ Location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied; (3-24-22)( )

(5) ~~The~~ Location and a description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and (3-24-22)( )

(6) ~~A~~ Description of the treatment the storm water receives, including the ultimate disposal of any solid or fluid wastes other than by discharge; (3-24-22)( )

iii. ~~A~~ Certification that ~~all~~ outfalls containing storm water discharges associated with industrial activity have been tested or evaluated for the presence of non-storm water discharges ~~which are~~ not covered by an IPDES permit, including a description of the method used, the date of ~~any~~ testing, and the on-site drainage points that were directly observed during a test. Tests for ~~such~~ non-storm water discharges may include smoke tests, fluorometric dye tests, and analysis of accurate schematics, ~~as well as other appropriate tests~~; (3-24-22)( )

iv. Existing information ~~regarding about~~ significant leaks or spills of toxic or hazardous pollutants at the facility that have taken place within the three (3) years ~~prior to the~~ before application submittal ~~of this application~~; (3-24-22)( )

v. Quantitative data based on samples collected during storm events and collected in accordance with Subsection 105.07 from ~~all~~ outfalls containing a storm water discharge associated with industrial activity for ~~the following parameters~~; (3-24-22)( )

(1) ~~Any p~~ Pollutants limited in an ~~effluent guideline~~ ELG to which the facility is subject; (3-24-22)( )

(2) ~~Any p~~ Pollutants listed in the facility's NPDES or IPDES permit for its process wastewater (if the facility is operating under an existing NPDES or IPDES permit); (3-24-22)( )

(3) Oil and grease, pH, BOD5, COD, TSS, total phosphorus, total Kjeldahl nitrogen, and nitrate plus nitrite nitrogen; ( )

(4) ~~Any i~~ Information on the discharge required under Subsections 105.07.j. through l.; (3-24-22)( )

(5) Flow measurements or estimates of the flow rate, and the total amount of discharge for the storm



event(s) sampled, and the method of flow measurement or estimation; and (3-24-22)( )

(6) ~~The d~~Date and duration (in hours) of ~~the~~ storm event(s) sampled, rainfall measurements or estimates of the storm event (in inches) ~~which that~~ generated the sampled runoff and the duration (in hours) between the storm event sampled and the end of the previous measurable (greater than one-tenth (0.1) inch rainfall) storm event; (3-24-22)( )

vi. Operators of a discharge ~~which is~~ composed entirely of storm water are exempt from the requirements of Subsections 105.07.b., 105.07.a.i(2) through (5), 105.07.a.ii., 105.07.a.iii., 105.07.g., 105.07.h., 105.07.i., and 105.07.m.; and (3-24-22)( )

vii. Operators of new sources or new discharges ~~(as defined in Section 010, Definitions) which are~~ composed in part or entirely of storm water must include estimates for the pollutants or parameters listed in Subsection 105.19.b.v. instead of actual sampling data, along with the source of each estimate. Operators of new sources or new discharges composed in part or entirely of storm water must provide quantitative data for the parameters listed in Subsection 105.19.b.v. within two (2) years after ~~commencement of~~ discharge commences, unless ~~such the~~ data has already been reported under the monitoring requirements of the IPDES permit for the discharge. Operators of a new source or new discharge ~~which is~~ composed entirely of storm water are exempt from the requirements of Subsections 105.16.a.iii.(2) and (3), and 105.16.b. (3-24-22)( )

c. ~~An e~~Operator of an existing or new storm water discharge ~~that is~~ associated with industrial activity solely under 40 CFR 122.26(b)(14)(x) or ~~is~~ associated with small construction activity solely under 40 CFR 122.26 (b)(15), is exempt from the requirements of Subsection 105.07 and Subsection 105.19.b. ~~Such~~The operator must provide a narrative description of: (3-24-22)( )

i. ~~The l~~ocation (including a map) and the nature of the construction activity; (3-24-22)( )

ii. ~~The t~~Total area of the site and the area of the site that is expected to undergo excavation during the life of the permit; (3-24-22)( )

iii. Proposed measures, including ~~best management practices BMPs~~, to control pollutants in storm water discharges during construction, including a ~~brief~~ description of ~~applicable~~ state and local erosion and sediment control requirements; (3-24-22)( )

iv. Proposed measures to control pollutants in storm water discharges that will occur after construction operations ~~have been~~ are completed, including a ~~brief~~ description of ~~applicable~~ state or local erosion and sediment control requirements; (3-24-22)( )

v. ~~An e~~Estimate of the runoff coefficient of the site and the increase in impervious area after the construction addressed in the permit application is completed, the nature of fill material and existing data describing the soil or the quality of the discharge; and (3-24-22)( )

vi. ~~The n~~Name of the receiving water. (3-24-22)( )

d. ~~The o~~Operator of an existing or new discharge composed entirely of storm water from an oil or gas exploration, production, processing, or treatment operation, or transmission facility is not required to submit a permit application ~~in accordance with~~ under Subsection 105.19.b., unless the facility: (3-24-22)( )

i. ~~Has had a d~~Discharge of storm water occurred resulting in ~~the discharge of~~ a reportable quantity for which notification is or was required ~~pursuant to~~ under 40 CFR 117.21 or 40 CFR 302.6 at any time since November 16, 1987; or (3-24-22)( )

ii. ~~Has had a d~~Discharge of storm water occurred resulting in ~~the discharge of~~ a reportable quantity for which notification is or was required ~~pursuant to~~ under 40 CFR 110.6 at any time since November 16, 1987; or (3-24-22)( )

iii. Contributes to a violation of a water quality standard. ( )

e. ~~The o~~perator of an existing or new discharge composed entirely of storm water from a mining operation is not required to submit a permit application unless the discharge ~~has come into~~ was in contact with, ~~any~~ overburden, raw material, intermediate products, finished product, byproduct, or waste products located on the site ~~of such operations.~~ (3-24-22)( )

f. Applicants must provide ~~such other~~ information the Department may ~~reasonably~~ require under Subsection 105.07.o. to determine whether to issue a permit and may require ~~any facility~~ facilities subject to Subsection 105.19.c. to comply with Subsection 105.19.b. (3-24-22)( )

**20. Requirements for Integrated Plans.** Integrated planning is a voluntary process for municipalities to identify efficiencies from separate wastewater and storm water programs to best prioritize capital investments and achieve human health and water quality objectives. ( )

**a.** The Department may incorporate integrated plans into IPDES permits, compliance agreement schedules, consent orders, and compliance schedule orders. ( )

**b.** Integrated plans considered by the Department should contain: ( )

**i.** A description of the water quality, human health, and regulatory issues to be addressed in the plan; ( )

**ii.** A description of the existing wastewater and storm water systems under consideration and a summary of information describing the systems' current performance; ( )

**iii.** A communications plan describing how community stakeholders are given consideration in the planning and implementation of the plan; ( )

**iv.** A process for identifying, evaluating, and selecting alternatives and proposing implementation schedules; ( )

**v.** A process for evaluating the performance of projects identified in the plan; and ( )

**vi.** A process for identifying, evaluating, and selecting proposed new projects or modifications to ongoing or planned projects based on changed circumstances. ( )

## 106. INDIVIDUAL PERMIT APPLICATION REVIEW.

**01. Completeness Criteria.** The Department will not ~~begin~~ processing or issue an individual IPDES permit application before receiving a complete application. ~~An application is complete when an~~ The application form and ~~any~~ supplemental information are completed ~~and when~~ submitted to the Department's satisfaction. The Department will not consider a permit application to be complete until ~~all~~ applicable fees required under Section 110 (~~Permit Fee Schedule for IPDES Permitted Facilities~~) are paid. (3-24-22)( )

**02. Sufficiently Sensitive Methods.** Except as specified in Subsection 106.02.c., a permit application ~~shall will~~ not be considered complete unless all required quantitative data are collected ~~in accordance with~~ following sufficiently sensitive analytical methods approved under 40 CFR Part 136 or required under 40 CFR Parts 400 through 471 and 501 through 503. (3-24-22)( )

**a.** A method approved under 40 CFR Part 136 or required under 40 CFR Parts 400 through 471 and 501 through 503 is "sufficiently sensitive" when: ( )

**i.** The method minimum level (ML) is at or below the level of the ~~applicable~~ water quality criterion for the measured pollutant or pollutant parameter; or (3-24-22)( )

**ii.** The method ML is above the ~~applicable~~ water quality criterion, but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method detects and quantifies the level of the

pollutant or pollutant parameter in the discharge; or (3-24-22)( )

iii. The method has the lowest ML of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR Parts 400 through 471 and 501 through 503 for the measured pollutant or pollutant parameter. ( )

b. For Subsection 106.02.a., consistent with 40 CFR Part 136, applicants ~~have the option of providing~~ may opt to provide matrix- or sample- specific ~~minimum levels~~ MLs rather than the published levels. ~~Further, where~~ When an applicant can demonstrate ~~that~~, despite a good faith effort to use a method that ~~would otherwise meet~~s the definition of “sufficiently sensitive,” the analytical results are not consistent with the QA/QC specifications for that method, then the Department may determine ~~that~~ the method is not performing adequately and the applicant ~~should~~ will select a different method from the remaining EPA-approved methods that is sufficiently sensitive consistent with Subsection 106.02.a. ~~Where~~ ren no other EPA-approved methods exist, the applicant ~~should~~ will select a method consistent with Subsection 106.02.c. (3-24-22)( )

c. When there is no analytical method ~~that has been~~ approved under 40 CFR Part 136, required under 40 CFR Parts 400 through 471 and 501 through 503, and is not otherwise required by the Department, the applicant may use any suitable method but ~~shall provide a description of~~ must describe the method. When selecting a suitable method, other factors such as a method's precision, accuracy, or resolution, may be considered when assessing the performance of the method. (3-24-22)( )

**03. Independence.** The Department ~~shall~~ will judge the completeness of any IPDES permit application independently of ~~any~~ other permit application or permit. (3-24-22)( )

**04. Schedule.** The Department will notify an applicant in writing whether the application is ~~deemed~~ complete ~~for purposes of this section~~ within: (3-24-22)( )

a. Thirty (30) days if the application is for a new source or new discharger under the IPDES program, or ( )

b. Sixty (60) days if the application is for an existing source or sludge-only facility. ( )

**05. Additional Information.** Notification that an application is complete does not preclude the Department from requiring the applicant submit additional information for the Department’s use in processing the application. This additional information may only be requested when necessary to clarify, modify, or supplement previously submitted material. ( )

a. Requests for additional information will not render an application incomplete. ( )

b. ~~If~~ While processing the application, if the Department decides ~~that~~ a site visit is necessary ~~for any reason in connection with the processing of an application~~, the Department ~~shall~~ will notify the applicant and ~~schedule~~ schedule a date ~~shall be scheduled~~. Failure to schedule or refusal of a requested site visit are grounds for permit denial. (3-24-22)( )

c. The applicant’s failure or refusal to correct deficiencies, or supply requested information may result in permit denial, and appropriate enforcement actions may be initiated, if warranted. ( )

**06. Incomplete Due to Waiver Denial.** The Department will not consider a permit application ~~to be~~ complete if the Department waived application requirements under Subsection 105.11 or 105.17 and the EPA has disapproved the waiver. (3-24-22)( )

**07. Impact of Waiver Delay.** If a person required to reapply for a permit submits a waiver request to the Department more than two hundred ten (210) days before an existing permit expires, and the EPA does not disapprove the waiver request one hundred eighty-one (181) days before the permit expires, the Department will consider the permit application ~~to be~~ complete without the information ~~that is the~~ subject ~~of~~ to the waiver request. (3-24-22)( )

**08. Application Completeness Date.** The ~~application is~~ completeness date of an application is the date ~~on which~~ when the Department notifies the applicant ~~that the application is complete.~~ (3-24-22)( )

**107. DECISION PROCESS.**

After the Department has determined ~~that~~ a permit application is complete, the Department will decide whether to tentatively deny the application, or prepare an IPDES draft permit. (3-24-22)( )

**01. Application Denial.** If the Department decides to tentatively deny the application: ( )

**a.** A notice of intent to deny the permit application ~~shall will~~ be issued. A notice of intent to deny the permit application ~~is a type of draft permit which~~ follows the same procedures as ~~any~~ draft permit and ~~shall will~~ be made available for public comment, ~~and the Department shall~~ The Department will give notice of opportunity for a public meeting, as specified in Section 109 ~~(Public Notification and Comment);~~ (3-24-22)( )

**b.** The Department ~~shall will~~ generate a response to public comment; and (3-24-22)( )

**c.** Issue a final decision. ~~The final decision that~~ may: (3-24-22)( )

**i.** ~~Be to w~~Withdraw the notice of intent to deny the application, and proceed to prepare a draft permit and fact sheet as defined in Section 108 ~~(Draft Permit and Fact Sheet);~~ or (3-24-22)( )

**ii.** Confirm the decision to deny the application. ( )

**d.** The applicant may appeal the final decision to deny the application by adhering to the requirements of Section 204 ~~(Appeals Process).~~ (3-24-22)( )

**02. Draft Permit.** If the Department decides to generate a draft permit and fact sheet, it will comply with Section 108 ~~(Draft Permit and Fact Sheet).~~ (3-24-22)( )

**a.** Upon completion of the draft permit and fact sheet, the Department ~~shall will~~ issue a public notification as required in Subsection 109.01. (3-24-22)( )

**b.** An opportunity for the public to comment and request a public meeting ~~shall will~~ be provided. (3-24-22)( )

**c.** The Department ~~shall will~~ generate a response to public comment as stipulated in Subsection 109.03. (3-24-22)( )

**03. Proposed Permit.** After the close of the public comment period on a draft permit, the Department will make appropriate changes in response to comments, and generate a proposed permit and fact sheet. (3-24-22)( )

**04. Final Permit.** After the ~~close of the~~ public comment period closes on a draft permit, and after ~~receipt of receiving~~ comments on the proposed permit, ~~if any,~~ from EPA, the Department ~~shall will~~ issue a final permit decision and fact sheet. ~~A~~ The final permit decision ~~means a final decision to~~ will issue, deny, modify, revoke and reissue, or terminate a permit. (3-24-22)( )

**a.** The Department ~~shall will~~ notify the applicant and each person who has submitted written comments or requested notice of the final permit decision. (3-24-22)( )

**b.** A final permit decision shall become effective twenty-eight (28) days after the service of notice of the decision unless: ( )

**i.** A later effective date is specified in the decision; or ( )

**ii.** A Petition for Review is filed with the Department as specified in Section 204 ~~(Appeals Process).~~ (3-24-22)( )

108. DRAFT PERMIT AND FACT SHEET.

01. Draft Permit. ( )

a. If the Department decides to prepare a draft permit, it ~~shall~~ will contain ~~the following information:~~  
(3-24-22)( )

i. ~~All e~~Conditions established under Section 300 (~~Conditions Applicable to All Permits~~)  
(3-24-22)( )

ii. ~~All e~~Conditions for specific categories established under Section 301 (~~Permit Conditions for Specific Categories~~) and 40 CFR 122.42(e). (3-24-22)( )

iii. ~~All e~~Conditions established under Section 302 (~~Establishing Permit Provisions~~); (3-24-22)( )

iv. ~~All e~~Conditions established under Section 303 (~~Calculating Permit Provisions~~); (3-24-22)( )

v. ~~All m~~Monitoring requirements established under Section 304 (~~Monitoring and Reporting Requirements~~); (3-24-22)( )

vi. Schedules of compliance established under Section 305 (~~Compliance Schedules~~); and (3-24-22)( )

vii. ~~Any~~Approved variances ~~that are approved~~. (3-24-22)( )

b. General and individual proposed permits ~~shall~~ will be available to the EPA Region 10 Administrator for comment as specified in Subsections 107.03 (Proposed Permit) and 107.04 (Final Permit). (3-24-22)( )

02. Fact Sheets. ( )

a. A fact sheet containing the information required in Subsection 108.02.b. must accompany the draft permit prepared for: ( )

i. ~~A m~~Major IPDES facility or activity; (3-24-22)( )

ii. ~~A~~Class I sludge management facility; (3-24-22)( )

iii. ~~An~~IPDES general permit; (3-24-22)( )

iv. ~~A p~~Permit that incorporates a variance or requires an explanation under Subsection 108.02.b.ix. through 108.02.b.x.; (3-24-22)( )

v. ~~A p~~Permit that includes a sewage sludge land application plan under 40 CFR 501.15(a)(2)(ix); and (3-24-22)( )

vi. ~~A p~~Permit that the Department finds is the subject of wide-spread public interest or raises major issues. (3-24-22)( )

b. A fact sheet must ~~briefly set out~~ describe the principal facts and ~~the~~ significant factual, legal, methodological, and policy questions considered in preparing the draft permit and must include, if applicable, ~~the following information:~~  
(3-24-22)( )

i. ~~A b~~Brief description of the type of facility or activity that is the subject of the draft permit; (3-24-22)( )

- ii. ~~The~~ Type and quantity of wastes, fluids, or pollutants that are proposed to be or are being treated, stored, disposed of, injected, emitted, or discharged; (3-24-22)( )
- iii. ~~A brief~~ Summary of the basis for the draft permit conditions, including references to applicable statutes or regulations and appropriate supporting references to the administrative record; (3-24-22)( )
- iv. Reasons for the Department's tentative decision on ~~any~~ requested variances or alternatives to required standards; (3-24-22)( )
- v. ~~A~~ Description of the procedures for reaching a final decision on the draft permit, including: (3-24-22)( )
- (1) ~~The~~ Beginning and ending dates of the comment period under Subsection 109.02 and the address where comments ~~should be~~ are submitted; (3-24-22)( )
- (2) ~~The~~ Procedure for requesting a public meeting and the nature of that meeting; and (3-24-22)( )
- (3) ~~Any~~ Other procedures by which the public may participate in the final decision; (3-24-22)( )
- vi. ~~The~~ Name and telephone number of a person to contact for additional information; (3-24-22)( )
- vii. ~~The~~ Justification for waiver of ~~any~~ application requirements under Section 105 (~~Application for an Individual IPDES Permit~~) for new and existing POTWs; (3-24-22)( )
- viii. ~~Any~~ Calculations or other ~~necessary~~ explanations of the derivation of specific effluent limitations and conditions, including a citation to the ~~applicable effluent limitation guideline~~ ELG or performance standard as required by Section 302 (~~Establishing Permit Provisions~~), and reasons why the effluent limitations and conditions ~~are~~ are ~~applicable~~, or an explanation of how any ~~alternate effluent limitation~~ was developed; (3-24-22)( )
- ix. If applicable, an explanation of why the draft permit contains ~~the following conditions or waivers~~: (3-24-22)( )
- (1) Limitations to control toxic pollutants under Subsection 302.07; (3-24-22)( )
- (2) Limitations on internal waste streams under Section 304 (~~Monitoring and Reporting Requirements~~); (3-24-22)( )
- (3) Limitations on indicator pollutants under 40 CFR 125.3(g); (3-24-22)( )
- (4) Limitations established on a case-by-case basis under 40 CFR 125.3 (c)(2) or (c)(3) or ~~pursuant to the Clean Water Act section~~ CWA Section 405(d)(4); (3-24-22)( )
- (5) Limitations to meet the criteria for permit issuance under Subsection 103.07; or (3-24-22)( )
- (6) Waivers from monitoring requirements granted under Subsection 302.03; ( )
- x. For a draft permit for a treatment works owned by a person other than a state or municipality, an explanation of the Department's decision on regulation of users under Subsection 302.15; ( )
- xi. If appropriate, a sketch or ~~detailed~~ description of the location of the discharge or regulated activity described in the application; and (3-24-22)( )
- xii. For permits that include a sewage sludge land application plan under 40 CFR 501.15(a)(2)(ix), a ~~brief~~ description of how each of the required elements of the land application plan are addressed in the permit. (3-24-22)( )

109. PUBLIC NOTIFICATION AND COMMENT.

- 01. Public Notification.** ( )
- a.** The Department will give notice to the public that: ( )
- i. A draft permit has been prepared under Subsection 108.01; ( )
- ii. The Department intends to deny a permit application under Subsection 107.01; ( )
- iii. A public meeting is scheduled; or ( )
- iv. An IPDES new source determination has been made. ( )
- b.** A public notice may describe more than one (1) permit or permit action. ( )
- c.** The Department will allow at least thirty (30) days for public comment on the items in the notice, and ~~will~~ provide at least thirty (30) days' notice before the public meeting. Notice of the draft permit and ~~the~~ meeting may be combined and given at the same time. (3-24-22)( )
- d.** Public notice that a draft permit has been prepared, and ~~any~~ public meeting on the draft permit ~~must~~ will be given by ~~the following methods:~~ (3-24-22)( )
- i. ~~By m~~Mailing a copy of the notice to the following persons, unless ~~any~~ person entitled to receive notice under this subsection waives ~~that person's~~ the right to receive notice for any classes and categories of permits: (3-24-22)( )
- (1) The applicant, unless there is no applicant for an IPDES general permit; ( )
- (2) ~~Any other~~ agency (including EPA when the draft permit is prepared by the state) ~~that~~ the Department knows has issued or is required to issue a permit for the same facility or activity under ~~the following laws and programs:~~ (3-24-22)( )
- (a) Resource Conservation and Recovery Act, under IDAPA 58.01.05, "Rules and Standards for Hazardous Waste"; ( )
- (b) Underground Injection Control (UIC) Program under Idaho Department of Water Resources as authorized under Idaho Code Title 42 Chapter 39 and regulated under IDAPA 37.03.03, "Rules and Minimum Standards for the Construction and Use of Injection Wells"; ( )
- (c) Clean Air Act, under IDAPA 58.01.01, "Rules for the Control of Air Pollution in Idaho"; ( )
- (d) Idaho Pollution Discharge Elimination System Program, under IDAPA 58.01.25, "~~Rules Regulating the~~ Idaho Pollutant Discharge Elimination System ~~Program~~ Rules"; or (3-24-22)( )
- (e) Sludge Management Program, under IDAPA 58.01.16.650, "Wastewater Rules"; and ( )
- (f) Dredge and Fill Permit Program (~~Clean Water Act section~~ CWA Section 404); (3-24-22)( )
- (3) Affected federal and state agencies with jurisdiction over fish, shellfish, wildlife, and other natural resources, state historic preservation officers, and any affected Indian tribes; (3-24-22)( )
- (4) ~~Any s~~State agency responsible for plan development under ~~the Clean Water Act sections~~ CWA Sections 208(b)(2), 208(b)(4), or 303(e), and the ~~United States~~ Army Corps of Engineers, the ~~United States~~ Fish and Wildlife Service, and ~~the~~ National Marine Fisheries Service; (3-24-22)( )



- (5) ~~Any~~ User identified in the permit application of a privately owned treatment works; (3-24-22)( )
- (6) Persons on a mailing list developed by: ( )
- (a) Recording those who request in writing to be on the list; ( )
- (b) Soliciting persons for area lists from participants in past permit proceedings in that area; and ( )
- (c) Publishing notice of the opportunity to be on the mailing list on the Department's website and through periodic publication in the local press and in regional and state-funded newsletters, environmental bulletins, state law journals, or similar publications. The Department may update the mailing list ~~from time to time~~ by requesting written indication of continued interest from those listed, and may delete from the list the name of ~~any~~ person who fails to respond to the Department's request; (3-24-22)( )
- (7) ~~Any~~ unit of local government having with jurisdiction over the area where the facility is proposed to be located; and (3-24-22)( )
- (8) Each state agency having any with authority under state law ~~with respect to the~~ for construction or operation of the facility; (3-24-22)( )
- ii. For a major facility permit, ~~a~~ general permit, and ~~a~~ permit that includes sewage sludge land application plans, by publishing a notice in a daily or weekly newspaper within the area affected by the facility or activity; and (3-24-22)( )
- iii. By ~~any other~~ method ~~reasonably calculated to give actual~~ that provides notice of the action ~~in question to the~~ persons potentially affected by it, including press releases or ~~use of any an~~ other forum or media to elicit public participation. For IPDES major permits and general permits, in lieu of the requirement for publication of a notice in a daily or weekly newspaper, the Department may publish all notices of activities described in Subsection 109.01.a. to the Department's website. If the Department selects this option for a draft permit, in addition to meeting the requirements in Subsection 109.01.e., the Department will post the draft permit and fact sheet on the website for the duration of the public comment period. The Department will ensure the methods of public notice effectively inform ~~all~~ interested communities and allow access to the permitting process for those seeking to participate. (3-24-22)( )
- e. A public notice issued under this subsection ~~must will~~ contain at least ~~the following information:~~ (3-24-22)( )
- i. Name and address of the office processing the permit action for which notice is ~~being~~ given and where comments may be submitted; (3-24-22)( )
- ii. Name and address of the permittee or permit applicant and, if different, of the facility or activity regulated by the permit, except ~~in the case of for~~ IPDES draft general permits; (3-24-22)( )
- iii. ~~A brief d~~ Description of the business conducted at the facility or activity described in the permit application, or for general permits, when there is no application, in the draft permit; (3-24-22)( )
- iv. Name, address, and telephone number of a person from whom interested persons may obtain ~~further~~ information, including copies of the draft permit or draft general permit, fact sheet, and ~~the~~ application; (3-24-22)( )
- v. ~~A brief d~~ Description of the comment and public meeting procedures required by this subsection and the time and place of any meetings ~~s~~ that will be held; if no meeting has ~~already~~ been scheduled, ~~a statement of~~ procedures to request a meeting and ~~other procedures~~ by which the public may participate in the final permit decision; (3-24-22)( )



vi. ~~A general~~ Description of the location of each existing or proposed discharge point and the name of the receiving water; (3-24-22)( )

vii. ~~The~~ Sludge use and disposal practices and the location of each sludge TWTDS and use or disposal sites known ~~at the time of~~ during permit application; (3-24-22)( )

viii. ~~A~~ Description of requirements applicable to cooling water intake structures under ~~the Clean Water Act section CWA Section~~ 316(b), in accordance with 40 CFR 125.80 through 89, 125.90 through 99, and 125.130 through 139; and (3-24-22)( )

ix. ~~Directions~~ Link to the Department's website where interested parties can obtain copies of the draft permit, fact sheet, and the permit application, if any; and (3-24-22)( )

f. In addition to the information required by Subsection 109.01.e., the public notice for a draft permit for a discharge for which a request has been filed under the ~~Clean Water Act section CWA Section~~ 316(a) ~~must will~~ include: (3-24-22)( )

i. ~~A~~ Statement that the thermal component of the discharge is subject to effluent limitations under ~~the Clean Water Act sections CWA Sections~~ 301 or 306, and a ~~brief~~ description, including a quantitative statement, of the thermal effluent limitations proposed under ~~the Clean Water Act sections CWA Section~~ 301 or 306; (3-24-22)( )

ii. ~~A~~ Statement that a request has been filed under ~~the Clean Water Act section CWA Section~~ 316(a), that alternative less stringent effluent limitations may be imposed on the thermal component of the discharge under ~~the Clean Water Act section CWA Section~~ 316(a), and a ~~brief~~ description, including a quantitative statement, of the alternative effluent limitations, if any, included in the request; and (3-24-22)( )

iii. If the applicant has filed an early screening request under 40 CFR 125.72 for a variance under ~~the Clean Water Act section CWA Section~~ 316(a), a statement that the applicant has submitted ~~that an~~ early screening request. (3-24-22)( )

g. In addition to the ~~general~~ public notice described in Subsection 109.01.e., the public notice of a meeting ~~under this section~~ must contain ~~the following information~~: (3-24-22)( )

i. Reference to the date of previous public notices relating to the permit; ( )

ii. Date, time, and place of the meeting; and ( )

iii. ~~A brief~~ Description of the nature and purpose of the meeting, including the applicable rules and procedures. (3-24-22)( )

h. The Department will mail a copy of the ~~general~~ public notice described in Subsection 109.01.e. to ~~all~~ persons identified in Subsections 109.01.d.i.(1), (2), (3), and (4). (3-24-22)( )

i. The Department will hold a public meeting whenever the Department finds, ~~on the basis of~~ based on requests, a significant degree of public interest in a draft permit. The Department may also hold a public meeting if a meeting might clarify one (1) or more issues involved in the permit decision or for ~~another good~~ reason in the Department's discretion. (3-24-22)( )

**02. Public Comment.** ( )

a. During the public comment period, ~~any~~ interested person may submit written comments on the draft permit. Written comments must be submitted to the person identified in the notice and as specified in Subsection 109.01.e. (3-24-22)( )

b. During the public comment period, ~~any~~ interested person may request a public meeting if no public meeting has been scheduled. The Department will schedule and hold a public meeting if the Department determines

that significant public interest exists in the draft permit. (3-24-22)( )

i. A request for a public meeting must be in writing and ~~be~~ submitted to the Department within fourteen (14) days after the date of the public notice required by Subsection 109.01. (3-24-22)( )

ii. If a public meeting is held ~~for the purpose of receiving~~ to receive comments, the Department will make an audio recording or hire a court reporter to record the meeting and will prepare a transcript of the meeting if an appeal is filed. (3-24-22)( )

c. If, during the comment period for an IPDES draft permit, the district engineer of the ~~United States~~ Army Corps of Engineers advises the Department in writing that anchorage and navigation of ~~any of~~ the waters of the United States ~~would will~~ be substantially impaired by ~~the granting of~~ a permit, the Department will deny the permit and notify the applicant of the denial. If the district engineer advises the Department that imposing specified conditions upon the permit is necessary to avoid ~~any~~ substantial impairment of anchorage or navigation, the Department will include the specified conditions in the permit. Review or appeal of denial of a permit or of conditions specified by the district engineer must be sought through the ~~applicable~~ procedures of the ~~United States~~ Army Corps of Engineers and not through the state procedures. If a court of competent jurisdiction stays the conditions or if ~~applicable~~ procedures of the ~~United States~~ Army Corps of Engineers result in a stay of the conditions, those conditions must be considered stayed in the IPDES permit for the duration of the stay. (3-24-22)( )

d. If, during the comment period for an IPDES draft permit, the ~~United States~~ Fish and Wildlife Service, the National Marine Fisheries Service, or ~~any an~~ other state or federal agency with jurisdiction over fish, wildlife, or public health advises the Department in writing that the imposition of specified conditions upon the permit is necessary to avoid substantial impairment of fish, shellfish, or wildlife resources, the Department may include the specified conditions in the permit to the extent the Department determines they are necessary to comply with the provisions of the ~~Clean Water Act~~ CWA. (3-24-22)( )

e. In some cases, the Department may confer with one (1) or more of the agencies referred to in Subsections 109.02.c. and 109.02.d. before issuing a draft permit and may ~~set out~~ state an agency's view in the fact sheet or the draft permit. (3-24-22)( )

f. The Department will consider all comments in making the final decision and will answer the comments as provided in this subsection. ( )

g. Requests for extending a public comment period must be received in writing by the Department ~~prior to~~ before the last day of the comment period. (3-24-22)( )

h. After ~~the close of~~ the public comment period closes and ~~prior to the issuance of~~ before issuing the final permit decision, the Department will ~~afford allow~~ the permit applicant ~~an opportunity~~ to provide additional information to respond to public comments. ~~In addition, in order to~~ To respond to comments, the Department may request the applicant provide additional information. (3-24-22)( )

**03. Response to Comments.** When ~~the Department issues~~ issuing a final permit, the Department will issue a response to comments that will be available to the public. The response must: (3-24-22)( )

a. Specify which provisions, if any, of the draft permit have been changed in the final permit decision, and the reasons for the change; and ( )

b. Briefly dDescribe and respond to ~~all~~ significant comments on the draft permit raised during the public comment period; or ~~during any~~ meetings. (3-24-22)( )

## 110. ~~FEE SCHEDULE FOR IPDES PERMITTED FACILITIES~~ FEE SCHEDULE.

**01. ~~Effective Date.~~** Annual fees must be paid for each ~~fee year beginning one (1) year after the effective date of the IPDES program for the affected category of discharger and continuing for each succeeding year.~~ (3-24-22)

**021. Fee Schedule. ( )**

a. Publicly and privately owned treatment works, and ~~any~~ other dischargers designated by the Department (Subsection 105.11.a.), must pay an annual fee based on the number of ~~equivalent dwelling units~~ (EDUs). The fee is \$1.74 per EDU. EDUs and the appropriate annual fee will be calculated according to the definition of EDUs in Section 010 by the following: ~~(3-24-22)( )~~

- i. The Department calculates facility EDUs; or ( )
- ii. Existing facilities may annually report to the Department the number of EDUs served; or ( )
- iii. New facilities may report to the Department the number of EDUs to be served, based on the facility planning design as part of the IPDES permit application. ( )

b. ~~All o~~Other permitted IPDES dischargers, ~~excluding small scale suction dredges~~, must pay an annual fee, an application fee, or both according to ~~the following schedule~~:

Permit Type	Application	Annual
<b>Non-POTW Individual Permits</b>		
Major	\$0	\$13,000
Minor	\$0	\$4,000
<b>Storm Water General Permits</b>		
<b>Construction (CGP)</b>		
1-10 acres <sup>1</sup>	\$200	\$0
>10-50 acres	\$400	\$75
>50-100 acres	\$750	\$100
>100-500 acres	\$1,000	\$400
>500 acres	\$1,250	\$400
<b>Low Erosivity Waiver (CGP)</b>	\$125	\$0
<b>Industrial (MSGP) Permits</b>	\$1,500	\$1,000
<b>Cert. of No Exposure (MSGP)</b>	\$250	\$100
<b>Other General Permits</b>	\$0	\$0

<sup>1</sup>This includes NOIs for construction that will disturb one or more acres of land, or will disturb less than one acre of land but are part of a common plan of development or sale that will ultimately disturb one or more acres of land. ~~(3-24-22)( )~~

**032. Fee Assessment. ( )**

a. An annual fee assessment will be generated for each IPDES-permitted facility for which an annual fee is required ~~as set forth in~~ under Subsection 110.0201. Annual fees will be determined based on the twelve (12) months between October 1 and September 30 ~~of the following calendar~~ each year. ~~(3-24-22)( )~~

b. Application Fees and Annual Fees. ( )

i. Application fees, as identified in Subsection 110.0201.b., are assessed ~~at the time of~~ upon application submission for coverage under an individual permit, or notice of intent for coverage or waiver under a general permit. ~~(3-24-22)( )~~

ii. Owners or operators of multi-year storm water facilities or construction projects are subject to annual fees that will be assessed in the year (October through September) ~~immediately~~ following the receipt of the application or notice of intent for coverage. (3-24-22)( )

c. Assessment of annual fees will consider the number of months a permittee was covered under either a general or an individual permit in a ~~given~~ year (October through September of ~~the following calendar~~ each year). If the permittee was covered for less than a full twelve (12) months, the assessed fee will be pro-rated to account for less than a full year's coverage under the permit. (3-24-22)( )

**043. Billing.** For ~~those~~ permitted facilities subject to an annual fee, the annual fee will be assessed, and ~~the Department will send~~ a statement ~~will be mailed by the Department~~ on or before ~~July~~ October 1 of each year. ~~The Department will also assess and send annual fee statements when permit coverage is terminated.~~ (3-24-22)( )

**054. Payment.** ( )

a. Payment of the annual fee is due on ~~October 1~~ December 31, unless it is a Saturday, Sunday, or legal holiday, in which event the payment is due on the successive business day. Payment of annual fees for terminated permit coverage is due at the time of termination. (3-24-22)( )

~~b. If a POTW serves five hundred seventy-five (575) EDUs or more, the facility may request to divide its annual fee payment into equal monthly or quarterly installments by submitting a request to the Department on the proper request form provided with the initial billing statement.~~ (3-24-22)

~~i. The Department will notify an applicable POTW, in writing, of approval or denial of a requested monthly or quarterly installment plan within ten (10) business days of the Department receiving such a request.~~ (3-24-22)

~~ii. If a POTW has been approved to pay monthly installments then each installment is due by the first day of each month, unless it is a Saturday, a Sunday, or a legal holiday, in which event the installment is due on the next business day.~~ (3-24-22)

~~iii. If a POTW has been approved to pay quarterly installments then each installment is due by the first day of the month of each quarter (October 1, January 1, April 1, and July 1), unless it is a Saturday, a Sunday, or a legal holiday, in which event the installment is due on the next business day.~~ (3-24-22)

~~eb. Payment of the application fee is due with the application for an individual permit or notice of intent for coverage under a general permit. The Department will not authorize IPDES permit payments upon receipt of the billing statement.~~ (3-24-22)( )

~~c. A POTW may request, in writing, monthly or quarterly installment payments upon receipt of the billing statement. The Department will approve or deny the request and inform the POTW within ten (10) business days.~~ ( )

**065. Delinquent Unpaid Fees.** A permittee covered under ~~either~~ a general or individual permit ~~or an individual permit~~ will be delinquent in payment if the Department does not receive the assessed annual fee ~~assessed has not been received by the Department~~ by ~~November~~ January 1; or if ~~having first the permittee~~ opted to pay monthly or quarterly ~~installments~~, its monthly or quarterly installment ~~has not been~~ is not received by the Department by the last day of the month ~~in which the monthly or quarterly~~ payment is due. (3-24-22)( )

**076. Suspension of Services and Disapproval Designation.** ~~For any p~~Permittees delinquent in payment of fees assessed under Subsections 110.021 and 110.065: (3-24-22)( )

a. ~~In excess of~~ After ninety (90) days, the Department will suspend all technical services ~~it provides~~. The permittee will receive a warning letter ~~that identifies~~ identifying administrative enforcement actions the Department may pursue if the permittee does not comply with the terms of the permit. (3-24-22)( )

b. ~~In excess of~~After one hundred and eighty (180) days, the Department will consider the permittee in non-compliance with permit conditions and these rules, and subject to provisions described in Section 500 ~~(Enforcement) of these rules.~~ (3-24-22)( )

**087. Reinstatement of Suspended Services and Approval Status.** ~~For any p~~Permittees for which delinquency of fee payment ~~pursuant to~~ under Subsection 110.076 ~~has~~ resulted in the suspension of technical services, determination of non-compliance of permit condition, or both, the continuation of technical services, determination of compliance based on payment of fee, or both, will occur upon payment of delinquent annual fee assessments. (3-24-22)( )

**098. Enforcement Action.** Nothing in Section 110 ~~(Fee Schedule for IPDES Permitted Facilities)~~ w ~~waives~~ the Department's right to undertake a non-fee related enforcement action at any time, including seeking penalties, as provided in Sections 39-108, 39-109, and 39-117, Idaho Code. (3-24-22)( )

**109. Responsibility to Comply.** Subsection 110.076 does not relieve ~~any~~ permittee from its obligation to comply with ~~all applicable~~ the state and federal statutes, rules, regulations, permits, or orders. (3-24-22)( )

111. -- 119. (RESERVED)

## 120. NEW SOURCES AND NEW DISCHARGES.

**01. Criteria for New Source Determination.** Except as ~~otherwise~~ provided in an ~~applicable~~ new source performance standard, a source is a new source if it meets the definition in Section 010 ~~(Definitions)~~, and: (3-24-22)( )

a. Is constructed at a site at which no other source is located; or ( )

b. Totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or ( )

c. Its processes are substantially independent of an existing source at the same site. In determining whether these processes are substantially independent, the Department ~~shall will~~ consider ~~such~~ factors ~~as including~~ the: (3-24-22)( )

i. ~~The e~~Extent to which the new facility is integrated with the existing plant; and (3-24-22)( )

ii. ~~The e~~Extent to which the new facility is engaged in the same general type of activity as the existing source. (3-24-22)( )

**02. New Source vs. New Discharger.** A source meeting the requirements of Subsection 120.01 is a new source only if a new source performance standard ~~is~~ independently ~~applicable~~ applies to it. If ~~there is no such~~ ~~independently applicable~~ no independent standard applies, the source is a new discharger, as defined in Section 010 ~~(Definitions)~~. (3-24-22)( )

**03. Modification vs. New Source/Discharger.** Construction on a site ~~at which~~ where an existing source is located, results in a modification subject to Subsection 201.02, rather than a new source (or a new discharger) if the construction does not create a new building, structure, facility, or installation meeting the criteria of Subsection 120.01, but otherwise alters, replaces, or adds to existing process or production equipment. (3-24-22)( )

**04. New Source Construction.** Construction of a new source ~~has commenced if~~ commences when the owner or operator ~~has~~: (3-24-22)( )

a. ~~Begun,~~ Begins a new or ~~caused to begin as part of a~~ restarts a continuous on-site construction program: (3-24-22)( )

i. ~~Any placement~~ Places, assembly yes, or installation ~~of~~ facilities or equipment; or (3-24-22)( )

ii. Significantly prepares the site, preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or (3-24-22)( )

b. Enters into a binding contractual obligation for the purchase of purchasing facilities or equipment which are intended to be for used in its operation within a reasonable time. Items which that do not constitute contractual obligations under this section include: (3-24-22)( )

i. Options to purchase or contracts which that can be terminated or modified without substantial loss; (3-24-22)( )

ii. Contracts for feasibility engineering; and ( )

iii. Design studies. ( )

121. -- 129. (RESERVED)

130. GENERAL PERMITS.

01. Coverage. The Department may issue a general permit in accordance with the following: ( )

a. Within a geographic area, the general permit will be written to cover one (1) or more categories or subcategories of discharges or sludge use or disposal practices or facilities described in the permit under Subsection 130.01.b.ii., except those covered by individual permits within a geographic area. The area should will correspond to existing geographic or political boundaries such as: (3-24-22)( )

i. Designated planning areas under the Clean Water Act sections CWA Sections 208 and 303; (3-24-22)( )

ii. Sewer districts or sewer authorities; ( )

iii. City, county, or state political boundaries; ( )

iv. State highway systems; ( )

v. Standard metropolitan statistical areas as defined by state or federal agencies; ( )

vi. Urbanized areas as designated by the U.S. Census Bureau; or ( )

vii. Any Another appropriate division or combination of boundaries. (3-24-22)( )

b. The general permit may be written to regulate one (1) or more categories or subcategories of discharges or sludge use or disposal practices or facilities, within the area described in Subsection 130.01.a., where the sources within a covered subcategory of discharges are either: ( )

i. Storm water point sources; or ( )

ii. One (1) or more categories or subcategories of point sources other than storm water point sources or TWTDS, if the point sources or TWTDS within each category or subcategory all: (3-24-22)( )

(1) Involve the same or substantially similar types of operations; ( )

(2) Discharge the same types of wastes or engage in the same types of sludge use or disposal practices; ( )



(3) Require the same effluent limitations, operating conditions, or standards for sewage sludge use or disposal; (3-24-22)( )

(4) Require the same or similar monitoring; and ( )

(5) In the opinion of the Department, are more appropriately controlled under a general permit than under individual permits. ( )

c. Where sources within a specific category or subcategory of dischargers are subject to water quality-based limits imposed pursuant to under Section 302-(Establishing Permit Provisions), the sources in that specific category or subcategory are subject to the same water quality-based effluent limitations. (3-24-22)( )

d. Other requirements: ( )

i. The general permit ~~must~~ will clearly identify the applicable conditions for each category or subcategory of dischargers or TWTDS covered by the permit; and (3-24-22)( )

ii. The general permit may exclude specified sources or areas from coverage. ( )

iii. For general permits issued under Subsection 130.01.b. for small MS4s, the Department ~~must~~ will establish the terms and conditions necessary to meet the requirements of 40 CFR 122.34 using one (1) of the two (2) permitting approaches described in Subsections 130.01.d.iii(1) and (2). The Department ~~must~~ will indicate in the permit or fact sheet ~~which the~~ approach ~~is being~~ used. (3-24-22)( )

(1) Comprehensive general permit. The Department includes all required permit terms and conditions in the general permit; or ( )

(2) Two-step general permit. The Department includes required permit terms and conditions in the general permit applicable to ~~all~~ eligible small MS4s and, during the process of authorizing small MS4s to discharge, establishes additional terms and conditions not included in the general permit to satisfy one (1) or more of the permit requirements in 40 CFR 122.34 for individual small MS4 operators. (3-24-22)( )

(a) The general permit ~~must~~ will require that ~~any~~ small MS4 operator seeking authorization to discharge under the general permit submit a Notice of Intent (NOI) consisting of the minimum required information in Subsection 130.05.b., and ~~any other~~ information the Director identifies as necessary to establish additional terms and conditions that satisfy the permit requirements of 40 CFR 122.34, such as the information required under Subsection 130.05.b. The general permit will explain ~~any~~ other steps necessary to obtain permit authorization. (3-24-22)( )

(b) The Department ~~must~~ will review the NOI submitted by the small MS4 operator to determine whether the information in the NOI is complete and to establish the additional terms and conditions necessary to meet the requirements of 40 CFR 122.34. The Department may require the small MS4 operator to submit additional information. If the Department makes a preliminary decision to authorize the small MS4 operator to discharge under the general permit, the Department ~~must~~ will give the public notice of and opportunity to comment and request a public meeting on its proposed authorization and the NOI, ~~the~~ proposed additional terms and conditions, and ~~the~~ basis for these additional requirements. The public notice, ~~the~~ process for submitting public comments and meeting requests, and ~~the~~ meeting process if a request for a meeting is granted, ~~must~~ will follow the procedures applicable to draft permits ~~set forth~~ in Sections 108 and 109 except Subsection 109.01.d. The Department ~~must~~ will respond to significant comments received during the comment period as provided in Subsection 109.03. (3-24-22)( )

(c) Upon authorization for the MS4 to discharge under the general permit, the final additional terms and conditions applicable to the MS4 operator become effective. The Department ~~must~~ will notify the permittee and inform the public of the decision to authorize the MS4 to discharge under the general permit and of the final additional terms and conditions specific to the MS4. (3-24-22)( )

**02. Electronic Submittals.** As of December 21, 2020, ~~all~~ notices of intent submitted in compliance with this section must be submitted electronically by the discharger (or treatment works treating domestic sewage) to

the Department unless waived ~~pursuant to~~ under 40 CFR 127.15. (3-24-22)( )

**03. Information Retention Schedule.** An applicant must keep records of all data used to complete a notice of intent and ~~any~~ supplemental information submitted for a period of at least three (3) years from the date the notice of intent is signed. (3-24-22)( )

**04. Notice of Intent.** ( )

**a.** ~~Any~~ person required under Subsections 102.01 through 102.03 must submit a notice of intent to the Department for coverage under an IPDES general permit as ~~set out~~ required in Subsection 130.05. (3-24-22)( )

**b.** A notice of intent must be signed and certified as required ~~by~~ in Section 090 ~~(Signature Requirements)~~. (3-24-22)( )

**05. Administration.** ( )

**a.** General permits may be issued, modified, revoked and reissued, or terminated in accordance with Sections 201 (Modification, or Revocation and Reissuance of IPDES Permits) and 203 (Termination of IPDES Permits). ( )

**b.** Authorization to discharge; or ~~authorization to~~ engage in sludge use and disposal practices will follow these procedures: (3-24-22)( )

**i.** Except as provided in Subsections 130.05.b.xi. and 130.05.b.xii., a discharger must submit, in accordance with general permit requirements, a complete and timely notice of intent ~~which will to~~ fulfill the requirements for permit applications; (3-24-22)( )

**ii.** A discharger (or TWTDS) who fails to submit a notice of intent in accordance with the terms of the permit is not authorized to discharge (or ~~in the case of~~ for a sludge disposal permit, to engage in a sludge use or disposal practice) under the terms of the general permit unless: (3-24-22)( )

(1) The general permit, in accordance with Subsections 130.05.b.xi., contains a provision that a notice of intent is not required; or ( )

(2) The Department notifies a discharger (or TWTDS) that it is covered by a general permit in accordance with Subsection 130.05.b.xii.; ( )

**iii.** ~~All~~ Notices of intent must be signed as required in Section 090 ~~(Signature Requirements)~~; (3-24-22)( )

**iv.** The general permit will specify the contents of the notice of intent and require ~~the submission of~~ submitting information necessary for adequate program implementation, including at a minimum: (3-24-22)( )

(1) ~~The~~ Legal name; and address; ~~and EIN or Department equivalent~~ of the ~~owner or~~ operator; (3-24-22)( )

(2) ~~The~~ Facility name and address; (3-24-22)( )

(3) Type of facility, site, or discharges; and (3-24-22)( )

(4) ~~The~~ Receiving stream (s); (3-24-22)( )

**v.** Coverage under a general permit may be terminated or revoked in accordance with Subsection 130.05.c. through e.; ( )

**vi.** Notices of intent for coverage under a general permit for CAFOs must include the information specified in Subsection 105.09 and 40 CFR 122.21(i)(1), including a topographic map; ( )



vii. A-CAFO owner or operator may be authorized to discharge under a general permit only in accordance with the process described in 40 CFR 122.23(h); (3-24-22)( )

viii. General permits for storm water discharges associated with industrial activity from inactive mining, inactive oil and gas operations, or inactive landfills occurring on federal lands where an operator cannot be identified may contain alternative notice of intent requirements; ( )

ix. General permits ~~shall~~ will specify the deadlines for submitting notices of intent to be covered and the date(s) when a discharger is authorized to discharge under the permit; (3-24-22)( )

x. General permits ~~shall~~ will specify whether a discharger (or TWTDS), who has submitted a complete and timely notice of intent to be covered in accordance with the general permit and is eligible for coverage under the permit, is authorized to discharge ~~(or in the case of for~~ a sludge disposal permit, to engage in a sludge use or disposal practice) in accordance with the permit ~~either~~; (3-24-22)( )

- (1) Upon receipt of the notice of intent by the Department; ( )
- (2) After a waiting period specified in the general permit; ( )
- (3) On a date specified in the general permit; or ( )
- (4) Upon receipt of notification of inclusion by the Department; ( )

xi. Discharges other than discharges from POTWs, combined sewer overflows, ~~municipal separate storm sewer systems MS4s~~, primary industrial facilities, and storm water discharges associated with industrial activity, may, at the discretion of the Department, be authorized to discharge under a general permit without submitting a notice of intent ~~where~~ when the Department finds that a notice of intent requirement ~~would be~~ is inappropriate. The Department ~~shall~~ will provide in the public notice of the general permit the reasons for not requiring a notice of intent. ~~In making such a finding,~~ The Department shall will consider: (3-24-22)( )

- (1) ~~The~~ Type of discharge; (3-24-22)( )
- (2) ~~The~~ Expected nature of the discharge; (3-24-22)( )
- (3) ~~The~~ Potential for toxic and conventional pollutants in the discharges; (3-24-22)( )
- (4) ~~The~~ Expected volume of the discharges; (3-24-22)( )
- (5) Other means of identifying discharges covered by the permit; and ( )
- (6) ~~The~~ Estimated number of discharges to be covered by the permit; and (3-24-22)( )

xii. The Department may notify a discharger (or TWTDS) that it is covered by a general permit, even if the discharger (or TWTDS) has not submitted a notice of intent to be covered. A discharger (or TWTDS) so notified may request an individual permit as specified in Subsection 130.05.d. ( )

c. The Department may terminate, revoke, or deny coverage under a general permit, and require the discharger or applicant to apply for and obtain an individual IPDES permit. ~~Any~~ interested person may petition the Department to take action under this subsection. Cases where an individual IPDES permit may be required include the following: (3-24-22)( )

i. ~~The~~ discharger or TWTDS is not in compliance with the conditions of the general permit; (3-24-22)( )

ii. ~~A~~ eChange has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source or TWTDS; (3-24-22)( )

- iii. ~~Effluent limitation guidelines~~ELGs are promulgated for point sources covered by the general permit; (3-24-22)( )
- iv. A Water Quality Management plan containing requirements ~~applicable to such~~ for point sources is approved; (3-24-22)( )
- v. Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary; ( )
- vi. Standards for sewage sludge use or disposal have been promulgated for the sludge use and disposal practice covered by the general IPDES permit; or ( )
- vii. ~~The discharge(s)~~Discharge is a significant contributor of pollutants. ~~In making~~For this determination, the Department may consider ~~the following factors~~: (3-24-22)( )
- (1) ~~The~~L location of the discharge with respect to waters of the United States; (3-24-22)( )
  - (2) ~~The~~sSize of the discharge; (3-24-22)( )
  - (3) ~~The~~Quantity and nature of the pollutants discharged to waters of the United States; and (3-24-22)( )
  - (4) Other relevant factors. ( )
- d. Any owner or operator authorized by a general permit may request to be excluded from the coverage of the general permit by applying for an individual permit. ( )
- i. The owner or operator ~~shall~~ must submit an application under Section 105 (~~Application for an Individual IPDES Permit~~), with reasons supporting the request, to the Department no later than ninety (90) days after the publication of the general permit. (3-24-22)( )
  - ii. The Department ~~shall~~ must process the request under Sections 106 (Individual Permit Application Review), 107 (Decision Process), 108 (Draft Permit and Fact Sheet) and 109 (Public Notification and Comment). (3-24-22)( )
  - iii. The Department ~~shall~~ will grant a request by issuing an individual permit if the reasons cited by the owner or operator are adequate to support the request. (3-24-22)( )
- e. When an individual IPDES permit is issued to an owner or operator otherwise subject to a general IPDES permit, the applicability of the general permit to the individual IPDES permittee is automatically terminated on the effective date of the individual permit. ( )
- f. A source excluded from a general permit, solely because it already has an individual permit, may request that the individual permit be revoked, and that it be covered by the general permit. Upon revocation of the individual permit, the general permit ~~shall~~ will apply to the source. (3-24-22)( )

**06. Case-by-Case Requirements for Individual Permits. ( )**

- a. The Department may require ~~any~~ owner or operator authorized by a general permit to apply for an individual IPDES permit as provided in Subsection 130.05.c., only if the owner or operator has been notified in writing that a permit application is required. This notice ~~shall~~ will include a ~~brief~~ statement of the reasons for this decision, an application form, a statement setting a time for the owner or operator to file the application, a statement that on the effective date of the individual IPDES permit, the general permit as it applies to the individual permittee ~~shall~~ automatically terminate, and a statement that the owner or operator may appeal the Department's decision as provided in Section 204 (~~Appeals Process~~). The Department may grant additional time upon request of the applicant.

(3-24-22)( )

b. ~~Prior to~~**Before** a case-by-case determination that an individual permit is required for a storm water discharge under this section (~~see~~ 40 CFR 122.26(a)(1)(v), (a)(9)(iii), and Subsection 105.19), the Department may require the discharger to submit a permit application or other information regarding the discharge described in the ~~Clean Water Act section~~ **CWA Section** 308. (3-24-22)( )

i. ~~In~~**When** requiring ~~such~~ information, the Department ~~shall~~ **will** notify the discharger in writing and ~~shall~~ send an application ~~form~~ with the notice. (3-24-22)( )

ii. The discharger must apply for a permit within one hundred eighty (180) days of notice, unless permission for a later date is granted by the Department. ( )

131. -- 199. (RESERVED)

200. RENEWAL OF IPDES PERMITS.

01. **Interim Effluent Limits.** Except as provided in Subsection 200.02, when a permit is renewed or reissued, interim effluent ~~limitations~~, standards or conditions must be at least as stringent as the final effluent ~~limitations~~, standards, or conditions in the previous permit unless the circumstances on which the previous permit ~~was based~~: (3-24-22)( )

a. ~~Have m~~**Material**ly and substantially changed since the time the permit was issued; and (3-24-22)( )

b. ~~Would e~~**Constitute** cause for permit modification or revocation and reissuance under Subsection 201.02. (3-24-22)( )

02. ~~Final~~~~Clean Water Act~~ **CWA Section 402(a)(1)(B) Effluent Limits.** ~~In the case of~~**For** effluent ~~limitations~~ established by the Department ~~on the basis of the Clean Water Act section~~ **based on CWA Section** 402(a)(1)(B), a permit may not be renewed, reissued, or modified ~~on the basis of effluent guidelines~~ **based on ELGs** promulgated under ~~Clean Water Act section~~ **CWA Section** 304(b) after the original issuance of a permit, to contain effluent ~~limitations which that~~ are less stringent than the comparable effluent ~~limitations~~ in the previous permit, except a permit may be renewed, reissued, or modified to contain a less stringent effluent ~~limitation~~ applicable to a pollutant, if: (3-24-22)( )

a. Material and substantial alterations or additions to the permitted facility occurred after permit issuance, ~~which~~ **justify**ing the application of a less stringent effluent ~~limitation~~; (3-24-22)( )

b. Information is available ~~that~~: (3-24-22)( )

i. ~~Which w~~ **Was** not available ~~at the time of~~ **during** permit issuance (other than revised regulations, guidance, or test methods) and ~~which would have justified~~ the application of a less stringent effluent ~~limitation at the time of~~ **during** permit issuance; or (3-24-22)( )

ii. ~~Which t~~ **The** Department determines ~~indicates that~~ technical mistakes or mistaken interpretations of law were made in issuing the permit under ~~the Clean Water Act section~~ **CWA Section** 402(a)(1)(b); (3-24-22)( )

c. A less stringent effluent ~~limitation~~ is necessary because of events over which the permittee has no control and ~~for which~~ there is no reasonably available remedy; (3-24-22)( )

d. The permittee ~~has~~ received a permit modification under ~~the Clean Water Act section~~ **CWA Sections** 301(c), 301(g), 301(i), 301(k), 301(n), or 316(a); or (3-24-22)( )

e. The permittee ~~has~~ installed the treatment facilities required to meet the effluent ~~limitations~~ in the previous permit and ~~has~~ properly operated and maintained the facilities but ~~has nevertheless been unable to not~~ **achieved** the previous effluent ~~limitations~~. ~~In this case t~~ **The** ~~limitations~~ in the reviewed, reissued, or modified permit

may reflect the level of pollutant control actually achieved (but ~~shall~~ will not be less stringent than required by ~~effluent guidelines~~ ELGs in effect ~~at the time of~~ during permit renewal, reissuance, or modification). (3-24-22)(    )

**03. Final ~~Clean Water Act~~ CWA Section 301(b)(1)(C) or 303 Effluent Limits.** ~~In the case of For~~ effluent limitations ~~established on the basis of Clean Water Act section~~ based on CWA Sections 301(b)(1)(C) ~~or section~~, 303(d), or (e), a permit may not be renewed, reissued, or modified to contain effluent limitations ~~which are~~ less stringent than the comparable effluent limitations in the previous permit except when: (3-24-22)(    )

a. One of the exceptions in Subsection 200.02 apply; or ( )

b. The water ~~to which~~ where the discharge occurs is identified as impaired on Idaho's Integrated Report and the effluent limitation is based on a ~~total maximum daily load~~ TMDL or other waste load allocation established under ~~Clean Water Act section~~ CWA Section 303, if the cumulative effect of all revised effluent limitations based on ~~such total maximum daily load~~ the TMDL or waste load allocation will ~~as~~ ensure the attainment of applicable water quality standards; or (3-24-22)(    )

c. The water quality ~~in the water to which~~ where the discharge occurs meets or exceeds levels required by ~~applicable~~ the water quality standards, and the effluent limitation is based on a ~~total maximum daily load~~ TMDL or other waste load allocation established under ~~Clean Water Act section~~ the CWA Section 303, any water quality standard, or ~~any~~ permitting standard, if ~~such~~ the revision is subject to and consistent with the antidegradation policy and implementation procedures in the water quality standards. (3-24-22)(    )

**04. Effluent Limits and Water Quality Standards.** In no event may a permit ~~with respect~~ to which Subsection 200.02 or 200.03 applies be renewed, reissued, or modified to contain an effluent limitation ~~which is~~ less stringent than required by ~~effluent guidelines~~ ELGs in effect at the time the permit is renewed, reissued, or modified. In no event may such a permit to discharge into waters of the United States be renewed, issued, or modified to contain a less stringent effluent ~~limitation if the implementation of such limitation would~~ limit if implementing the limit results in a violation of a water quality standard under IDAPA 58.01.02, "Water Quality Standards." (3-24-22)(    )

## 201. MODIFICATION, OR REVOCATION AND REISSUANCE OF IPDES PERMITS.

**01. Procedures to Modify, or Revoke and Reissue Permits.** ( )

a. Permits may be modified, or revoked and reissued, ~~either~~ at the request of ~~any~~ interested person (including the permittee) or upon the Department's initiative. ~~However,~~ Permits may only be modified, or revoked and reissued, for the reasons specified in Subsection 201.02. ~~All~~ Requests shall must be in writing and ~~shall~~ contain facts or reasons supporting the request. (3-24-22)(    )

b. If the Department tentatively decides to modify, or revoke and reissue, a permit, the Department ~~shall will~~ prepare a draft permit under Section 108 ~~(Draft Permit and Fact Sheet)~~, incorporating the proposed changes. (3-24-22)(    )

i. The Department may request additional information, and, ~~in the case of for~~ a modified permit, may require ~~the submission~~ submittal of an updated application. If the tentative decision is to revoke and reissue a permit, the Department ~~shall will~~ require ~~the submission~~ submittal of a new application. (3-24-22)(    )

ii. In a permit modification ~~under this section~~, only those conditions to be modified ~~shall will~~ be reopened when a new draft permit is prepared. All other aspects of the existing permit ~~shall~~ remain in effect for the duration of the unmodified permit. (3-24-22)(    )

iii. When a permit is revoked and reissued ~~under this section~~, the entire permit is reopened ~~just~~ as if the permit had expired and ~~was is~~ being reissued. During ~~any~~ revocation and reissuance proceeding, the permittee ~~shall~~ must comply with ~~all the~~ conditions of the existing permit until a new final permit is reissued. (3-24-22)(    )

iv. Minor modifications, ~~as~~ defined in Subsection 201.03, do not require ~~the~~ development of a draft permit, ~~and~~ fact sheet, nor must minor modifications be subjected and are not subject to public notification and comment. (3-24-22)(    )

02. **Causes to Modify, or Revoke and Reissue Permits.** When the Department receives ~~any~~ pertinent information (~~for example, inspects the c.g.,~~ facility, ~~receives inspection,~~ information submitted ~~by the permittee~~ as required ~~in by~~ the permit, ~~receives~~ a request for modification or revocation and reissuance under Subsection 201.01, or ~~conducts a review of the~~ permit file ~~review~~), the Department may determine whether ~~or not~~ one (1) or more of the causes listed in Subsections 201.02.c. and 201.02.d. for modification or revocation and reissuance or both exist. (3-24-22)( )

a. If cause exists, the Department may modify or revoke and reissue the permit ~~accordingly~~, subject to the ~~limitations~~ of Subsection 201.01.b., and may request a new or updated application, if necessary. (3-24-22)( )

b. If cause does not exist ~~under this section~~, the Department ~~shall~~ will not modify or revoke and reissue the permit. (3-24-22)( )

c. The following are causes for modification but not revocation and reissuance of permits except when the permittee requests or agrees: ( )

i. ~~There are m~~Material and substantial alterations or additions to the permitted facility or activity (including a change ~~or changes~~ in the permittee's sludge use or disposal practice), ~~which~~ occurred after permit issuance, and ~~which~~ justify ~~the application of~~ permit conditions that are different or absent in the existing permit. (3-24-22)( )

ii. The Department has received new information. Permits may be modified during their terms for this cause only if the information was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and ~~would have justified~~ justifies the application of different permit conditions at the time of issuance: (3-24-22)( )

(1) For IPDES general permits (Section 130), ~~this~~ cause includes ~~any~~ information indicating that cumulative effects on the environment are unacceptable; and (3-24-22)( )

(2) For new source or new discharger IPDES permits (Section 120), ~~this~~ cause ~~shall include any~~ includes significant information derived from effluent testing required under Subsection 105.08 or 105.16 after issuance of the permit. (3-24-22)( )

iii. The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. Permits may be modified during their terms for this cause only ~~as follows~~: (3-24-22)( )

(1) For promulgation of amended standards or regulations, when: ( )

(a) The ~~permit condition~~ requested ~~to be modified~~ modification was based on a promulgated ~~effluent limitation guideline~~ ELG, EPA approved or promulgated water quality standards, or the Secondary Treatment Regulations under 40 CFR Part 133; (3-24-22)( )

(b) ~~The~~ EPA ~~has~~ revised, ~~withdrawn~~ withdrew, or modified that portion of the regulation or ~~effluent limitation guideline~~ ELG on which the permit condition was based, or ~~has~~ approved a state action ~~with regard to~~ for a water quality standard on which the permit condition was based; and (3-24-22)( )

(c) A permittee requests modification ~~in accordance with~~ under Subsection 201.01 or 203.01 within ninety (90) days after notice of the action on which the request is based; ~~and~~. (3-24-22)( )

(2) For judicial decisions, a court of competent jurisdiction ~~has~~ remanded and stayed EPA or Idaho promulgated regulations or ~~effluent limitation guidelines~~ ELGs, if the remand and stay concerns that portion of the regulations or guidelines on which the permit condition was based, and a request is filed by the permittee ~~in accordance with~~ under Subsection 201.01 or 203.01 within ninety (90) days of judicial remand. (3-24-22)( )

iv. The Department determines good cause exists for ~~modification of~~ modifying a compliance

schedule, such as an act of God, strike, flood, or materials shortage or other events ~~over which that~~ the permittee has little or no control and ~~for which there is~~ no reasonably available remedy ~~exists~~. However, in no case may an IPDES A compliance schedule ~~must not~~ be modified to extend beyond ~~an applicable Clean Water Act~~ the CWA statutory deadline. (3-24-22)( )

v. When the permittee has filed a request for a variance under ~~Clean Water Act section~~ CWA Sections 301(c), 301(g), 301(i), 301(k), or 316(a) or for fundamentally different factors within the time specified in Section 310 ~~(Variances)~~. (3-24-22)( )

vi. When required to incorporate an ~~applicable Clean Water Act~~ CWA Section 307(a) toxic effluent standard or prohibition, under Subsection 302.04. (3-24-22)( )

vii. When required by the reopener conditions in a permit, ~~which are~~ established in the permit under Subsection 302.05 or 40 CFR 403.18(e) (Pretreatment Standards). (3-24-22)( )

viii. Upon request of a permittee who qualifies for effluent limitation on a net basis, or when a discharger is no longer eligible for net limitations, as provided in Subsection 303.07. (3-24-22)( )

ix. As necessary under 40 CFR 403.8(e) (Pretreatment Program Requirements: Development and Implementation by POTW). ( )

x. Upon failure of an approved state to notify, as required by ~~the Clean Water Act section~~ CWA Section 402(b)(3), another state whose waters may be affected by a discharge from the approved state. (3-24-22)( )

xi. When the level of discharge of ~~any pollutant which is~~ pollutants not limited in the permit exceeds the level ~~which that~~ can be achieved by the technology-based treatment requirements appropriate to the permittee under 40 CFR 125.3(c). (3-24-22)( )

xii. To establish a notification level as provided in Subsection 302.08. ( )

xiii. To modify a compliance schedule ~~of compliance~~ to reflect the time lost during construction of an innovative or alternative facility, ~~in the case of for~~ a POTW ~~which has that~~ received a loan under IDAPA 58.01.12, "Rules for Administration of Water Pollution Control Loans." ~~In no case shall~~ The compliance schedule must not be modified to extend beyond ~~an applicable Clean Water Act~~ the CWA statutory deadline. (3-24-22)( )

xiv. For a small MS4, to include an effluent limitation requiring implementation of ~~a~~ minimum control ~~measure or~~ measures as specified in 40 CFR 122.34(b) when: (3-24-22)( )

(1) The permit does not include ~~such~~ measure(s) based upon the determination that another entity was responsible for ~~implementation of~~ implementing the requirement(s), and (3-24-22)( )

(2) The other entity fails to implement measure(s) that satisfy the requirement(s). (3-24-22)( )

xv. To correct technical ~~mistakes, such as~~ errors in calculation, or mistaken interpretations of law made in determining permit conditions. (3-24-22)( )

xvi. When the discharger has installed the treatment technology considered by the permit writer in setting effluent limitations imposed under ~~the Clean Water Act section~~ CWA Section 402(a)(1) and has properly operated and maintained the facilities but ~~nevertheless has been unable to not~~ achieved those effluent limitations. ~~In this case, t~~ The limitations in the modified permit may reflect the level of pollutant control ~~actually~~ achieved (but ~~shall must~~ not be less stringent than required by a subsequently promulgated ~~effluent limitations guideline~~ ELG). (3-24-22)( )

xvii. The incorporation of the terms of a CAFO's nutrient management plan into the terms and conditions of a general permit when a CAFO obtains coverage under a general permit in accordance with 40 CFR 122.23(h), and Section 130 ~~(General Permits)~~ is not a cause for modification ~~pursuant to~~ under the requirements of



this section.

(3-24-22)( )

xviii. When required by a permit condition to incorporate a land application or sludge disposal plan for beneficial reuse of sewage sludge, to revise an existing land application or sludge disposal plan, or to add a land application or sludge disposal plan as required by IDAPA 58.01.16.650, "Wastewater Rules," and Section 380 (Sewage Sludge) of these rules.

(3-24-22)( )

d. The following are causes to modify or, ~~alternatively,~~ revoke and reissue a permit: (3-24-22)( )

i. Cause exists for termination under Subsection 203.03, and the Department determines that modification or revocation and reissuance is appropriate; ( )

ii. The Department has received notification, as required in the permit, of a proposed transfer of the permit; or ( )

iii. A permit also may be modified to reflect a transfer after the effective date of an automatic transfer (Subsection 202.02) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee. ( )

**03. Minor Modifications of Permits.** Upon the consent of the permittee, the Department may modify a permit to ~~make the~~ corrections or allow ~~ances~~ for changes in the permitted activity listed in this subsection without following the procedures of Sections 108 (Draft Permit and Fact Sheet), 109 (Public Notification and Comment), and Subsection 201.01. ~~Any~~ permit modification not processed as a minor modification under this subsection must be made for cause and ~~must~~ meet the requirements of Section 108 (~~Draft Permit and Fact Sheet~~) and Section 109 (~~Public Notification and Comment~~). Minor modifications may:

(3-24-22)( )

a. Correct typographical errors; ( )

b. Require more frequent ~~or not less frequent~~ monitoring or reporting by the permittee; (3-24-22)( )

c. Change an interim compliance date in a ~~compliance~~ schedule ~~of compliance~~, provided the new date is not more than one hundred twenty (120) days after the date specified in the existing permit and does not interfere with ~~attainment of~~ ~~attaining~~ the final compliance date requirement; (3-24-22)( )

d. Allow for a change in ownership or operational control of a facility where the Department determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Department; ( )

e. Change the construction schedule for a discharger ~~which that~~ is a new source. No ~~such~~ change ~~shall~~ affects a discharger's obligation to have ~~all~~ pollution control equipment installed and in operation ~~prior to~~ ~~before~~ discharge under Section 120 (~~New Sources and New Discharges~~), and 40 CFR 122.29(d); (3-24-22)( )

f. Delete a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except ~~in accordance with~~ ~~under~~ permit limits; (3-24-22)( )

g. Incorporate conditions of a POTW pretreatment program ~~that has been~~ approved in accordance with ~~the procedures in~~ 40 CFR 403.11 or a modification ~~that has been~~ approved in accordance with ~~the procedures in~~ 40 CFR 403.18 as enforceable conditions of the POTW's permits; (3-24-22)( )

h. Incorporate changes to the terms of a CAFO's nutrient management plan that ~~have been~~ ~~were~~ revised in accordance with ~~the requirements of~~ 40 CFR 122.42(e)(6); or (3-24-22)( )

i. Require electronic reporting requirements (to replace paper reporting requirements) ~~including those~~ specified in 40 CFR Part 127 (NPDES Electronic Reporting). (3-24-22)( )

202. TRANSFER OF IPDES PERMITS.

01. **Transfers by Modification.** Except as provided in Subsection 202.02, a permit may be transferred by the permittee to a new owner or operator only if the permit ~~has been~~ was modified or revoked and reissued under Subsection 201.02.d., or a minor modification was made under Subsection 201.03, to identify the new permittee and incorporate ~~such~~ other requirements ~~as may be~~ necessary under the ~~Clean Water Act~~ CWA. (3-24-22)( )

02. **Automatic Transfers.** As an alternative to transfers by modification, ~~any~~ IPDES permit may be automatically transferred to a new permittee if the: (3-24-22)( )

a. ~~The e~~Current permittee notifies the Department at least thirty (30) days ~~in advance of~~ before the proposed transfer date; (3-24-22)( )

b. ~~The n~~Notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee; and (3-24-22)( )

c. ~~The~~Department does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. A modification under this subsection may ~~also~~ be a minor modification under Subsection 201.03. If this notice is not received, the transfer is effective on the date specified in the agreement. (3-24-22)( )

203. TERMINATION OF IPDES PERMITS.

01. **Request to Terminate or Termination Initiated by the Department.** Permits may be terminated either at the request of ~~any~~ interested person (including the permittee) or upon the Department's own initiative. ~~However, p~~Permits may only be terminated for the reasons specified in Subsection 203.03 or 203.04. (3-24-22)( )

a. Request for termination by persons other than the permittee must be submitted in writing to the Department. ( )

b. As of December 21, 2020, ~~all NOTs submitted in compliance with this section~~ must be submitted electronically by the permittee to the Department ~~in compliance to comply~~ with this section and 40 CFR Part 127 unless waived ~~pursuant to, under~~ 40 CFR 127.15. 40 CFR Part 127 ~~is not intended to undo~~ does not eliminate existing requirements for electronic reporting. ~~Prior to this date, and i~~Independent of 40 CFR Part 127, the permittee may be required to report electronically if specified by a particular permit. (3-24-22)( )

02. **Tentative Permit Termination.** Except as provided in Subsection 203.04, if the Department tentatively decides to terminate a permit under Subsection 203.03, the Department will issue a notice of ~~intent to terminate~~ ion. A notice of ~~intent to terminate~~ termination will be available for public comment, and the Department will give notice of an opportunity for public meetings, as specified in Section 109 ~~(Public Notification and Comment)~~. (3-24-22)( )

03. **Cause to Terminate Permits.** The following are causes for terminating a permit during its term, or for denying a permit renewal application: ( )

a. Noncompliance by the permittee with ~~any~~ conditions of the permit; (3-24-22)( )

b. ~~The p~~Permittee's failure in the application or during the permit issuance process to fully disclose ~~fully all~~ relevant facts, or the permittee's misrepresentation of ~~any~~ relevant facts at any time; (3-24-22)( )

c. ~~A d~~Determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or (3-24-22)( )

d. ~~A e~~Change in ~~any~~ condition that requires either a temporary or permanent reduction or elimination of ~~any~~ discharge or sludge use or disposal practice controlled by the permit (~~for example~~ e.g., plant closure or



termination of discharge by connection to a POTW), or other situations where the Department has sufficiently ~~reliable~~ basis for determining discharge will cease. (3-24-22)( )

**04. Expedited Termination Process for Terminated or Eliminated Discharge.** If the entire discharge is permanently terminated by ~~elimination of the~~ eliminating flow or ~~by connection~~ connecting to a POTW (but not by land application or disposal into a well), the Department may terminate the permit by notice to the permittee. (3-24-22)( )

**a.** Termination by notice becomes effective thirty (30) days after notice is sent (expedited permit termination), unless the permittee objects within that time. ( )

**b.** If the permittee objects during that period, the Department will follow procedures for termination in Subsection 203.02. ( )

**c.** Expedited permit termination procedures are not available to permittees ~~that are~~ subject to pending state and/or federal enforcement actions including citizen suits brought under federal law. If requesting expedited permit termination procedures, a permittee must certify ~~that~~ it is not subject to ~~any~~ pending state or federal enforcement actions including citizen suits brought under federal law. (3-24-22)( )

## **204. APPEALS PROCESS.**

**01. Petition for Review of a Permit Decision.** Appeal of a final IPDES permit decision, issued under Section 107-~~(Decision Process)~~, to the Hearing Authority is commenced by filing a Petition for Review with the Department's Hearing Coordinator within the time prescribed in Subsection 204.01.b. The "Hearing Authority" ~~shall~~ will be a Hearing Officer appointed by the Director from a pool of Hearing Officers approved by the Board. (3-24-22)( )

**a.** Any person who is aggrieved by the final permit decision may file a Petition for Review as provided in this section. A person aggrieved is limited to the permit holder or applicant, and any person or entity who filed comments or who participated in the public meeting on the draft permit. (3-24-22)( )

**b.** A Petition for Review must be filed with the Department's Hearing Coordinator within twenty-eight (28) days after the Department serves notice of the final permit decision under Section 107-~~(Decision Process)~~. A petition is filed when it is received by the Department's Hearing Coordinator at the address specified in Subsection 204.13. (3-24-22)( )

**c.** In addition to meeting the requirements in Subsection 204.06, a Petition for Review must: ( )

**i.** Be confined to the issues raised during the public comment process or to changes made to the permit by the Department after the close of the public comment period; ( )

**ii.** Identify the permit condition or other specific aspect of the permit decision ~~that is~~ being challenged; (3-24-22)( )

**iii.** Set forth State the legal and factual basis for the petitioner's contentions; (3-24-22)( )

**iv.** Set forth State the relief sought; and (3-24-22)( )

**v.** Set forth State the basis for asserting ~~that~~ the petitioner is an aggrieved person. (3-24-22)( )

**02. Public Notice of the Petition for Review.** Within fourteen (14) days of the date a Petition for Review has been filed, the Hearing Authority must give reasonable notice to the public of the petition. ( )

**03. Administrative Record Filed By the Department.** The Department ~~shall~~ will file a certified copy of the administrative record, as identified in Section 600-~~(Administrative Records and Data Management)~~, with an index within twenty-eight (28) days of the date the Petition for Review was filed. (3-24-22)( )

**04. Participation by the Permit Applicant or Permit Holder.** A permit applicant or permit holder who did not file a petition but who wishes to participate in the appeal process must file a notice of appearance within twenty-eight (28) days of the date the Petition for Review was filed. ( )

**05. Petition to Intervene.** Any person who has a direct and substantial interest in the outcome of the Petition for Review may file a Petition to Intervene. (3-24-22)( )

a. The Petition to Intervene must ~~set forth~~ state the interest of the intervener, and why intervention ~~would will~~ not unduly broaden the issues and cause delay or prejudice to the parties. (3-24-22)( )

b. Petitions to Intervene must be filed within fourteen (14) days of the notice of filing of the Petition for Review. ( )

c. Any party opposing a Petition to Intervene must file objections within seven (7) days after service of the Petition to Intervene and serve the objection upon all parties of record and upon the person petitioning to intervene. ( )

d. If a Petition to Intervene shows direct and substantial interest in the outcome of the Petition for Review, does not unduly broaden the issues, and will not cause delay or prejudice to the parties, the Hearing Authority ~~shall~~ must grant intervention. (3-24-22)( )

**06. Content and Form Requirements for Petitions and Briefs.** All ~~p~~ Petitions and briefs filed under this section must: (3-24-22)( )

a. Identify, in the caption, the permit applicant or holder, ~~the~~ permitted facility, and ~~the~~ permit number. ~~The caption should also~~ In the caption, include the case number, if available ~~at the time of~~ during filing, and ~~the~~ title of the document, and (3-24-22)( )

b. Specify on the upper left corner of the first page, the name, address, telephone number, e-mail address and facsimile number, if any, of the person filing the document. If the person filing the document is a representative of a party as provided in Subsection 204.11, the document must identify the name of the person or entity represented. No more than two (2) representatives for service of documents may be listed. ( )

**07. Augmenting the Administrative Record.** Consideration of the Petition for Review by the Hearing Authority is limited to the certified administrative record unless, upon the request of a party, the Hearing Authority allows the record to be augmented. A request to augment the record must be filed within fourteen (14) days of the filing of the certified administrative record, unless intervention is granted, in which case the request to augment must be filed within fourteen (14) days of the date the order granting intervention is issued. The Hearing Authority may allow the record to be augmented if the requesting party shows that the additional information is material, is relevant to the issues raised in the appeal and that: ( )

a. ~~There were~~ g Good reasons exist for failure to present the information during the permitting proceeding; or (3-24-22)( )

b. ~~There were~~ a Alleged irregularities exist in the permitting proceeding and the party wishes to introduce evidence of the alleged irregularities. (3-24-22)( )

**08. Brief of the Petitioner.** Once ~~all~~ requests to augment the record and motions to intervene have been determined, the Hearing Authority ~~shall~~ must issue an order notifying the parties that the administrative record has been settled and ~~of~~ the date ~~by which~~ the petitioner must file ~~petitioner's~~ a brief in support of the Petition for Review. In addition to meeting the requirements of Subsection 204.06, the brief must include: (3-24-22)( )

a. ~~The~~ I legal arguments and citations to legal authority ~~that~~ supporting the allegations in the Petition for Review; and (3-24-22)( )

b. ~~The~~ f actual support for the allegations in the Petition for Review, including citations to the

administrative record. (3-24-22)( )

- c. ~~A s~~Statement ~~regarding~~ whether the party ~~desires~~ requests an opportunity for oral argument. (3-24-22)( )

**09. Response Briefs.** Unless an alternative date is set by the Hearing Authority, the Department and all other parties must file response briefs within twenty-eight (28) days of the service of the petitioner's brief. In addition to meeting the requirements of Subsection 204.06, the response briefs must include: ( )

- a. ~~A r~~Response to the arguments and assertions in the petitioner's brief (either in support or opposed); (3-24-22)( )
- b. ~~A e~~Citation to ~~all~~ legal authorities and facts in the administrative record relied upon; and (3-24-22)( )
- c. ~~A s~~Statement ~~regarding~~ whether the party ~~desires~~ requests an opportunity for oral argument. (3-24-22)( )

**10. Reply Briefs by the Petitioner.** Unless an alternative date is set by the Hearing Authority, the petitioner may file a reply brief within fourteen (14) days after service of response briefs. A petitioner may not raise new issues or arguments in the reply. ( )

**11. Representation of Parties.** Unless otherwise authorized or required by law, appearances and representation of parties or other persons ~~shall be~~ are as follows: (3-24-22)( )

- a. A natural person may represent himself or herself or be represented by an attorney or, if the person lacks full legal capacity to act for himself or herself, then by a legal guardian or guardian ad litem or representative of an estate; ( )
- b. ~~A g~~General partnership may be represented by a partner or an attorney; (3-24-22)( )
- c. ~~A e~~Corporation, or any other business entity other than a general partnership, must be represented by an attorney; (3-24-22)( )
- d. ~~A m~~Municipal corporation, local government agency, unincorporated association or nonprofit organization must be represented by an attorney; or (3-24-22)( )
- e. ~~A s~~State, federal, or tribal governmental entity or agency must be represented by an attorney. (3-24-22)( )

**12. Substitution and Withdrawal of Representatives.** A party's representative may ~~be~~ changed and a new representative may be substituted by notice to all parties ~~so long as~~ if the proceedings are not unreasonably delayed. Representatives who wish to withdraw from a proceeding must immediately file a motion to withdraw representation and serve that motion on the party represented and all other parties. (3-24-22)( )

**13. Filing and Service Requirements.** ( )

a. ~~All d~~Documents ~~concerning actions governed by these rules~~ must be filed with the Hearing Coordinator ~~at the following address: Hearing Coordinator, Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706. Documents may also be filed by fax or may be filed electronically. The Hearing Coordinator's fax number and email address for filing electronically are and may be filed by email, US mail, hand-delivery, or fax. The Hearing Coordinator assigns case docket numbers, maintains case records, and issues notices on behalf of the Department. Information for filing documents is available at [www.deq.idaho.gov/petitions-for-review](http://www.deq.idaho.gov/petitions-for-review). The documents are deemed to be filed on the date received by the Hearing Coordinator. Upon receipt of the filed document, the Hearing Coordinator will provide confirmation to the originating party.~~ (3-24-22)( )

- b. ~~All d~~Documents ~~subsequent to~~ filed after the petition must be served on all parties or

representatives, unless otherwise directed by the Hearing Authority.

(3-24-22)( )

c. Service of documents on the named representative is valid service upon the party for all purposes in the proceeding. ( )

14. **Proof of Service.** Every document meeting ~~the requirements~~ conditions for service must be attached to or accompanied by proof of service ~~containing the following certificate:~~ A certificate of service template is available at <https://www.deq.idaho.gov/public-information/laws-guidance-and-orders/petitions-for-review-and-precedential-orders>

I hereby certify that on this (insert date), a true and correct copy of the foregoing (insert name of document) was served on the following as indicated below:  
  
(insert names and addresses of parties and method of delivery (first class U.S. mail, facsimile, hand delivery, or overnight express))  
  
(Signature)

(3-24-22)( )

15. **Motions.** A request for an interlocutory or procedural order or other relief must be made by written motion unless these rules prescribe another form. ( )

a. A motion must specifically ~~state with particularity~~ the grounds for the motion, the relief sought, and the legal argument ~~necessary to~~ supporting the motion. ~~In advance of~~ Before filing a motion, parties must attempt to ascertain whether the other parties concur or object to the motion and ~~must~~ indicate in the motion the attempt made and the response obtained. (3-24-22)( )

b. Any party may file a response to a motion. Responses must specifically ~~state with particularity~~ the grounds for opposition and the legal argument ~~necessary to~~ supporting the motion. The response must be filed within fifteen (15) days after service of the motion unless the Hearing Authority shortens or extends the time for response. (3-24-22)( )

c. Any reply to a response must be filed within ten (10) days after service of the response. A reply must not introduce ~~any~~ new issues or arguments and may respond only to matters presented in the response. (3-24-22)( )

d. The Hearing Authority may act on a motion for a procedural order at any time without ~~awaiting~~ a response. (3-24-22)( )

e. Parties must file motions for extensions of time ~~sufficiently in advance of~~ before the due date to allow other parties ~~to have a~~ reasonable opportunity to respond to the request for more time and to provide the Hearing Authority with a reasonable opportunity to issue an order ~~prior to~~ before the due date. (3-24-22)( )

16. **Oral Argument.** The Hearing Authority may hold oral argument on its own initiative or at its discretion in response to a request by one or more of the parties. ( )

17. **Withdrawal of Permit or Portions of Permit by the Department.** The Department may, at any time, upon notification to the Hearing Authority and all parties, withdraw the permit or specified portions of the permit and prepare a new draft permit under Section 108 (~~Draft Permit and Fact Sheet~~) addressing the portions ~~so~~ withdrawn. The new draft permit must will proceed through the same process of public comment and opportunity for a public meeting as ~~would apply to any~~ other draft permits. If applicable, ~~any~~ portions of the permit that are not withdrawn continue to apply, unless stayed under Sections 205 (Contested Permit Conditions) and 206 (Stays of Contested Permit Conditions). The ~~For those portions of the permit that DEQ does not withdraw that are part of the appeal, the~~ appeal ~~shall will~~ continue ~~with respect to those portions of the permit that are contested in the appeal that the Department does not withdraw.~~ (3-24-22)( )

**18. Request to Dismiss Petition.** The petitioner, by motion, may request ~~to have~~ the Hearing Authority ~~to~~ dismiss its appeal. The motion must ~~briefly~~ state the reason for its request. (3-24-22)( )

**19. Burden of Proof.** The petitioner has the burden of proving the allegations in the Petition for Review. Factual allegations must be proven by a preponderance of the evidence. ( )

**20. Appointment of Hearing Officers.** The Hearing Authority ~~shall will~~ be a Hearing Officer appointed by the Director from a pool of Hearing Officers approved by the Board. Hearing Officers should be persons with technical expertise or experience in the issues involved in IPDES appeals. Notice of appointment of a Hearing Officer ~~shall will~~ be served on all parties. No Hearing Officer ~~shall will~~ be appointed ~~that who~~ has a conflict of interest as defined in 40 CFR 123.25(c). (3-24-22)( )

**21. Scope of Authority of the Hearing Authority.** The Hearing Authority ~~shall have the following~~ ~~has~~ authority: (3-24-22)( )

a. ~~The authority to~~ To set schedules and take ~~such~~ other actions to ensure an efficient and orderly adjudication of the issues raised in the Petition for Review; (3-24-22)( )

b. ~~The authority to~~ To hear and decide motions; and (3-24-22)( )

c. ~~The authority to~~ To issue an order that decides the issues raised in the appeal, ~~and includes~~ including findings of fact and conclusions of law. The required contents of an order are ~~set forth~~ stated in Subsection 204.24. (3-24-22)( )

**22. Ex Parte Communications.** The Hearing Authority ~~shall must~~ not communicate, directly or indirectly, regarding ~~any~~ substantive issues in the permit appeal with any party, except upon notice and opportunity for all parties to participate in the communication. The Hearing Authority may communicate ex parte with a party concerning procedural matters (e.g., scheduling). When the Hearing Authority becomes aware of a written ex parte communication regarding ~~any~~ substantive issue from a party or representative of a party during an appeal, the Hearing Authority shall place a copy of the communication in the case file for the case and order the party providing the written communication to serve a copy of the written communication upon all parties of record. Written communications from a party showing service upon all other parties are not ex parte communications. (3-24-22)( )

**23. Alternative Dispute Resolution.** Parties to the permit appeal may agree to use ~~a means of~~ alternative dispute resolution. (3-24-22)( )

**24. Final Orders.** (3-24-22)

~~a.~~ Final orders are issued by the Hearing Authority upon review of the petitions, briefs, and the administrative record on appeal. Motions for reconsideration of a final order will not be considered. (3-24-22)

~~b.~~ Every final orders shall must contain ~~the following~~: (3-24-22)( )

~~i.~~ a. A reasoned statement in support of the decision; ( )

~~ii.~~ b. Findings of fact, with reference to the portions of the administrative record that support the findings. The findings of fact must be based exclusively on the administrative record, or if augmented during the appeal, the augmented record; ( )

~~iii.~~ c. Conclusions of law with respect to legal issues raised in the appeal; ( )

~~iv.~~ d. The final order ~~shall must~~ either affirm the permitting decision, or vacate and remand the decision to the Department with instructions; and (3-24-22)( )

~~v.~~ e. A statement of the right to judicial review as ~~set forth~~ stated in Section 204.26. (3-24-22)( )

- ~~e. Motions for reconsideration of any final order shall not be considered. (3-24-22)~~
- 25. Final Agency Action for Purposes of Judicial Review. ( )**
- a. Filing a Petition for Review is a prerequisite to seeking judicial review of the Department's permitting decision. ( )
- b. For ~~purposes of~~ judicial review under Sections 39-107 and 67-5270, Idaho Code, final agency action or determination regarding an appeal of a permit occurs when a final order that affirms the Department's permitting decision is issued. ~~(3-24-22)( )~~
- c. An order that vacates and remands the decision to the Department with instructions is not a final agency action for ~~purposes of~~ judicial review. ~~(3-24-22)( )~~
- 26. Petition for Judicial Review. (3-24-22)( )**
- a. Any person aggrieved by a final agency action or determination by the Department as defined in Subsection 204.25 has a right to judicial review by filing a petition for judicial review. ( )
- b. The petition for judicial review must be: ( )
- i. ~~Filed with the Hearing Coordinator as set out in accordance with~~ Subsection 204.13 and with the district court ~~and served on all parties pursuant to Section 67-5272, Idaho Code. The petition for judicial review shall also be; and~~ ( )
- ii. ~~Served up~~ on the Hearing Authority, all parties, the Director of the Department, and ~~upon~~ the Attorney General of the State of Idaho. ~~Pursuant to Section 67-5272, Idaho Code, petitions for judicial review may be filed in the District Court of the county in which:~~ (3-24-22)
- i. ~~The hearing was held;~~ (3-24-22)
- ii. ~~The final agency action was taken;~~ (3-24-22)
- iii. ~~The party seeking review of the agency action resides; or~~ (3-24-22)
- iv. ~~The real property or personal property that was the subject of the agency action is located.~~ (3-24-22)( )
- c. Pursuant to Section 67-5273, Idaho Code, a petition for judicial review of a final agency action must be filed within twenty-eight (28) days of the service date of a final order issued by the Hearing Authority. ( )
- 27. IPDES General Permits. ( )**
- a. Persons affected by an IPDES general permit may not file a petition under this section or otherwise challenge the conditions of a general permit in further Department proceedings. Instead, they may ~~do either of the following:~~ (3-24-22)( )
- i. Challenge the conditions in a general permit by filing an action in court; or ( )
- ii. Apply for an individual IPDES permit under Section 105 ~~(Application for an Individual IPDES Permit)~~, as authorized in Section 130 ~~(General Permits)~~, and may then petition the Hearing Authority to review the individual permit ~~as provided by in these rules.~~ (3-24-22)( )
- b. As provided in Subsection 130.05.c., any interested person may also petition the Department to require an individual IPDES permit for any discharger eligible for authorization to discharge under an IPDES general permit. ( )



c. The Department's decision to terminate, revoke or deny coverage under a general permit and to require application for an individual permit may be appealed ~~pursuant to the provisions of~~ under Section 204 (~~Appeals Process~~). (3-24-22)( )

**28. Appeals of Variances.** ( )

a. When the Department issues a permit on which EPA has made a variance decision, separate appeals of the Department permit and ~~of the~~ EPA variance decision are possible. If the owner or operator is challenging the same issues in both proceedings, the EPA Region 10 Administrator will decide, in consultation with the Department, which case will be heard first. (3-24-22)( )

b. Variance decisions made by EPA may be appealed under the provisions of 40 CFR 124.19. ( )

c. Stays for variances other than ~~Clean Water Act section~~ CWA Section 301(g) variances are governed by Section 205 (~~Contested Permit Conditions~~) and 206 (~~Stays of Contested Permit Conditions~~). (3-24-22)( )

**205. CONTESTED PERMIT CONDITIONS.**

**01. Force and Effect of Conditions.** As provided in Subsection 206.01, if an appeal of a permit decision is filed under Section 204 (~~Appeals Process~~), the force and effect of the contested conditions of the permit are stayed until final Department action. The Department ~~must will~~ notify the discharger and ~~all~~ interested parties of the uncontested conditions of the permit that are enforceable obligations of the discharger in accordance with Subsection 206.01.c. (3-24-22)( )

**02. Control Technologies.** When effluent limitations are contested, but the underlying control technology is not, the notice ~~must will~~ identify the installation of the technology in accordance with the ~~permit~~ compliance schedules as an uncontested, enforceable obligation of the permit. (3-24-22)( )

**03. Combination of Technologies.** When a combination of technologies is contested, but a portion of the combination is not contested, that portion must be identified as uncontested if compatible with the combination of technologies proposed by the requester. ( )

**04. Inseverable Conditions.** Uncontested conditions, if inseverable from a contested condition, must be considered contested. ( )

**05. Enforceable Dates.** Uncontested conditions become enforceable thirty (30) days after the date of notice under Subsection 205.01. ( )

**06. Uncontested Conditions.** Uncontested conditions include: ( )

a. Preliminary design and engineering studies or other requirements necessary to achieve the final permit conditions ~~which that~~ do not entail substantial expenditures; and (3-24-22)( )

b. Permit conditions ~~which will have to~~ that must be met regardless of the outcome of the appeal under Section 204 (~~Appeals Procedure~~). (3-24-22)( )

**206. STAYS OF CONTESTED PERMIT CONDITIONS.**

**01. Stays.** ( )

a. If a Petition for Review of an IPDES permit under Section 204 (~~Appeals Process~~) is filed, the ~~effect of the~~ contested permit conditions are stayed pending final Department action. Uncontested permit conditions are stayed only until the date specified in Subsection 206.01.b. If the permit involves a new facility or new injection well, new source, new discharger or a recommencing discharger, the applicant will not be issued a permit for the proposed new facility, injection well, source, or discharger pending final Department action. (3-24-22)( )

b. Uncontested conditions ~~which that~~ are not severable from those contested are stayed together with the contested conditions. The Department ~~must will~~ identify the stayed provisions of permits for existing facilities, injection wells, and sources. ~~All o~~ther provisions of the permit for the existing facility, injection well, or source become fully effective and enforceable thirty (30) days after the date of the notification required in Subsection 206.01.c. (3-24-22)( )

c. As soon as possible after receiving notification from the Hearing Coordinator of the filing of a Petition for Review, the Department ~~must will~~ notify the Hearing Authority, ~~the~~ applicant, and ~~all~~ other parties of the uncontested (and severable) conditions of the final permit that will become fully effective, enforceable obligations of the permit ~~as of on~~ the date specified in Subsection 206.01.b., and the notice must comply with the requirements of Section 205 (~~Contested Permit Conditions~~). (3-24-22)( )

**02. Stays Based on Cross Effects.** ( )

a. The Department may grant a stay based on the grounds that an appeal to the Hearing Authority under Section 204 (~~Appeals Process~~) of one permit may result in changes to another Department-issued IPDES permit only when each of the permits involved has been appealed to the Department. (3-24-22)( )

b. No stay of an EPA-issued NPDES permit may be granted based on the staying of ~~any~~ Department-issued IPDES permit except at the discretion of the EPA Region 10 Administrator and only upon written request from the Department. (3-24-22)( )

**03. Permittee Responsibilities.** Any facility or activity holding an existing permit must: ( )

a. Comply with the conditions of ~~that~~ permit during any modification or revocation and reissuance proceeding under Section 201 (~~Modification, or Revocation and Reissuance of IPDES Permits~~); and (3-24-22)( )

b. To the extent conditions of ~~any~~ new permit are stayed ~~under this section~~, comply with the conditions of the existing permit ~~which~~ correspond to the stayed conditions, unless compliance with the existing conditions ~~would be~~ is technologically incompatible with compliance with other new permit conditions ~~of the new permit which that~~ have not been stayed. (3-24-22)( )

**207. -- 299. (RESERVED)**

**300. CONDITIONS APPLICABLE TO ALL PERMITS.**

The following conditions apply to all IPDES permits. Additional conditions ~~applicable to IPDES permits~~ are in Sections 301 (Permit Conditions for Specific Categories), 302 (Establishing Permit Provisions), and 40 CFR 122.42(e). All applicable conditions ~~applicable to IPDES permits~~ will be incorporated into ~~the IPDES permits either~~ expressly or by reference. If incorporated by reference, a specific citation must be given in the permit. (3-24-22)( )

**01. Duty to Comply.** The permittee must comply with all conditions of the permit. ( )

a. ~~Any p~~Permit noncompliance constitutes a violation of Idaho law, the ~~Clean Water Act~~ CWA, and is grounds for: (3-24-22)( )

i. Enforcement action; ( )

ii. Permit termination, revocation and reissuance, or modification; or ( )

iii. Denial of a permit renewal application. ( )

b. The permittee ~~shall must~~ comply with effluent standards or prohibitions established under ~~the Clean Water Act section~~ CWA Section 307(a) for toxic pollutants and with standards for sewage sludge use or disposal established under ~~the Clean Water Act section~~ CWA Section 405(d), Section 380 (~~Sewage Sludge~~) of these



rules, and IDAPA 58.01.16.650, “Wastewater Rules,” within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not ~~yet~~ been modified to incorporate the requirement. (3-24-22)( )

**02. Duty to Reapply.** If the permittee wishes to continue an activity regulated by the permit after the ~~permit’s~~ expiration date ~~of the permit~~, the permittee must apply for and obtain a new permit. If the permittee complies with the application requirements of Section 105 ~~(Application for an Individual IPDES Permit)~~, or the notice of intent requirements of Section 130 ~~(General Permits)~~ for a general permit, and a permit is not issued ~~prior to~~ ~~before~~ the permit’s expiration date, the permit ~~shall~~ ~~remains~~ in force as stipulated in Subsections 101.02 and 101.03. (3-24-22)( )

**03. Need to Halt or Reduce Activity.** In an enforcement action, a permittee may not assert as a defense that compliance with the conditions of the permit ~~would have made it necessary for~~ ~~requires~~ the permittee to halt or reduce the permitted activity. (3-24-22)( )

**04. Duty to Mitigate.** The permittee ~~shall~~ ~~must~~ take all reasonable steps to minimize or prevent ~~any~~ discharge or sludge use or disposal in violation of the permit ~~which~~ ~~that~~ has a reasonable likelihood of adversely affecting human health or the environment. (3-24-22)( )

**05. Proper Operation and Maintenance.** ~~The~~ ~~At all times~~, permittee ~~shall at all times~~ ~~must~~ properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) ~~which~~ ~~that~~ are installed or used by the permittee to achieve compliance with the conditions of the permit. (3-24-22)( )

**a.** Proper operation and maintenance ~~also~~ includes adequate laboratory controls and appropriate quality assurance procedures. (3-24-22)( )

**b.** This provision requires ~~the operation of~~ ~~operating~~ back-up or auxiliary facilities or similar systems, ~~which are~~ installed by a permittee, only when ~~the operation is necessary~~ ~~needed~~ to achieve compliance with the conditions of the permit or ~~are~~ required by IDAPA 58.01.16 “Wastewater Rules.” (3-24-22)( )

**06. Permit Actions.** The permit may be modified, revoked and reissued, or terminated for cause. The ~~permittee~~ filing ~~of~~ a request ~~by the permittee~~ for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. (3-24-22)( )

**07. Property Rights.** The permit does not convey any property rights of any sort; or ~~any~~ exclusive privilege. (3-24-22)( )

**08. Duty to Provide Information.** The permittee ~~shall~~ ~~must~~ furnish ~~to the Department~~ ~~information~~, within a reasonable time, ~~any information which~~ ~~that~~ the Department ~~may~~ requests to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The permittee ~~shall also~~ ~~must~~ furnish ~~to the Department~~ upon ~~Department~~ request, copies of records required ~~to be kept~~ by the permit. (3-24-22)( )

**09. Inspection and Entry.** The permittee ~~shall~~ ~~must~~ provide the Department’s inspectors, or authorized representatives, including authorized contractors acting as representatives of the Department, upon ~~presentation of~~ ~~presenting~~ credentials ~~and other documents as may be~~ required by law, access to: (3-24-22)( )

**a.** Enter ~~upon~~ the permittee's premises where a regulated facility or activity is located or conducted, or where records ~~must be~~ ~~are~~ kept under the ~~permit~~ conditions ~~of the permit~~; (3-24-22)( )

**b.** ~~Any~~ ~~r~~Records that must be kept under the ~~permit~~ conditions ~~of the permit~~ and, at reasonable times, to copy ~~such~~ ~~the~~ records; (3-24-22)( )

**c.** Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and ( )

**d.** Sample or monitor at reasonable times, ~~for the purposes of assuring~~ ~~to ensure~~ permit compliance or

as otherwise authorized by the ~~Clean Water Act CWA~~, any substances or parameters at any location. (3-24-22)( )

**10. Monitoring and Records.** A permittee must comply with the following ~~monitoring and recordkeeping conditions~~: (3-24-22)( )

a. Samples and measurements ~~taken for the purpose of monitoring shall be~~ must representative of the monitored activity. (3-24-22)( )

b. ~~The p~~Permittee ~~shall~~ must retain ~~the following records~~: (3-24-22)( )

i. ~~All m~~Monitoring information, ~~for a period of~~ at least three (3) years from the date of the sample, measurement, report or application. This ~~period~~ may be extended by request of the Department at any time; and (3-24-22)( )

ii. ~~The p~~ermittee's Records of sewage sludge use and disposal activities ~~shall be retained~~ for a period ~~of~~ at least five (5) years or longer as required by 40 CFR Part 503. (3-24-22)( )

c. Records of monitoring information ~~shall~~ must include: (3-24-22)( )

i. ~~All e~~Calibration and maintenance records; (3-24-22)( )

ii. ~~All e~~Original strip chart recordings for continuous monitoring instrumentation or other forms of data approved by the Department; (3-24-22)( )

iii. Copies of ~~all~~ reports required by the permit; (3-24-22)( )

iv. Records of all data used to complete the application or notice of intent for the permit; ( )

v. ~~The d~~Date, exact place, and time of sampling or measurements; (3-24-22)( )

vi. ~~The n~~Names of ~~any~~ individual(s) who performed the sampling or measurements; (3-24-22)( )

vii. ~~The date(s) any~~Dates analyses were performed; (3-24-22)( )

viii. ~~The n~~Names of any individual(s) who performed the analyses; (3-24-22)( )

ix. ~~The a~~Analytical techniques or methods used; and (3-24-22)( )

x. ~~The r~~Results of the analysis. (3-24-22)( )

d. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless another test method is required by 40 CFR Parts 401 through 471 or ~~Part~~ 501 through 503. (3-24-22)( )

**11. Signatory Requirements.** ~~All a~~Applications, reports, or information submitted to the Department ~~shall~~ must be signed and certified in accordance with Section 090 (~~Signature Requirements~~) and ~~must include penalty provisions pursuant to Section 500 (Enforcement)~~. (3-24-22)( )

**12. Reporting Requirements.** ( )

a. The permittee must give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility if: ( )

i. The alteration or addition to a permitted facility ~~may~~ meets one (1) of the criteria for determining whether a facility is a new source as defined in Section 120 (~~New Sources and New Discharges~~) and 010 (~~Definitions~~); (3-24-22)( )

ii. The alteration or addition ~~could~~ may significantly change the nature or increase the quantity of

pollutants discharged. This notification applies to pollutants ~~which are not~~ subject ~~neither~~ to effluent limitations in the permit, ~~n~~ or to notification requirements under Subsection 301.01.a.; or (3-24-22)( )

iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and ~~such the~~ alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites: (3-24-22)( )

(1) Not reported during the permit application process, or ( )

(2) Not reported ~~pursuant to~~ under an approved land application or sludge disposal plan. (3-24-22)( )

b. The permittee must give advance notice to the Department of ~~any~~ planned changes in the permitted facility or activity ~~which that~~ may result in noncompliance with permit requirements. (3-24-22)( )

c. The permit is not transferable to any person except after notice to the Department. The Department may modify or revoke and reissue a permit to change the name of the permittee and incorporate ~~such~~ other requirements ~~as may be~~ necessary under Section 202 (~~Transfer of IPDES Permits~~). (3-24-22)( )

d. Monitoring results must be reported at the intervals specified in the permit and meet the following requirements: ( )

i. Monitoring results will be reported on a Discharge Monitoring Report (DMR) or forms (~~which~~ may be electronic) provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices. ~~All r~~Reports and forms ~~submitted in compliance with this section~~ must be submitted electronically by the permittee to the Department ~~in compliance to comply~~ with this section and 40 CFR Part 127 unless waived ~~pursuant to under~~ 40 CFR 127.15. 40 CFR Part 127 ~~is not intended to undo~~ does not eliminate existing requirements for electronic reporting. ~~Prior to this date, and i~~Independent of 40 CFR Part 127, permittees may be required to report electronically if specified by a particular permit. (3-24-22)( )

ii. If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream specified in the permit or under 40 CFR Parts 401 through 471 or ~~Part~~ 501 through ~~Part~~ 503, the results ~~of such monitoring will must~~ be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department. (3-24-22)( )

iii. Calculations for all limitations ~~which that~~ require averaging of measurements will utilize an arithmetic mean unless otherwise specified by the Department in the permit. (3-24-22)( )

e. A permittee must submit reports of compliance or noncompliance with, or ~~any~~ progress reports on, interim and final requirements contained in ~~any the~~ compliance schedule ~~of the permit~~ no later than fourteen (14) days following each schedule date of each requirement. ~~As of December 21, 2020, all r~~Reports related to combined sewer overflows, sanitary sewer overflows, or bypass events ~~submitted in compliance with this section~~ must be submitted electronically by the permittee to the Department in compliance with this section and 40 CFR Part 127 unless waived ~~pursuant to under~~ 40 CFR 127.15. 40 CFR Part 127 ~~is not intended to undo~~ does not eliminate existing requirements for electronic reporting. ~~Prior to this date, and i~~Independent of 40 CFR Part 127, permittees may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit. The Director may also require permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (3-24-22)( )

f. The permittee must report to the Department any noncompliance ~~which that~~ may endanger health or the environment as follows: (3-24-22)( )

i. Within twenty-four (24) hours from the time the permittee becomes aware of the circumstances, provide any information orally; ( )

ii. Within five (5) days from the time the permittee becomes aware of the circumstances, provide a written submission that contains a description of: ( )

- (1) ~~The n~~Noncompliance and its cause; (3-24-22)( )
- (2) ~~The p~~Period of noncompliance, including exact dates and times; (3-24-22)( )
- (3) If the noncompliance has not been corrected, the anticipated time it is expected to continue; and ( )
- (4) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; ( )

(5) For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described in Subsections 300.12.f.ii(1) through (4), ~~as well as the~~ type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combine sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. (3-24-22)( )

(6) ~~As of December 21, 2020, all r~~Reports related to combined sewer overflows, sanitary sewer overflows, or bypass events ~~submitted in compliance with this section~~ must be submitted electronically by the permittee to the Department in compliance with this section and 40 CFR Part 127 unless waived ~~pursuant to under~~ 40 CFR 127.15. 40 CFR Part 127 ~~is not intended to undo~~ does not eliminate existing requirements for electronic reporting. ~~Prior to this date, and i~~Independent of 40 CFR Part 127, permittees may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit. The Director may also require permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (3-24-22)( )

iii. The following information must be reported within twenty-four (24) hours: ( )

- (1) ~~Any u~~Unanticipated bypass ~~which that~~ exceeds ~~any~~ effluent limitations in the permit (see Subsection 300.07, Property Rights); (3-24-22)( )
- (2) ~~Any u~~Upset ~~which that~~ exceeds ~~any~~ effluent limitations in the permit; and (3-24-22)( )
- (3) Violation of a maximum daily discharge limitation for ~~any of~~ the pollutants listed by the Department in the permit to be reported within twenty-four (24) hours (~~see~~ Subsection 302.09, Twenty-Four Hour Reporting); and (3-24-22)( )

iv. The Department may waive the written report on a case-by-case basis ~~for reports~~ under Subsection 300.12.f.iii. if the oral report has been received within twenty-four (24) hours. (3-24-22)( )

g. The permittee must report ~~all~~ instances of noncompliance not reported under Subsections 300.12.d., e., and f., ~~at the time when the~~ monitoring reports are submitted. The reports of noncompliance must contain the information listed in Subsection 300.12.f. ~~As of December 21, 2020, all r~~Reports related to combined sewer overflows, sanitary sewer overflows, or bypass events ~~submitted in compliance with this section~~ must be submitted electronically by the permittee to the Department in compliance with this section and 40 CFR Part 127 unless waived ~~pursuant to under~~ 40 CFR 127.15. 40 CFR Part 127 ~~is not intended to undo~~ does not eliminate existing requirements for electronic reporting. ~~Prior to this date, and i~~Independent of 40 CFR Part 127, permittees may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit. The Director may also require permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (3-24-22)( )

h. Where ~~n~~ the permittee becomes aware that it failed to submit ~~any~~ relevant facts in a permit

application, or submitted incorrect information in a permit application or in any report to the Department, it must promptly submit ~~such the~~ facts or correct information. (3-24-22)( )

**13. Bypass Terms and Conditions.** ( )

**a.** Bypass, as defined in Section 010-(Definitions), is prohibited, and the Department may take enforcement action against a permittee for bypass, unless: (3-24-22)( )

**i.** The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; ( )

**ii.** ~~There were n~~No feasible alternatives to the bypass existed, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if under reasonable judgment, adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass ~~which occurred~~ from occurring during normal periods of equipment downtime or preventive maintenance; and (3-24-22)( )

**iii.** The permittee submitted a notice of a bypass to the Department in accordance with Subsections 300.13.c. and d. ~~As of December 21, 2020, all n~~Notices ~~submitted in compliance with this section~~ must be submitted electronically by the permittee to the Department in compliance with this section and 40 CFR Part 127 unless waived pursuant to under 40 CFR 127.15. 40 CFR Part 127 ~~is not intended to undo~~ does not eliminate existing requirements for electronic reporting. ~~Prior to this date, and i~~Independent of 40 CFR Part 127, permittees may be required to report electronically if specified by a particular permit. (3-24-22)( )

**b.** The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines ~~that~~ it will meet the three (3) conditions listed in Subsection 300.13.a. (3-24-22)( )

**c.** If the permittee knows in advance of the need for a bypass, it ~~shall~~ must submit ~~prior~~ notice to the Department, if possible, at least ten (10) days before the date of the bypass. (3-24-22)( )

**d.** The permittee ~~shall~~ must submit notice of an unanticipated bypass as required in Subsection 300.12.f. (24-hour notice). (3-24-22)( )

**e.** Bypasses not exceeding limitations, are allowed to occur, and are not subject to Subsection 300.13.a. or 300.13.d. if: (3-24-22)( )

**i.** The bypass does not cause effluent limitations to be exceeded, and (3-24-22)( )

**ii.** Only if it also is for essential maintenance to asensure efficient operation. (3-24-22)( )

**14. Upset Terms and Conditions.** ( )

**a.** In any enforcement action for noncompliance with technology-based permit effluent limitations, a permittee may claim upset, as defined in Section 010-(Definitions), as an affirmative defense. A permittee seeking to establish the occurrence of an upset has the burden of proof. (3-24-22)( )

**b.** Any determination made in administrative review of a claim that noncompliance was caused by upset, before an action for noncompliance is commenced, is not final administrative action subject to judicial review. ( )

**c.** The following conditions are necessary for a permittee to demonstrate that an upset occurred. A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that: ( )

**i.** An upset occurred and ~~that~~ the permittee can identify ~~the~~ cause(s) of the upset; (3-24-22)( )

**ii.** The permitted facility was properly operated at the time ~~being properly operated;~~ (3-24-22)( )

iii. The permittee submitted twenty-four (24)-hour notice of the upset as required Subsection 300.12.f.iii(2); and ( )

iv. The permittee complied with ~~any~~ remedial measures required under Subsection 300.04. (3-24-22)( )

**15. Penalties and Fines.** Permits ~~must~~ will include penalty and fine requirements ~~pursuant to~~ under Section 500-~~(Enforcement)~~. (3-24-22)( )

**301. PERMIT CONDITIONS FOR SPECIFIC CATEGORIES.**

In addition to ~~conditions set forth in~~ Section 300-~~(Conditions Applicable to all Permits)~~, conditions identified in this section apply to all IPDES permits within the categories specified below. (3-24-22)( )

**01. Existing Manufacturing, Commercial, Mining, and Silvicultural Dischargers.** In addition to the reporting requirements under Subsection 300.12, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Department as soon as they know or have reason to believe: ( )

a. ~~That a~~ Any activity has occurred or will occur ~~which would that~~ results ~~in the a~~ discharge, on a routine or frequent basis, of any toxic pollutant ~~which that~~ is not limited in the permit if ~~that~~ discharge will exceed the highest of the following notification levels: (3-24-22)( )

- i. One hundred micrograms per liter (100 µg/L); ( )
- ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; ( )
- iii. Five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and ( )
- iv. One milligram per liter (1 mg/L) for antimony; ( )
- v. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Subsection 105.07; or ( )
- vi. The level established by the Department in accordance with Subsection 302.08; and ( )

b. ~~That a~~ Any activity has occurred or will occur ~~which would that~~ results in any discharge, on a non-routine or infrequent basis, of a toxic pollutant ~~which that~~ is not limited in the permit if ~~that~~ discharge will exceed the highest of the following notification levels: (3-24-22)( )

- i. Five hundred micrograms per liter (500 µg/L); ( )
- ii. One milligram per liter (1 mg/L) for antimony; ( )
- iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Subsection 105.07; or ( )
- iv. The level established by the Department in accordance with Subsection 302.08. ( )

**02. Publicly Owned Treatment Works.** ~~All~~ POTWs must provide adequate notice to the Department of ~~the following~~: ( )

a. ~~Any n~~ New introduction of pollutants into the POTW from an indirect discharger ~~which would be~~ subject to ~~the Clean Water Act section~~ CWA Section 301 or 306 if it were directly discharging those pollutants; and (3-24-22)( )

b. ~~Any s~~ Substantial change in the volume or character of pollutants ~~being~~ introduced into ~~that~~ ( )



POTW by a source introducing pollutants into the POTW ~~at the time of issuance of the~~ during permit issuance. For purposes of this subsection, adequate notice ~~shall~~ **must** include ~~information on:~~ (3-24-22)( )

- i. ~~The~~ **Q**uality and quantity of effluent introduced into the POTW, and (3-24-22)( )
- ii. ~~Any~~ **A**nticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (3-24-22)( )

**03. Municipal Separate Storm Sewer Systems (MS4s).** The operator of a large or medium ~~municipal separate storm sewer system MS4~~ or an ~~municipal separate storm sewer that has been~~ MS4 designated by the Department under 40 CFR 122.26(a)(1)(v) must submit an annual report by the anniversary of the date of the issuance of the permit ~~for such system. As of December 21, 2020, a~~ All reports ~~submitted in compliance with this section~~ must be submitted electronically by the owner, operator, or the duly authorized representative of the MS4 to the Department in compliance with this section and 40 CFR Part 127 unless waived ~~pursuant to~~ under 40 CFR 127.15. 40 CFR Part 127 ~~is not intended to undo~~ **does not eliminate** existing requirements for electronic reporting. ~~Prior to this date, and i~~ Independent of 40 CFR Part 127, the owner, operator, or the duly authorized representative of the MS4 may be required to report electronically if specified by a particular permit. The report ~~shall~~ **must** include: (3-24-22)( )

- a. ~~The~~ **S**tatus of implementing the components of the storm water management program ~~that are~~ established as permit conditions; (3-24-22)( )
- b. Proposed changes to the storm water management programs ~~that are~~ established as permit conditions. ~~Such~~ **p**roposed changes ~~shall~~ **must** be consistent with Subsection 105.18.b.iii.; (3-24-22)( )
- c. Revisions, if necessary, to the assessment of controls and the fiscal analysis reported in the permit application under Subsection 105.18.b.iv. and 105.18.b.v.; ( )
- d. ~~A~~ **s**Summary of data, including monitoring data, ~~that is~~ accumulated throughout the reporting year; (3-24-22)( )
- e. Annual expenditures and budget for the year following each annual report; ( )
- f. ~~A~~ **s**Summary describing the number and nature of enforcement actions, inspections, and public education programs; and (3-24-22)( )
- g. Identification of water quality improvements or degradation. ( )

**04. Storm Water Dischargers.** The initial permits for discharges composed entirely of storm water issued ~~pursuant to~~ under 40 CFR 122.26(e)(7) ~~shall~~ require compliance with the conditions of the permit as expeditiously as practicable but ~~in no event~~ later than three (3) years after the date of ~~permi-~~ **t** issuance ~~of the permit.~~ (3-24-22)( )

**05. Concentrated Animal Feeding Operations (CAFOs).** Any applicable permit must include provisions ~~pursuant to~~ under 40 CFR 122.42(e). (3-24-22)( )

### 302. ESTABLISHING PERMIT PROVISIONS.

The Department will establish conditions, as required on a case-by-case basis, to provide for and ensure compliance with ~~all~~ applicable requirements of the ~~Clean Water Act CWA~~ and state rules, including conditions under Section 101 (~~duration of permits~~), Section 305 (~~compliance schedules~~), Section 304 (~~monitoring~~), and electronic reporting requirements identified under 40 CFR Part 127. An IPDES permit ~~must~~ **will** include conditions meeting the following requirements, when applicable, ~~in addition to other applicable sections of these rules.~~ (3-24-22)( )

**01. Incorporation.** ~~All~~ **p**ermit conditions ~~shall~~ **will** be incorporated ~~either~~ expressly or by reference. If incorporated by reference, a specific citation to the applicable regulations or requirements ~~must~~ **will** be given in the permit. (3-24-22)( )

**02. Applicable Requirements.** The Department ~~shall will~~ establish conditions, as required on a case-by-case basis, to provide for and ~~as~~ ensure compliance with ~~all~~ applicable requirements of the ~~Clean Water Act CWA~~ and Section 101 (~~Duration~~), and Subsections 304.01, and 305.01 ~~of these rules~~. Applicable requirements include:  
(3-24-22)( )

a. ~~Applicable requirements include a~~ All statutory or regulatory requirements ~~which that~~ take effect ~~prior to before~~ final administrative disposition of the permit.  
(3-24-22)( )

b. ~~Applicable requirements also include a~~ Any requirement ~~which that~~ takes effect ~~prior to before~~ the modification or revocation and reissuance of a permit under Section 201 ~~(Modification, or Revocation and Reissuance of IPDES Permits)~~.  
(3-24-22)( )

c. New or reissued permits, and to the extent allowed under Section 201 ~~(Modification, or Revocation and Reissuance of IPDES Permits)~~ for modified or revoked and reissued permits, ~~shall will~~ incorporate each of the applicable requirements referenced in Sections 200 (Renewal of IPDES Permits), and 302 (Establishing Permit Provisions) through 304 (Monitoring and Reporting Requirements).  
(3-24-22)( )

**03. Technology-Based Effluent Limitations and Standards.** (3-24-22)( )

a. Technology-based effluent limitations and standards shall be based on: (3-24-22)( )

i. Effluent limitation and standards promulgated under ~~the Clean Water Act section~~ CWA Section 301; (3-24-22)( )

ii. New source performance standards promulgated under ~~the Clean Water Act section~~ CWA Section 306; (3-24-22)( )

iii. Effluent limitation determined on a case-by-case basis under ~~the Clean Water Act section~~ CWA Section 402(a)(1); or (3-24-22)( )

iv. ~~A~~ Combination of the three (3), in accordance with 40 CFR 125.3. (3-24-22)( )

b. For new sources or new dischargers, these technology-based limitations and standards are subject to the provisions of 40 CFR 122.29(d). (3-24-22)( )

c. The Department may authorize a discharger, subject to technology-based ~~effluent limitations guidelines~~ ELGs and standards in an IPDES permit, to forgo sampling of a pollutant found at 40 CFR Parts 401 through 471, if the discharger has demonstrated through sampling and other technical factors that the pollutant is not present in the discharge or is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger.  
(3-24-22)( )

i. ~~This~~ waiver is good only for the term of the permit and is not available during the term of the first NPDES or IPDES permit issued to a discharger. (3-24-22)( )

ii. ~~Any~~ request for ~~this~~ waiver must be submitted when applying for a reissued permit or modification of a reissued permit. The request must demonstrate through sampling or other technical information, including information generated during an earlier permit term that the pollutant is not present in the discharge or is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger.  
(3-24-22)( )

iii. ~~Any grant of the~~ monitoring waiver approval must will be included in the permit as an express permit condition and the reasons supporting the ~~grant approval must will~~ be documented in the permit's fact sheet.  
(3-24-22)( )

iv. This provision does not supersede certification processes and requirements already established in existing ~~effluent limitations guidelines~~ ELGs and standards. (3-24-22)( )



04. Other Effluent Limitations and Standards. (3-24-22)( )

a. If ~~any applicable~~ toxic effluent limitations and standards under ~~the Clean Water Act sections~~ CWA Section 301, 302, 303, 307, 318, and 405 or prohibition (including ~~any~~ schedules of compliance specified in ~~such~~ effluent standard or prohibition) ~~is are~~ promulgated under ~~the Clean Water Act section~~ CWA Section 307(a) for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in the permit, the Department ~~shall will~~ initiate proceedings under Section 201 (~~Modification, or Revocation and Reissuance of IPDES Permits~~) to modify or revoke and reissue the permit to conform to the more stringent toxic effluent standard or prohibition (~~see also~~ Subsection 300.01). (3-24-22)( )

b. Standards for sewage sludge use or disposal under ~~the Clean Water Act section~~ CWA Section 405(d), Section 380 (~~Sewage Sludge~~) of these rules, and IDAPA 58.01.16.650, "Wastewater Rules," ~~shall will~~ be applied, unless those standards have been included in a permit issued under the appropriate provisions of: (3-24-22)( )

- i. Subtitle C of the Solid Waste Disposal Act; ( )
- ii. Part C of Safe Drinking Water Act; ( )
- iii. The Clean Air Act; or ( )
- iv. State permit programs approved by the EPA. ( )

c. When ~~there are~~ no applicable standards exist for sewage sludge use or disposal, the permit may include requirements developed on a case-by-case basis to protect public health and the environment from any adverse effects ~~which that~~ may occur from toxic pollutants in sewage sludge. (3-24-22)( )

d. If ~~any~~ applicable standard for sewage sludge use or disposal is promulgated under ~~the Clean Water Act section~~ CWA Section 405(d), Section 380 (Sewage Sludge) of these rules, and IDAPA 58.01.16.650, "Wastewater Rules," and that standard is more stringent than ~~any~~ limitation on the pollutant or practice in the permit, the Department may initiate proceedings under these regulations to modify or revoke and reissue the permit, ~~in compliance to comply~~ with Section 201 (~~Modification, or Revocation and Reissuance of IPDES Permits~~), to conform to the standard for sewage sludge use or disposal. (3-24-22)( )

e. Include ~~any~~ requirements applicable to cooling water intake structures under ~~the Clean Water Act section~~ CWA Section 316(b), in accordance with 40 CFR 125.80 through 125.99. (3-24-22)( )

05. Reopener Clause. For ~~any~~ permit issued to a TWTDS (including sludge-only facilities), the Department ~~shall will~~ include a reopener clause to incorporate ~~any~~ applicable standards for sewage sludge use or disposal promulgated under ~~the Clean Water Act section~~ CWA Section 405(d). The Department may promptly modify or revoke and reissue ~~any~~ permit containing the reopener clause required by this subsection if the standard for sewage sludge use or disposal: (3-24-22)( )

a. Is more stringent than ~~any the~~ requirements for sludge use or disposal in the permit, or (3-24-22)( )

b. Controls pollutant or practice not limited in the permit. ( )

06. Water Quality Standards and Requirements. ~~Any~~ R requirements in addition to or more stringent than promulgated ~~effluent limitations guidelines ELGs~~ or standards under ~~the Clean Water Act sections~~ CWA Sections 301, 304, 306, 307, 318 and 405 ~~shall will~~ be included in a permit if they are necessary to: (3-24-22)( )

a. Achieve water quality standards established in IDAPA 58.01.02, "Water Quality Standards," including narrative criteria for water quality and antidegradation provisions. ( )

i. Effluent limitations in a permit ~~must will~~ control all pollutants or pollutant parameters (either

conventional, nonconventional, or toxic pollutants) ~~which~~ the Department determines are or may be discharged at a level ~~which that~~ will cause, have the reasonable potential to cause, or contribute to an excursion above ~~any~~ water quality standards, including narrative criteria for water quality. (3-24-22)( )

ii. When the Department determines whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a water quality standard, the Department ~~shall will~~ use procedures ~~which to~~ account for: (3-24-22)( )

(1) Existing controls on point and nonpoint sources of pollution; ( )

(2) ~~The v~~Variability of the pollutant or pollutant parameter in the effluent; (3-24-22)( )

(3) ~~The s~~Sensitivity of the species to toxicity testing (when evaluating ~~whole effluent toxicity WET~~); and where appropriate, (3-24-22)( )

(4) ~~The d~~Dilution of the effluent in the receiving water; (3-24-22)( )

iii. When the Department determines, using the procedures in Subsection 302.06.a.ii., that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the allowable ambient concentration of a state numeric criteria within a state water quality standard for an individual pollutant, the permit must contain effluent limits for that pollutant. ( )

iv. When the Department determines, using the procedures in Subsection 302.06.a.ii., that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the numeric criterion for ~~whole effluent toxicity WET~~, the permit must contain effluent limits for ~~whole effluent toxicity WET~~. (3-24-22)( )

v. Except as provided in this subsection, when the Department determines, using the procedures in Subsection 302.06.a.ii., toxicity testing data, or other information, that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative criterion within an applicable water quality standard, the permit must contain effluent limits for ~~whole effluent toxicity WET~~. Limits on ~~whole effluent toxicity WET~~ are not necessary where the Department demonstrates in the ~~fact sheet of the~~ IPDES permit ~~fact sheet~~, using the procedures in Subsection 302.06.a.ii., that chemical-specific limits for the effluent are sufficient to attain and maintain applicable numeric and narrative state water quality standards. (3-24-22)( )

vi. When the state has not established a numeric water quality criterion for a specific chemical pollutant that is present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion above a narrative criterion within an applicable state water quality standard, the Department ~~must will~~ establish effluent limits using one (1) or more of the following options: (3-24-22)( )

(1) ~~Establish effluent limits using a~~ calculated numeric water quality target or concentration value for the pollutant ~~which that~~ the Department demonstrates will attain and maintain applicable narrative water quality criteria and will fully protect the designated use. ~~Such a~~ target or concentration value may be derived: (3-24-22)( )

(a) Using a proposed criterion, or an explicit policy or regulation interpreting its narrative water quality criterion, and ( )

(b) Supplemented with other relevant information ~~which that~~ may include EPA's ~~current~~ Water Quality Standards Handbook, ~~as currently revised~~, risk assessment data, exposure data, information about the pollutant from the Food and Drug Administration (FDA), and current EPA criteria documents; (3-24-22)( )

(2) ~~Establish effluent limits on a case by case basis, using~~ EPA's water quality ~~recommended~~ criteria, published under ~~the Clean Water Act section~~ ~~CWA Section~~ 304(a), supplemented where necessary by other relevant information; or (3-24-22)( )

(3) ~~Establish effluent limitations on an i~~Indicator parameter for the pollutant of concern, provided ~~the~~:

(3-24-22)( )

(a) The ~~p~~Permit identifies ~~which the~~ pollutants ~~are~~ intended to be controlled by ~~the use of~~ using the effluent limitation; (3-24-22)( )

(b) The ~~r~~Required fact sheet ~~sets forth~~ states the basis for the limit, including a finding that compliance with the effluent limit on the indicator parameter will result in controls on the pollutant of concern ~~which that~~ are sufficient to attain and maintain applicable water quality standards; (3-24-22)( )

(c) The ~~p~~Permit requires all effluent and ambient monitoring necessary to show that during the term of the permit the limit on the indicator parameter continues to attain and maintain applicable water quality standards; and (3-24-22)( )

(d) The ~~p~~Permit contains a reopener clause allowing the Department to modify or revoke and reissue the permit if the limits on the indicator parameter no longer attain and maintain applicable water quality standards. (3-24-22)( )

vii. When developing water quality-based effluent limits under this subsection, the Department ~~shall~~ will ensure that the; (3-24-22)( )

(1) The ~~l~~Level of water quality to be achieved by limits on point sources established under this subsection is derived from, and complies with ~~all~~ applicable water quality standards; and (3-24-22)( )

(2) Effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of ~~any~~ available wasteload allocations for the discharge prepared by the state and approved by EPA ~~pursuant to~~ under 40 CFR 130.7; (3-24-22)( )

b. Attain or maintain a specified water quality through water quality related effluent limits established under ~~the Clean Water Act section~~ CWA Section 302; (3-24-22)( )

c. Conform to applicable water quality requirements under ~~the Clean Water Act section~~ CWA Section 402(b)(5) when the discharge affects a state other than Idaho; (3-24-22)( )

d. Incorporate ~~any~~ more stringent limitations, treatment standards, or schedules of compliance requirements established under federal or state law or regulations in accordance with ~~the Clean Water Act section~~ CWA Section 301(b)(1)(C); (3-24-22)( )

e. Ensure consistency with the requirements of a Water Quality Management plan approved by EPA under ~~the Clean Water Act section~~ CWA Section 208(b); or (3-24-22)( )

f. Incorporate alternative effluent limitations or standards where ~~re~~ warranted by fundamentally different factors, under 40 CFR 125.30 through 125.32. (3-24-22)( )

**07. Technology-Based Controls for Toxic Pollutants.** ( )

a. In determining whether to include limitations on toxic pollutants in a permit under this section, the Department will establish limits in accordance with Subsections 302.03, 302.04, and 302.06 and in a notification under Section 301 (~~Permit Conditions for Specific Categories~~), or other relevant information. The fact sheet must explain the development of limitations included in the permit. (3-24-22)( )

b. An IPDES permit ~~must will~~ include limitations to control all toxic pollutants ~~which~~ the Department determines (based on information reported in a permit application under Subsection 105.07 and 301.01.a., or on other information) are or may be discharged at a level greater than the level ~~which that~~ can be achieved by the technology-based treatment requirements appropriate to the permittee under 40 CFR 125.3(c). (3-24-22)( )

c. The requirement that the limitations control ~~the~~ pollutants meeting the criteria of Subsection 302.07.b. will be satisfied by: (3-24-22)( )

- i. Limitations on those toxic pollutants; or (3-24-22)( )
- ii. Limitations on other pollutants ~~which that~~, in the judgment of the Department, will ~~provide treatment of~~ the pollutants under Subsection 302.07.b. to the levels required by 40 CFR 125.3(c). (3-24-22)( )

**08. Notification Level.** An IPDES permit ~~must will include a condition~~ requiring a notification level ~~which that~~ exceeds the notification level of Subsection 301.01.a., upon a petition from the permittee or on the Department's initiative. This new notification level may not exceed the level ~~which that~~ can be achieved by the technology-based treatment requirements appropriate to the permittee under 40 CFR 125.3(c). (3-24-22)( )

**09. Twenty-Four (24) Hour Reporting.** A permit will list pollutants ~~for which the a~~ permittee is required to report violations of maximum daily discharge limitations within twenty-four (24) hours under Subsection 300.12.f.iii(3), including ~~any~~ toxic pollutants or hazardous substances, or ~~any~~ pollutants ~~specifically~~ identified as the method to control a toxic pollutant or hazardous substance. (3-24-22)( )

**10. Permit Durations.** Permits must include permit durations ~~pursuant to~~ under Subsection 101.01. (3-24-22)( )

**11. Monitoring Requirements.** Permits ~~must will~~ include monitoring requirements ~~pursuant to~~ under Section 304 (~~Monitoring and Reporting Requirements~~). (3-24-22)( )

**12. Pretreatment Program for POTWs.** A POTW permit ~~must will~~ include pretreatment program conditions requiring the permittee to: ( )

a. Identify, ~~in terms of the~~ character and volume of pollutants, ~~any of~~ Significant Industrial Users discharging into the POTW subject to Pretreatment Standards under ~~the Clean Water Act section~~ CWA Section 307(b) and 40 CFR Part 403; (3-24-22)( )

b. Submit a local program when required by ~~and in accordance with~~ 40 CFR Part 403, to ensure compliance with pretreatment standards to the extent applicable under ~~the Clean Water Act section~~ CWA Section 307(b):

i. ~~The~~ Incorporate the local program ~~shall be incorporated~~ into the permit as described in 40 CFR Part 403, and (3-24-22)( )

ii. ~~The program must require all~~ Require indirect dischargers to the POTW to comply with the reporting requirements of 40 CFR Part 403; (3-24-22)( )

c. Provide written technical evaluation of the need to revise local limits under 40 CFR 403.5(c)(1), following permit issuance or reissuance; and ( )

d. POTWs ~~which that~~ are sludge-only facilities, ~~are required to~~ must develop a pretreatment program under 40 CFR Part 403, when the Department determines that a pretreatment program is necessary to ~~as~~ ensure compliance with ~~the Clean Water Act section~~ CWA Section 405(d). (3-24-22)( )

**13. Best Management Practices.** An IPDES permit ~~must will~~ include ~~best management practices~~ (BMPs) to control or abate the discharge of pollutants when: (3-24-22)( )

a. Authorized under ~~the Clean Water Act section~~ CWA Section 304(e) ~~for the to~~ control of toxic pollutants and hazardous substances from ancillary industrial activities; (3-24-22)( )

b. Authorized under ~~the Clean Water Act section~~ CWA Section 402(p) ~~for the to~~ control of storm water discharges; (3-24-22)( )

c. Numeric effluent limitations are infeasible; or (3-24-22)( )

d. ~~The p~~Practices are ~~reasonably~~ necessary to achieve effluent limitations and standards or to carry out the ~~purposes and intent of the Clean Water Act CWA.~~ (3-24-22)( )

14. **Reissued Permits.** When a permit is renewed or reissued, it ~~must will~~ include provisions ~~pursuant to under~~ Section 200 ~~(Renewal of IPDES Permits).~~ (3-24-22)( )

15. **Privately-Owned Treatment Works.** For a privately owned treatment works, ~~any~~ conditions expressly applicable to ~~any~~ users, as a limited co-permittee, ~~that~~ may be necessary in the permit issued to the treatment works to ensure compliance with applicable requirements under this section. (3-24-22)( )

a. Alternatively, the Department may issue separate permits to the treatment works and to its users; or may require a separate permit application from ~~any~~ user. (3-24-22)( )

b. The Department's decision to issue a permit with no conditions applicable to ~~any~~ users, to impose conditions on one (1) or more users, to issue separate permits, or to require separate applications, and the basis for that decision, ~~shall will~~ be stated in the fact sheet for the draft permit for the treatment works. (3-24-22)( )

16. **Grants.** An IPDES permit ~~must will~~ include ~~any~~ conditions imposed in grants made by the EPA to POTWs under ~~the Clean Water Act sections CWA Sections~~ 201 and 204, ~~which that~~ are reasonably necessary ~~for the to achievement of~~ effluent limitations under ~~the Clean Water Act section CWA Section~~ 301. (3-24-22)( )

17. **Sewage Sludge.** An IPDES permit ~~must will~~ include ~~any~~ requirements under ~~the Clean Water Act section CWA Section~~ 405 governing the disposal of sewage sludge from POTWs or ~~any~~ other TWTDS for ~~any use for which uses where~~ regulations have been established, ~~in accordance with any applicable regulations.~~ (3-24-22)( )

18. **Navigation.** An IPDES permit ~~must will~~ include ~~any~~ conditions ~~that~~ the Secretary of the Army considers necessary to ensure ~~that~~ navigation and anchorage will not be substantially impaired, in accordance with Subsection 103.04 and 109.02. (3-24-22)( )

19. **Qualifying State or Local Programs.** ( )

a. For storm water discharges associated with small construction activity disturbing one (1) acre or more, but less than five (5) acres as specified in 40 CFR 122.26(b)(15), the Department may include permit conditions that incorporate by reference qualifying state or local erosion and sediment control program requirements. Where a qualifying state or local program does not include one (1) or more of the elements in this subsection, then the Department must include those elements as conditions in the permit. ( )

b. A qualifying state or local erosion and sediment control program ~~is one that~~ includes ~~requirements for construction site operators to:~~ (3-24-22)( )

i. ~~Requirements for construction site operators to i~~Implement appropriate erosion and sediment control ~~best management practices BMPs;~~ (3-24-22)( )

ii. ~~Requirements for construction site operators to e~~Control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality; (3-24-22)( )

iii. ~~Requirements for construction site operators to d~~Develop and implement a storm water pollution prevention plan, ~~which must include~~ing: (3-24-22)( )

- (1) Site descriptions; ( )
- (2) Descriptions of appropriate control measures; ( )
- (3) Copies of approved state or local requirements; ( )
- (4) Maintenance procedures; ( )

- (5) Inspection procedures; ( )
- (6) Identification of non-storm water discharges; and ( )
- iv. Requirements to submit a site plan for review that incorporates consideration of potential water quality impacts. (3-24-22)( )

c. For storm water discharges from a construction activity disturbing five (5) acres or more, including activities that disturb less than five (5) acres but are part of a larger common plan of development or sale that will ultimately disturb five (5) acres or more, as specified in 40 CFR 122.26(b)(14)(x), the Department may include permit conditions that incorporate by reference qualifying state or local erosion and sediment control program requirements. A qualifying state or local erosion and sediment control program ~~is one that~~ includes the elements listed in Subsections 302.19.a. and b. and ~~any~~ additional requirements necessary to achieve the ~~applicable~~ technology-based standards of best available technology and best conventional technology based on the best professional judgment of the permit writer. (3-24-22)( )

### 303. CALCULATING PERMIT PROVISIONS.

01. **Outfalls and Discharge Points.** All ~~per~~ permit effluent limitations, standards and prohibitions ~~shall~~ will be established for each outfall or discharge point of the permitted facility, except as otherwise provided under Subsections 302.13, ~~(Best Management Practices,)~~ and ~~Subsection~~ 303.08, ~~(Internal Waste Streams,)~~. (3-24-22)( )

02. **Production-Based Limitations.** (3-24-22)( )

a. ~~In the case of~~ For POTWs, permit effluent limitations, standards, or prohibitions ~~shall~~ will be calculated based on design flow. (3-24-22)( )

b. Except ~~in the case of~~ for POTWs or as provided in Subsection 303.02.b.ii., calculation of ~~any~~ permit limitations, standards, or prohibitions ~~which are~~ based on production (or other measure of operation) ~~shall~~ will be based upon a reasonable measure of actual production of the facility. (3-24-22)( )

i. For new sources or new dischargers, actual production ~~shall~~ must be estimated using projected production. The time period of the measure of production ~~shall~~ must correspond to the time period of the calculated permit ~~limitations; for example, limit (e.g.,~~ monthly production ~~shall be~~ is used to calculate average monthly discharge limitations. (3-24-22)( )

ii. The Department may include a condition establishing alternate permit limitations, standards, or prohibitions based upon anticipated increased (not to exceed maximum production capability) or decreased production levels. (3-24-22)( )

iii. For the automotive manufacturing industry only, the Department ~~shall~~ will establish an alternate condition under ~~Subsection~~ 303.02.b.ii., if the applicant satisfactorily demonstrates to the Department, ~~at the time the~~ during application ~~is submitted~~ submittal, that: (3-24-22)( )

(1) ~~Its a~~ Actual production, as indicated in Subsections 303.02.b. and 303.02.b.i., ~~is~~ substantially below maximum production capability, and (3-24-22)( )

(2) ~~There is a~~ Reasonable potential ~~exists~~ for an increase above actual production during the duration of the permit. (3-24-22)( )

iv. If the Department establishes permit conditions under Subsection 303.02.b.ii.: ( )

(1) The permit ~~shall~~ will require the permittee to notify the Department at least two (2) business days ~~prior to a~~ before the month ~~in which~~ the permittee expects to operate at a level higher than the lowest production level identified in the permit. The notice ~~shall~~ must specify: (3-24-22)( )



(a) ~~The a~~Anticipated level; and the period ~~during which~~ the permittee expects to operate at the alternate level; and (3-24-22)( )

(b) If the notice covers more than one (1) month, ~~the notice shall~~ specify the reasons for the anticipated production level increase; and (3-24-22)( )

(c) New notice of discharge at alternate levels ~~is required to~~ must cover a period or production level not covered by a prior notice or, if during two (2) consecutive months otherwise covered by a notice, the production level at the permitted facility does not ~~in fact~~ meet the higher level designated in the notice; (3-24-22)( )

(2) The permittee ~~shall~~ must comply with the ~~limitations~~, standards, or prohibitions that correspond to the lowest level of production specified in the permit, unless the permittee has notified the Department under Subsection 303.02.b.ii., in which case the permittee ~~shall~~ must comply with the lower of the actual level of production during each month or the level specified in the notice; and (3-24-22)( )

(3) The permittee ~~shall~~ must submit, with the Discharge Monitoring Report, the level of production that ~~actually~~ occurred during each month and the ~~limitations~~, standards, or prohibitions applicable to that level of production. (3-24-22)( )

**03. Metals.** ~~All p~~Permit effluent ~~limitations~~, standards, or prohibitions for a metal ~~shall~~ will be expressed in terms of total recoverable metal as defined in 40 CFR Part 136, unless: (3-24-22)( )

a. An applicable effluent standard or ~~limitation~~ has been promulgated under the ~~Clean Water Act CWA~~ and specifies the ~~limitation~~ for the metal in the dissolved or valent or total form; (3-24-22)( )

b. In establishing permit ~~limitations~~ on a case-by-case basis under 40 CFR 125.3, ~~it is necessary to express specify~~ the ~~limitation~~ on the metal in the dissolved or valent or total form to carry out the provisions of the ~~Clean Water Act CWA~~; or (3-24-22)( )

c. ~~All a~~Approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium). (3-24-22)( )

**04. Continuous Discharges.** For continuous discharges, ~~all~~ permit effluent ~~limitations~~, standards, and prohibitions, including those necessary to achieve water quality standards, ~~shall~~ will, unless impracticable, ~~be~~ stated as: (3-24-22)( )

a. Maximum daily and average monthly discharge ~~limitations~~ for all dischargers other than POTWs; or (3-24-22)( )

b. Average weekly and average monthly discharge ~~limitations~~ for POTWs. (3-24-22)( )

**05. Noncontinuous Discharges.** Discharges ~~which that~~ are not continuous, as defined in Section 010 (~~Definitions~~), ~~shall be particularly~~ will be described and limited, considering the following factors, as appropriate: (3-24-22)( )

a. Frequency (~~for example~~ e.g., a batch discharge ~~shall~~ must not occur more than once every three (3) weeks); (3-24-22)( )

b. Total mass (~~for example~~ e.g., not to exceed one hundred (100) kilograms of zinc and two hundred (200) kilograms of chromium per batch discharge); (3-24-22)( )

c. Maximum rate of discharge of pollutants during the discharge (~~for example~~ e.g., not to exceed two (2) kilograms of zinc per minute); and (3-24-22)( )

d. Prohibition or ~~limitation~~ of specified pollutants by mass, concentration, or other appropriate measure (~~for example~~ e.g., ~~shall~~ must not contain at any time more than one-tenth (0.1) mg/L zinc or more than two

hundred fifty (250) grams (one-fourth (1/4) kilogram) of zinc in ~~any~~ discharge). (3-24-22)( )

**06. Mass Limitations.** (3-24-22)( )

a. ~~All~~ Pollutants limited in permits ~~shall~~ will have ~~limitations~~, standards, or prohibitions expressed in terms of mass except: (3-24-22)( )

i. pH, temperature, radiation, or other pollutants ~~which that~~ cannot ~~appropriately~~ be expressed by mass; (3-24-22)( )

ii. When applicable standards and ~~limitations~~ are expressed in ~~terms of~~ other units of measurement; or (3-24-22)( )

iii. If in establishing permit ~~limitations~~ on a case-by-case basis under 40 CFR 125.3, ~~limitations~~ expressed in ~~terms of~~ mass are infeasible because the mass of the pollutant discharged cannot be related to a measure of operation (~~for example e.g.~~, discharges of TSS from certain mining operations), and permit conditions ensure ~~that~~ dilution will not be used as a substitute for treatment. (3-24-22)( )

b. Pollutants limited ~~in terms of by~~ mass, may also be limited ~~in terms of by~~ other units of measurement, and the permit ~~shall~~ requires the permittee to comply with both ~~limitations~~. (3-24-22)( )

**07. Pollutant Credits for Intake Water.** ( )

a. The following definitions apply to ~~the consideration of~~ intake credits in determining reasonable potential and establishing technology ~~-based~~ and water quality ~~-~~ based effluent limits for IPDES permits. (3-24-22)( )

i. An intake pollutant is the amount of a pollutant ~~that is~~ present in waters of the United States (including ground water as provided in Subsection 303.07.a.iv.) ~~at the time when~~ water is removed from the same body of water by the discharger or other facility supplying the discharger with intake water. (3-24-22)( )

ii. ~~An~~ To be eligible for intake credit, an intake pollutant must be from the same body of water as the discharge ~~in order to be eligible for an intake credit. An intake pollutant is considered to be from the same body of water as the discharge if, and~~ the Department finds ~~that~~ the intake pollutant would have reached the vicinity of the outfall point in the receiving water within a reasonable period ~~had it had~~ not been removed by the permittee. This finding will be established if: (3-24-22)( )

(1) The background concentration of the pollutant in the receiving water (excluding any amount of the pollutant in the facility's discharge) is similar to ~~that in~~ the intake water; ( )

(2) ~~There is a~~ A direct hydrological connection exists between the intake and discharge points; and (3-24-22)( )

(3) Water quality characteristics (e.g., temperature, pH, hardness) are similar in the intake and receiving waters. ( )

iii. The Department may ~~also~~ consider other site-specific factors relevant to the transport and fate of the pollutant to ~~make the finding determine~~ in a particular case that a pollutant would ~~or would not~~ have reached the vicinity of the outfall point in the receiving water within a reasonable period ~~had it if it had~~ not been removed by the permittee. (3-24-22)( )

iv. An intake pollutant from ground water may be considered ~~to be~~ from the same body of water if the Department determines ~~that~~ the pollutant would have reached the vicinity of the outfall point in the receiving water within a reasonable period ~~had it if it had~~ not been removed by the permittee, except that ~~such a~~ the pollutant is not from the same body of water if the ground water contains the pollutant partially or entirely due to human activity, such as industrial, commercial, or municipal operations, disposal actions, or treatment processes. (3-24-22)( )



v. The determinations made under Subsections 303.07.b. and c. will be made on a pollutant-by-pollutant and outfall-by-outfall basis. ( )

vi. These provisions do not alter ~~the~~ Department's obligation under Subsection 302.06.a.vii(2) to develop effluent limitations consistent with the assumptions and requirements of ~~any~~ available waste load allocations for the discharge, that is part of a TMDL prepared by the Department and approved by EPA ~~pursuant to~~ under 40 CFR 130.7, or prepared by EPA ~~pursuant to~~ under 40 CFR 130.7(d). (3-24-22)( )

b. Consideration of intake pollutants for technology-based effluent limitations: ( )

i. Upon request of the discharger, technology-based effluent limitations or standards ~~shall~~ will be adjusted to reflect credit for pollutants in the discharger's intake water if ~~the~~: (3-24-22)( )

(1) ~~The~~ Applicable effluent limitations and standards contained in 40 CFR Part 401 through 471, specifically provide that they ~~shall~~ will be applied on a net basis; or (3-24-22)( )

(2) ~~The~~ discharger demonstrates ~~that~~ the control system ~~it~~ proposes d or uses d to meet applicable technology-based limitations and standards would, if properly installed and operated, meet the limitations and standards in the absence of pollutants in the intake waters. (3-24-22)( )

ii. Credit for generic pollutants such as BOD or TSS ~~should~~ will not be granted unless the permittee demonstrates ~~that~~ the constituents of the generic measure in the effluent are substantially similar to the constituents of the generic measure in the intake water or ~~unless~~ appropriate additional limits are placed on process water pollutants either at the outfall or elsewhere. (3-24-22)( )

iii. Credit ~~shall~~ will be granted only to the extent necessary to meet the applicable limitation or standard, up to a maximum value equal to the influent value. Additional monitoring may ~~be necessary to~~ determine eligibility for credits and compliance with permit limits. (3-24-22)( )

iv. Credit ~~shall~~ will be granted only if the discharger demonstrates ~~that~~ the intake water is drawn from the same body of water ~~into which~~ where the discharge is made. The Department may waive this requirement if the Department finds that no environmental degradation will result. (3-24-22)( )

v. This section does not apply to the discharge of raw water clarifier sludge generated from the treatment of intake water. ( )

c. Consideration of intake pollutants for water quality based effluent limitations: (3-24-22)( )

i. The Department will evaluate if ~~there is~~ reasonable potential exists for the discharge of an identified intake pollutant to cause or contribute to an exceedance of a narrative or numeric water quality criterion. If the Department determines ~~that~~ an intake pollutant in the discharge does not have the reasonable potential to cause or contribute to an exceedance of an applicable water quality standard, the Department is not required to include a water quality-based effluent limit for the identified intake pollutant in the facility's permit. (3-24-22)( )

ii. If a reasonable potential exists, then water quality-based effluent limits may be established that reflect a credit for intake pollutants where a discharger demonstrates that the ~~following conditions are met:~~ (3-24-22)( )

(1) ~~The~~ facility removes the intake water containing the pollutant from the same body of water ~~into which~~ where the discharge is made; (3-24-22)( )

(2) ~~The~~ ambient background concentration of the pollutant does not meet the most stringent applicable water quality criterion for that pollutant; (3-24-22)( )

(3) ~~The~~ facility does not alter the identified intake pollutant chemically or physically ~~in a manner that would to~~ cause adverse water quality impacts ~~to occur~~ that would not occur if the pollutants had not been removed from the body of water; (3-24-22)( )

(4) ~~The~~ Timing and location of the discharge ~~would~~ does not cause adverse water quality impacts to occur that would not occur if the identified intake pollutant had not been removed from the body of water; and  
(3-24-22)( )

(5) For ~~the purpose of~~ determining water quality-based effluent limits, ~~the~~ facility does not increase the identified intake pollutant concentration at the point of discharge as compared to the pollutant concentration in the intake water.  
(3-24-22)( )

iii. Where the conditions in Subsection 303.07.c.i. and ii are met, the Department may establish a water quality-based effluent limitation allowing a facility to discharge a mass and concentration of the intake pollutant that are no greater than the mass and concentration found in the facility's intake water. A discharger may add mass of the pollutant to its waste stream if an equal or greater mass is removed ~~prior to~~ before discharge, so there is no net addition of the pollutant in the discharge compared to the intake water.  
(3-24-22)( )

iv. Where intake water for a facility is provided by a municipal water supply system and the supplier provides treatment of the raw water that removes an intake water pollutant, the concentration of the intake water pollutant will be determined at the point where the water enters the water supplier's distribution system. ( )

v. Where a facility discharges intake pollutants from multiple sources that originate from the receiving water body and from other water bodies, the Department may derive an effluent limit reflecting the flow-weighted amount of each source of the pollutant ~~provided that if~~ conditions in Subsection 303.07.c.ii. ~~of this subsection~~ are met and adequate monitoring to determine compliance can be established and is included in the permit.  
(3-24-22)( )

vi. The permit will specify how compliance with mass and concentration-based limitations for the intake water pollutant will be assessed. This assessment may be ~~done by basing~~ based on the effluent limitation on background concentration data. Alternatively, the Department may determine compliance by monitoring the pollutant concentrations in the intake water and ~~in the~~ effluent. This mMonitoring may be supplemented by monitoring internal waste streams or by a Department evaluation of the use of ~~best management practices~~ BMPs.  
(3-24-22)( )

vii. Effluent limitations ~~must~~ will be established to comply with all other applicable state and federal laws and regulations including technology-based requirements and anti-degradation policies.  
(3-24-22)( )

viii. When determining whether water quality based effluent limitations are necessary, information from chemical-specific, ~~whole effluent toxicity~~ WET and biological assessments will be considered independently.  
(3-24-22)( )

ix. Permit limits ~~must~~ will be consistent with the assumptions and requirement of waste load allocations or other provisions in a TMDL that has been approved by the EPA.  
(3-24-22)( )

**08. Internal Waste Streams.** ( )

a. When permit effluent limitations or standards imposed at the point of discharge are impractical or infeasible, effluent limitations or standards for discharges of pollutants may be imposed on internal waste streams before mixing with other waste streams or cooling water streams. In those instances, the monitoring required by Section 304 (~~Monitoring and Reporting Requirements~~) shall will also be applied to the internal waste streams.  
(3-24-22)( )

b. Limits on internal waste streams will be imposed only when the fact sheet ~~sets forth~~ states the exceptional circumstances ~~which that~~ make ~~such the~~ limitations necessary, such as:  
(3-24-22)( )

i. When the final discharge point is inaccessible (~~for example~~ e.g., under ten (10) meters of water);  
(3-24-22)( )

ii. ~~The w~~Wastes at the point of discharge are so diluted ~~as to~~ it makes monitoring impracticable; or  
(3-24-22)( )

iii. ~~The i~~nterferences among pollutants at the point of discharge ~~would~~ make detection or analysis impracticable. (3-24-22)( )

**09. Disposal of Pollutants into Wells, into POTWs, or by Land Application.** ( )

a. When part of a discharger's process wastewater is not ~~being~~ discharged into waters of the United States because it is disposed into a well, into a POTW, or by land application, ~~thereby~~ reducing the flow or level of pollutants ~~being~~ discharged into waters of the United States, applicable effluent standards and limitations for the discharge in an IPDES permit ~~shall will~~ be adjusted to reflect the reduced raw waste resulting from ~~such the~~ disposal. Effluent limitations and standards in the permit ~~shall be~~ are calculated by one (1) of the following methods: (3-24-22)( )

i. If none of the waste from a particular process is discharged into waters of the United States, and ~~effluent limitations guidelines ELGs~~ provide separate allocation for wastes from that process, ~~all~~ allocations for the process ~~shall be~~ are eliminated from calculation of permit effluent limitations or standards; or (3-24-22)( )

ii. In all cases other than those described in Subsection 303.09.a.i., effluent limitations ~~shall be~~ are adjusted by multiplying the effluent limitation derived by applying ~~effluent limitation guidelines ELGs~~ to the total waste stream by the amount of wastewater flow to be treated and discharged into waters of the United States, and dividing the result by the total wastewater flow. Effluent limitations and standards ~~so~~ calculated may be further adjusted under 40 CFR Part 125, subpart D, to make them more or less stringent if discharges to wells, POTWs, or by land application change the character or treatability of the pollutants ~~being~~ discharged to receiving waters. This method may be algebraically expressed as:

$P=(E \times N)/T$ ; where P is the permit effluent limitation, E is the limitation derived by applying effluent guidelines to the total waste stream, N is the wastewater flow to be treated and discharged to waters of the United States, and T is the total wastewater flow.

(3-24-22)( )

ELGs: b. Subsection 303.09.a. does not apply to the extent that promulgated ~~effluent limitations guidelines~~ (3-24-22)( )

i. Control concentrations of pollutants discharged but not mass; or ( )

ii. Specify a different specific technique for adjusting effluent limitations to account for well injection, land application, or disposal into POTWs. (3-24-22)( )

c. Subsection 303.09.a. does not alter a discharger's obligation to meet ~~any~~ more stringent requirements established under Sections 300 (Conditions Applicable to all Permits), 301 (Permit Conditions for Specific Categories), 40 CFR 122.42(e), and 302 (Establishing Permit Provisions). (3-24-22)( )

d. Disposal of discharge into injection wells is regulated by: ( )

i. Idaho Department of Water Resources, in compliance with the IDAPA 37.03.03, "Rules and Minimum Standards for the Construction and Use of Injection Wells," ~~for a Class I injection well~~; or (3-24-22)( )

ii. Health District ~~having with~~ jurisdiction, in compliance with IDAPA 58.01.03, "Individual/Subsurface Sewage Disposal Rules," for a Class V injection well. (3-24-22)( )

e. Disposal of discharge onto the surface of the land is regulated by the Department under IDAPA 58.01.17, "Recycled Water Rules." ( )

**304. MONITORING AND REPORTING REQUIREMENTS.**

01. **Monitoring Requirements.** A permit ~~must will~~ include ~~the following requirements for monitoring:~~ (3-24-22)( )
- a. Requirements ~~concerning for~~ the proper use, maintenance, and installation, when appropriate, of monitoring equipment or methods (including biological monitoring methods when appropriate); (3-24-22)( )
  - b. ~~The t~~Type, intervals, and frequency of monitoring sufficient to yield data ~~which are that~~ representative of the monitored activity including, when appropriate, continuous monitoring; (3-24-22)( )
  - c. Provisions for reporting the results of monitoring, including frequency, appropriate for the regulated activity based on the impact of that activity and as specified in 40 CFR Part 127 (NPDES Electronic Reporting). Reporting ~~shall must~~ be no less frequent than specified in 40 CFR 122.44; (3-24-22)( )
  - d. ~~The m~~Mass (or other measurement specified in the permit) for each pollutant limited in the permit; (3-24-22)( )
  - e. ~~The v~~Volume of effluent discharged from each outfall; (3-24-22)( )
  - f. Other measurements as appropriate, including: ( )
    - i. Pollutants in internal waste streams under Subsection 303.08; ( )
    - ii. Pollutants in intake water for net limitations under Subsection 303.07; (3-24-22)( )
    - iii. Frequency, rate of discharge, etc., for non-continuous discharges under Subsection 303.05; ( )
    - iv. Pollutants subject to notification requirements under Subsection 301.01; and ( )
    - v. Pollutants in sewage sludge or other monitoring as specified in 40 CFR Part 503; or as determined to be necessary on a case-by-case basis ~~pursuant to the Clean Water Act section under CWA Section~~ 405(d)(4), Section 380 (Sewage Sludge) of these rules, and IDAPA 58.01.16.650, "Wastewater Rules"; (3-24-22)( )
  - g. According to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 for the analysis of pollutants or pollutant parameters, or another method required under 40 CFR Parts 401 through 471 or Part 501 through 503. Consistent with 40 CFR Part 136, applicants or permittees ~~have the option of providing~~ may provide matrix- or sample-specific minimum levels rather than the published levels. ~~Further, where~~ When an applicant or permittee can demonstrate that, despite a good faith effort to use a method that ~~would~~ otherwise meets the definition of "sufficiently sensitive," the analytical results are not consistent with the QA/QC specifications for ~~that~~ the method, then the Department may determine ~~that~~ the method is not performing adequately and the Department ~~should will~~ select a different method from the remaining EPA-approved methods that is sufficiently sensitive consistent with provisions outlined in Subsections 304.01.g.i. and ii. ~~For the purposes of this section, a method is~~ "sufficiently sensitive" when: (3-24-22)( )
    - i. The method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or ( )
    - ii. The method has the lowest ML of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapter N or O, for the measured pollutant or pollutant parameter; and ( )
  - h. ~~In the case of~~ For pollutants or pollutant parameters ~~for which there are~~ which have no approved methods under 40 CFR Part 136, or methods are not otherwise required under 40 CFR Part 401 through 471 or Part 501 through 503, monitoring ~~shall must~~ be conducted according to a test procedure specified in the permit for ~~such~~ the pollutants or pollutant parameters. (3-24-22)( )

02. Reporting Monitoring Results. ( )

a. Except as provided in Subsections 304.02.d. and 304.02.e., the Department will establish requirements to report monitoring results on a case-by-case basis with a frequency dependent on the nature and effect of the discharge, but ~~in no case less than~~ at least once a year. ~~All~~ Results must be electronically reported in compliance with 40 CFR Part 127. (3-24-22)( )

b. For sewage sludge use or disposal practices, the Department will establish requirements to monitor and report results on a case-by-case basis with a frequency dependent on the nature and effect of the sewage sludge use or disposal practice; minimally ~~this shall be~~ as specified in 40 CFR Part 503, Section 380 ~~(Sewage Sludge)~~ of these rules, and Idaho's Wastewater Rules, IDAPA 58.01.16.650, "Wastewater Rules," (where applicable), but ~~in no case less than~~ at least once a year. ~~All~~ Results must be electronically reported in compliance with 40 CFR Part 127. (3-24-22)( )

c. The Department will establish requirements to report monitoring results for storm water discharges associated with industrial activity ~~which are~~ subject to an ~~effluent limitation guideline~~ ELG on a case-by-case basis with a frequency dependent on the nature and effect of the discharge, but ~~in no case less than~~ at least once a year. (3-24-22)( )

d. The Department will establish requirements to report monitoring results for storm water discharges associated with industrial activity, other than those addressed in Subsection 304.02.c., on a case-by-case basis with a frequency dependent on the nature and effect of the discharge. At a minimum, a permit for ~~such~~ a discharge ~~must will~~ require the discharger to: (3-24-22)( )

i. Conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity; ( )

ii. Evaluate whether measures to reduce pollutant loadings identified in a storm water pollution prevention plan are adequate and properly implemented ~~in accordance with~~ following the terms of the permit or whether additional control measures are needed; (3-24-22)( )

iii. Maintain for a period of three (3) years a record summarizing the results of the inspection and a certification that the facility is ~~in compliance~~ complying with the plan and the permit, and identifying ~~any~~ incidents of noncompliance; (3-24-22)( )

iv. Sign the report and certification in accordance with Section 090 ~~(Signature Requirements)~~; and (3-24-22)( )

v. ~~Permits~~ For storm water discharges associated with industrial activity from inactive mining operations ~~may~~, where annual inspections are impracticable, may require certification that the facility is ~~in compliance~~ complying with the permit, or alternative requirements, once every three (3) years by an Idaho licensed professional engineer. (3-24-22)( )

e. A permit that does not require monitoring results reports at least annually must require the permittee to report, at least annually, all instances of noncompliance not reported under Subsection 300.12. ( )

305. COMPLIANCE SCHEDULES.

01. **General.** An IPDES permit may, when appropriate, specify a schedule ~~of compliance~~ leading to compliance with the ~~Clean Water Act~~ CWA and these rules. (3-24-22)( )

a. Any Compliance schedules ~~of compliance under this section shall~~ require compliance as soon as possible. (3-24-22)( )

b. The first IPDES permit issued to a new source or a new discharger ~~shall will~~ contain a compliance schedule ~~of compliance~~ only when necessary to allow a reasonable opportunity to attain compliance with

requirements issued or revised after ~~commencement of construction~~ construction commences, but less than three (3) years before ~~commencement of the relevant~~ discharge commences. (3-24-22)( )

c. For recommending dischargers, a compliance schedule ~~of compliance shall will~~ be available only when necessary to allow a reasonable opportunity to ~~attain compliance~~ comply with requirements issued or revised less than three (3) years before ~~recommencement of~~ discharge recommences. (3-24-22)( )

d. If a permit establishes a compliance schedule ~~of compliance under this section~~ that exceeds one (1) year from the date of permit issuance, the schedule ~~must set out will state~~ interim requirements and dates for ~~achievement of~~ achieving the interim requirements. If the schedule includes interim requirements: (3-24-22)( )

i. The time between interim dates ~~shall will~~ not exceed one (1) year, except ~~that in the case of a schedule~~ for a compliance schedule with standards for sewage sludge use and disposal, the time between interim dates ~~shall will~~ not exceed six (6) months; or (3-24-22)( )

ii. If the time ~~necessary for completion of any to complete~~ interim requirements (such as the e.g., construction of a control facility) is more than one (1) year and is not readily divisible into stages for completion, the permit ~~shall will~~ specify interim dates for ~~the submission of~~ submitting reports of progress toward ~~completion of~~ completing the interim requirements and indicate a projected completion date. (3-24-22)( )

e. Within fourteen (14) days following each interim and final date of compliance, the permittee ~~shall~~ must notify the Department in writing of its compliance or noncompliance with the interim or final requirements, or submit progress reports if Subsection 305.01.d.ii. ~~is applicable~~ applies. (3-24-22)( )

f. Permits may incorporate compliance schedules ~~which~~ allowing a discharger to phase in, over time, compliance with water quality-based effluent limitations in accordance with IDAPA 58.01.02.400, "Water Quality Standards." (3-24-22)( )

02. **Alternative Compliance Schedules ~~of Compliance~~.** An IPDES permit applicant or permittee may cease conducting regulated activities (by terminating direct discharge for point sources) rather than continuing to operate and meet permit requirements as follows: (3-24-22)( )

a. If the permittee decides to cease conducting regulated activities at a given time within the term of a permit ~~which that~~ has already been issued: (3-24-22)( )

i. The permit may be modified to contain a new or additional schedule leading to timely cessation of activities; or ( )

ii. The permittee ~~shall must~~ cease conducting permitted activities before noncompliance with any interim or final compliance schedule requirement already specified in the permit. (3-24-22)( )

b. If the decision to cease conducting regulated activities is made before ~~issuance of~~ issuing a permit ~~whose term will include the with a~~ termination date, the permit ~~shall will~~ contain a schedule leading to termination ~~which that~~ will ensure timely compliance with ~~applicable~~ requirements no later than the statutory deadline. (3-24-22)( )

c. If the permittee is undecided whether to cease conducting regulated activities, the Department may issue or modify a permit to contain two (2) schedules, as follows: ( )

i. Both schedules ~~shall will~~ contain an identical interim deadline requiring a final decision on whether to cease conducting regulated activities no later than a date ~~which that~~ ensures sufficient time to comply with applicable requirements in a timely manner if the decision is to continue conducting regulated activities; (3-24-22)( )

ii. ~~One (1) The first~~ schedule ~~shall will~~ lead to timely compliance with applicable requirements, no later than the statutory deadline; (3-24-22)( )



iii. The second schedule ~~shall lead to cessation of~~ will cease regulated activities by a date ~~which that~~ will ensure timely compliance with ~~applicable~~ requirements no later than the statutory deadline; and (3-24-22)( )

iv. Each permit containing two (2) schedules shall include a requirement that after the permittee has made a final decision under Subsection 305.02.c., it shall follow the schedule leading to compliance if the decision is to continue conducting regulated activities, and follow the schedule leading to termination if the decision is to cease conducting regulated activities. (3-24-22)( )

d. The applicant's or permittee's decision to cease conducting regulated activities shall be evidenced by a firm public commitment satisfactory to the Department, such as a resolution of the board of directors of a corporation. (3-24-22)( )

**306. -- 309. (RESERVED)**

**310. VARIANCES.**

**01. Variance Requests by non-POTWs. ( )**

a. A discharger ~~which that~~ is not a POTW may request a variance from otherwise applicable effluent limitations under the following statutory or regulatory provisions, within the times specified ~~in this subsection.~~ (3-24-22)( )

i. ~~A request for a variance based on t~~The presence of fundamentally different factors from ~~those on~~ which the ~~effluent limitations guideline~~ ELG was based must be filed as follows: (3-24-22)( )

(1) For a request from best practicable control technology currently available (BPT), by the close of the public comment period under Section 109 ~~(Public Notification and Comment)~~; or (3-24-22)( )

(2) For a request from best available technology economically achievable (BAT) and/or best conventional pollutant control technology (BCT), by no later than one hundred eighty (180) days after the date on which an ~~effluent limitation guideline~~ ELG is published in the Federal Register for a request based on an ~~effluent limitation guideline~~ ELG promulgated on or after February 4, 1987. (3-24-22)( )

ii. The request must explain how the ~~requirements of the applicable~~ regulatory and/or statutory criteria have been met. (3-24-22)( )

b. An applicant may request ~~a variance~~ for non-conventional pollutants under this section ~~for the following:~~ (3-24-22)( )

i. A variance from the BAT requirements for ~~Clean Water Act section~~ CWA Section 301(b)(2)(F) pollutants (~~commonly called~~ i.e., non-conventional pollutants) ~~pursuant to the Clean Water Act section~~ under CWA Section 301(c) because of the economic capability of the owner or operator; or (3-24-22)( )

ii. A variance ~~pursuant to the Clean Water Act section~~ under CWA Section 301(g) provided: (3-24-22)( )

(1) The variance may only be requested for ammonia; chlorine; color; iron; total phenols (4AAP), when determined by the EPA Administrator to be a pollutant covered by ~~the Clean Water Act section~~ CWA Section 301(b)(2)(F); and (3-24-22)( )

(2) ~~Any o~~Other pollutants ~~which~~ the EPA Administrator lists under ~~the Clean Water Act section~~ CWA Section 301(g)(4). (3-24-22)( )

c. The request for variance as outlined in Subsection 310.01.b. must be made as follows: ( )

i. For ~~those requests for a variance from an~~ effluent limitations based ~~upon an~~ effluent limitation

~~guideline ELG~~, by submitting an initial request to the Department no later than two hundred seventy (270) days after promulgation of the applicable ~~effluent limitation guideline ELG~~ followed by a completed request no later than the close of the public comment period under Section 109 ~~(Public Notification and Comment)~~. (3-24-22)( )

- (1) The initial request to the Department must contain: ( )
  - (a) ~~The n~~Name of the discharger; (3-24-22)( )
  - (b) ~~The p~~Permit number; (3-24-22)( )
  - (c) ~~The o~~Outfall number(s); (3-24-22)( )
  - (d) ~~The a~~Applicable ~~effluent guideline ELG~~; and (3-24-22)( )
  - (e) Whether the discharger is requesting a ~~Clean Water Act section CWA Section~~ 301(c) or ~~section 301(g)~~ modification or both. (3-24-22)( )

(2) The completed request must demonstrate ~~that~~ the applicable requirements of 40 CFR Part 125 have been met. ~~Notwithstanding this provision, t~~ The complete application for a request under ~~Clean Water Act section CWA Section~~ 301(g) must be filed one hundred eighty (180) days before the Department ~~must~~ makes a decision (unless the Department establishes a shorter or longer period). (3-24-22)( )

ii. For ~~those requests for a variance from~~ effluent limitations not based on ~~effluent limitation guidelines ELGs~~, the request need only comply with Subsection 310.01.c.i(2) and need not be preceded by an initial request under Subsection 310.01.c.i(1). (3-24-22)( )

d. A modification under ~~the Clean Water Act section CWA Section~~ 302(b)(2) of requirements under the ~~Clean Water Act section CWA Section~~ 302(a) for achieving water quality related effluent limitations may be requested ~~no later than before~~ the close of the public comment period under Section 109 ~~(Public Notification and Comment)~~ on the permit from which the modification is sought. (3-24-22)( )

e. A variance under ~~the Clean Water Act section CWA Section~~ 316(a) for the thermal component of any discharge must be filed with a timely application for a permit under Section 105 ~~(Application for an Individual IPDES Permit) of these rules~~, except that if thermal effluent limitations are established under ~~the Clean Water Act section CWA Section~~ 402(a)(1) or are based on water quality standards, the request for a variance may be filed by the close of the public comment period under Section 109 ~~(Public Notification and Comment)~~. (3-24-22)( )

**02. Variance Requests by POTWs.** ~~A discharger which is a POTW may request a variance from water quality based effluent limitations. A modification under the Clean Water Act section 302(b)(2) of the requirements under the Clean Water Act section 302(a) for achieving water quality based effluent limitations shall be requested no later than the close of the public comment period under Section 109 (Public Notification and Comment) on the permit from which the modification is sought. A discharger that is a POTW may request a variance, under CWA Section 302(b)(2), from the water quality-based effluent limits found at CWA Section 302(a). The variance must be requested before the close of the public comment period under Section 109~~ (3-24-22)( )

**03. Permit Variance Decision Process.** ( )

a. The Department may deny requests for variances. A variance that has been denied by the Department may be appealed according to the process identified in Section 204 ~~(Appeals Process)~~. (3-24-22)( )

b. The Department may grant variances (subject to EPA objection under Subsection 103.02 or 40 CFR 123.44): (3-24-22)( )

i. Variances for extensions under ~~the Clean Water Act section CWA Section~~ 301(i) based on delay in ~~completion of completing~~ a POTW; (3-24-22)( )

ii. Variances after consultation with EPA, extensions under ~~the Clean Water Act section CWA~~



- ~~Section~~ 301(k) based on the use of innovative technology; (3-24-22)( )
- iii. ~~Variiances u~~Under the Clean Water Act section ~~CWA Section~~ 316(a) for thermal pollution; or (3-24-22)( )
- iv. ~~Variiances f~~From water quality standards under IDAPA 58.01.02.260, “Water Quality Rules.”; (3-24-22)( )
- c. The Department may forward to EPA with or without a recommendation, a variance based on: (3-24-22)( )
- i. ~~A variance based on the e~~Economic capability of the applicant under ~~the Clean Water Act section~~ CWA Section 301(c); or (3-24-22)( )
- ii. ~~A variance based on w~~Water quality-related effluent limitations under ~~the Clean Water Act section~~ CWA Section 302(b)(2). (3-24-22)( )
- d. The Department may forward to EPA with a written concurrence, a variance based on: (3-24-22)( )
- i. ~~A variance based on the p~~Presence of fundamentally different factors from ~~those on which an~~ effluent limitations guideline the ELG was based (~~Clean Water Act section~~ CWA Section 301(n)); or (3-24-22)( )
- ii. ~~A variance based upon e~~Certain water quality factors under ~~the Clean Water Act section~~ CWA Section 301(g). (3-24-22)( )
- e. The EPA may grant or deny a request for a variance that is forwarded by the Department. If the EPA Administrator (or ~~his~~ delegate) approves the variance, the Department ~~shall~~ will prepare a draft permit incorporating the variance. (3-24-22)( )
- f. ~~Any~~ public notice of a draft permit for which a variance or modification has been approved or denied ~~shall~~ will identify the ~~applicable~~ procedures for appealing that decision under Section 204 (~~Appeals Process~~). (3-24-22)( )

**04. Expedited Variance Procedures and Time Extensions. ( )**

- a. ~~Notwithstanding~~Considering the time requirements in Subsections 310.01 and 310.02, the Department may notify a permit applicant before a draft permit is issued under Section 108 (~~Draft Permit and Fact Sheet~~) that the draft permit will ~~likely~~ contain limitations ~~which are~~ eligible for variances. (3-24-22)( )
- i. In the notice, the Department may require the applicant, as a condition of ~~consideration of any a~~ potential variance request, to ~~submit a request~~ explaining how the requirements of 40 CFR Part 125, ~~applicable apply~~ to the variance, have been met, and may require ~~its submission~~ submitting an explanation within a specified ~~reasonable~~ time after receipt of the notice. (3-24-22)( )
- ii. The Department may send the notice before the permit application ~~has been is~~ submitted. The draft or final permit may contain the alternative limitations ~~which that~~ may become effective upon final grant of the variance. (3-24-22)( )
- b. A discharger who cannot file a timely complete request required under Subsections 310.01.c.i.(2) or 310.01.c.ii. may request an extension: that; (3-24-22)( )
- i. ~~The extension m~~May be granted or denied at the discretion of the Department. (3-24-22)( )
- ii. ~~The extension shall be~~Is no more than six (6) months in duration. (3-24-22)( )

05. Special Procedures for Decisions on Thermal Variances. ( )

a. ~~The only issues connected with issuance of a particular permit on which the Department will make a final decision before the final permit is issued, are~~ If the Department makes a final decision on a thermal variance before a final permit is issued it will only consider whether alternative effluent limitations ~~would be~~ are justified under ~~the Clean Water Act section~~ CWA Section 316(a) or whether cooling water intake structures will use the best available technology under ~~section~~ CWA Section 316(b). (3-24-22)( )

i. Permit applicants who wish an early decision on these issues ~~should make a request to~~ may request ~~that~~ the Department, ~~furnished with~~ provide supporting reasons ~~at the time when~~ their permit applications are filed. (3-24-22)( )

ii. The Department will ~~then~~ decide whether ~~or not~~ to make an early decision. If ~~it is~~ granted, ~~both~~ the early decision on ~~Clean Water Act section~~ CWA Section 316 (a) or (b) issues and the grant of the balance of the permit ~~shall~~ will be: (3-24-22)( )

(1) Considered permit issuance under these regulations, and ( )

(2) Subject to the same requirements of public notice and comment and the same opportunity for an appeal. ( )

b. If the Department, on review of the administrative record, determines that the information necessary to decide whether ~~or not the Clean Water Act section~~ the CWA Section 316(a) issue is not likely to be available in time for a decision on permit issuance, the Department may issue a permit for a term up to five (5) years. (3-24-22)( )

i. The permit ~~shall~~ will require achievement of the effluent limitations initially proposed for the thermal component of the discharge, no later than the date otherwise required by law. (3-24-22)( )

ii. ~~However,~~ The permit shall will also afford the permittee an opportunity to file a demonstration under ~~Clean Water Act section~~ CWA Section 316(a), after conducting ~~such~~ studies ~~as are~~ required under 40 CFR 125.70 through 125.73. (3-24-22)( )

iii. A new discharger may not exceed the thermal effluent limitation ~~which is~~ initially proposed unless and until ~~its Clean Water Act section~~ the CWA Section 316(a) variance request is ~~finally~~ approved. (3-24-22)( )

c. Any proceeding held under Subsection 310.05.a. ~~shall~~ will be: (3-24-22)( )

i. Publicly noticed as required by Section 109 ~~(Public Notification and Comment)~~, and (3-24-22)( )

ii. Conducted at a time allowing the permittee to take ~~necessary~~ measures to meet the final compliance date ~~in the event if~~ its request for modification of thermal limits is denied. (3-24-22)( )

d. Whenever the Department defers the decision under ~~the Clean Water Act section~~ CWA Section 316(a), ~~any~~ decision under ~~the Clean Water Act section~~ CWA Section 316(b) may be deferred. (3-24-22)( )

311. -- 369. (RESERVED)

370. PRETREATMENT STANDARDS.

01. **Purpose and Applicability.** This section and 40 CFR Part 403. 1 through 40 CFR 403.3, and 40 CFR 403.5 through 40 CFR 403.18 apply to: (3-24-22)( )

a. Pollutants from non-domestic sources covered by Pretreatment Standards ~~which that~~ are indirectly discharged into or transported by truck, ~~or~~ rail, or otherwise introduced into POTWs as defined in Subsection 370.04 and 40 CFR 403.3; (3-24-22)( )

b. POTWs ~~which that~~ receive wastewater from sources subject to National Pretreatment Standards; and (3-24-22)( )

c. Any new or existing source subject to Pretreatment Standards. National Pretreatment Standards do not apply to sources ~~which discharge discharging~~ to a sewer ~~which that~~ is not connected to a POTW ~~Treatment Plant~~. (3-24-22)( )

**02. Objectives of General Pretreatment Regulations.** This section and 40 CFR Part 403 fulfill three (3) objectives: ( )

a. To prevent the introduction of pollutants into POTWs ~~which that~~ will interfere with ~~the operation of operating~~ a POTW, including interference with its use or disposal of municipal sludge; (3-24-22)( )

b. To prevent the introduction of pollutants into POTWs ~~which that~~ will pass through the treatment works or otherwise be incompatible with ~~such the~~ works; and (3-24-22)( )

c. To improve opportunities to recycle and reclaim municipal and industrial wastewaters and sludges. ( )

**03. Department Program in Lieu of a POTW Program.** 40 CFR 403.8(a) requires certain POTWs develop a pretreatment program. The Department may, ~~however on a case-by-case basis~~, assume responsibility for implementing the POTW pretreatment program requirements ~~set forth~~ in 40 CFR 403.8(f) in lieu of requiring the POTW to develop a pretreatment program. This does not preclude POTWs from independently developing pretreatment programs. (3-24-22)( )

**04. Term Interpretation.** When used in the context of 40 CFR Part 403, unless the context in which a term is used clearly requires a different meaning, terms 40 CFR Part 403 that are incorporated by reference in these rules have the following meanings: (3-24-22)

~~a. The terms Administrator or Regional Administrator mean the EPA Region 10 Administrator; (3-24-22)~~

~~b. The term Approval Authority means the Department of Environmental Quality; (3-24-22)~~

~~c. The term Approved POTW Pretreatment Program or Program or POTW Pretreatment Program means a program administered by a POTW that meets the criteria established in 40 CFR 403.8 and 403.9, and which has been approved by the Department in accordance with 40 CFR 403.1; (3-24-22)~~

~~d. The term Control Authority means the POTW for a facility with a Department approved pretreatment program and the Department for a POTW without a Department approved pretreatment program; (3-24-22)~~

~~e. The term Director means the Department of Environmental Quality with an NPDES permit program approved pursuant to the Clean Water Act section 402(b); (3-24-22)~~

~~f. The terms National Pretreatment Standard, Pretreatment Standard, or Standard mean any regulation containing pollutant discharge limits promulgated by the EPA in accordance with section 307 (b) and (c) of the Act, which applies to Industrial Users. This term includes prohibitive discharge limits established pursuant to 40 CFR 403.5; and (3-24-22)~~

~~g. The term Water Management Division Director means a Director of the Water Management Division within the Region 10 office of the Environmental Protection Agency or this person's delegated representative. (3-24-22)~~

**05. Exceptions to Incorporation by Reference.** The following sections of 40 CFR Part 403 are excluded from the incorporation by reference in Section 003 (Incorporation by Reference) of these rules. (3-24-22)

- ~~a.~~ 40 CFR 403.4 (State or Local Law). (3-24-22)
- ~~b.~~ 40 CFR 403.19 (Provisions of Specific Applicability to the Owatonna Wastewater Treatment Facility). (3-24-22)
- ~~c.~~ 40 CFR 403.20 (Pretreatment Program Re-invention Pilot Projects Under Project XL). (3-24-22)

371. -- 379. (RESERVED)

380. SEWAGE SLUDGE.

01. Purpose. ~~The purpose of this~~ This section and 40 CFR Part 503 ~~is to:~~ (3-24-22)( )
- a. Establish standards, ~~which~~ ~~consisting~~ of general requirements, pollutant limits, management practices, and operational standards, for the final use or disposal of sewage sludge, ~~and include:~~ (3-24-22)( )
    - i. ~~Include s~~Standards for sewage sludge applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.; (3-24-22)( )
    - ~~ii.~~ ~~Include:~~ (3-24-22)
    - ~~(+)ii.~~ Pathogen and alternative vector attraction reduction requirements for sewage sludge applied to the land or placed on a surface disposal site; and ( )
    - ~~(-)iii.~~ On a case-by-case basis, controls for storm water runoff from lands where sewage sludge or septage has been placed for treatment or disposal. ( )
  - b. Include the frequency of monitoring and recordkeeping requirements when sewage sludge is: ( )
    - i. Applied to the land; ( )
    - ii. Placed on a surface disposal site; or ( )
    - iii. Fired in a sewage sludge incinerator; and ( )
  - c. Include reporting requirements for: ( )
    - i. Class I sludge management facilities; ( )
    - ii. POTWs with a design flow rate equal to or greater than one million gallons per day (1 MGD); and ( )
    - iii. POTWs that serve ten thousand (10,000) people or more. ( )
02. Applicability. This section and 40 CFR Part 503 ~~applies~~ to: (3-24-22)( )
- a. ~~Any~~ person, who prepares sewage sludge, applies sewage sludge to the land, or fires sewage sludge in a sewage sludge incinerator and to the owner or operator of a surface disposal site; (3-24-22)( )
  - b. Sewage sludge applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator; ( )
  - c. ~~The e~~Exit gas from a sewage sludge incinerator stack; or (3-24-22)( )
  - d. Land where sewage sludge is applied, to a surface disposal site, and to a sewage sludge incinerator.

( )

~~03. Term Interpretation.~~ When used in the context of 40 CFR Part 503, unless the context in which a term is used clearly requires a different meaning, terms in the 40 CFR Part 503 that are incorporated by reference in these rules have the following meanings: (3-24-22)

~~a. The terms Administrator or Regional Administrator mean the EPA Region 10 Administrator;~~ (3-24-22)

~~b. The terms Director or State Program Director mean the Department of Environmental Quality as the agency designated by the Governor as having the lead responsibility for managing or coordinating the approved IPDES program; and~~ (3-24-22)

~~e. The term permitting authority is the Department of Environmental Quality.~~ (3-24-22)

~~043. Exceptions to Incorporation by Reference.~~ 40 CFR 503.1 (Purpose and Applicability) is excluded from the incorporation by reference found in Section 003-(Incorporation by Reference) of these rules. (3-24-22)( )

381. -- 399. (RESERVED)

#### 400. COMPLIANCE EVALUATION.

~~01. Non-Compliance Actions.~~ When ~~the a~~ permittee is ~~or was~~ not in compliance with ~~any~~ conditions of the existing, ~~terminated~~, or expired permit that has been administratively continued, the Department may choose to do one (1) or more of the following: (3-24-22)( )

a. Initiate an enforcement action; ( )

b. Issue a notice of intent to deny the new application. If the application is denied and the expired permit is no longer effective as provided in Subsection 101.02, the owner or operator must cease the activities authorized by the permit or be subject to enforcement action for operating without a permit; ( )

c. Issue a new permit with appropriate conditions; or ( )

d. Take other actions authorized by state law. ( )

401. -- 499. (RESERVED)

#### 500. ENFORCEMENT.

~~01. General Enforcement and Penalties.~~ ~~Any~~ person who violates ~~any~~ permit conditions, filing or reporting requirements, duty to allow or carry out inspections, entry or monitoring requirements, or ~~any~~ other provisions in these rules ~~shall be is~~ subject to administrative, civil, or criminal enforcement and those remedies authorized in the Environmental Protection and Health Act, Sections 39-101 et seq., Idaho Code, including without limitation, civil and criminal penalties as provided in Sections 39-108 and 39-117, Idaho Code. (3-24-22)( )

~~02. Truth in Reporting.~~ It is a violation of these rules for ~~any~~ person to falsify, tamper with, or knowingly render inaccurate ~~any~~ monitoring device or method required to be maintained under an IPDES permit. In addition to ~~any~~ other remedies available to the Department, ~~such~~ a violation is punishable by a fine as provided in Section 39-117, Idaho Code. (3-24-22)( )

~~03. False Statements.~~ It is a violation of these rules for ~~any~~ person to knowingly make ~~any~~ false statement, representation, or certification in ~~any~~ record or other document submitted or required to be maintained under an IPDES permit, including monitoring reports or reports of compliance or non-compliance. In addition to ~~any~~ other remedies available to the Department, ~~such~~ a violation is punishable by a fine as provided in Section 39-117, Idaho Code. (3-24-22)( )

**04. Public Participation in Enforcement.** The Department ~~shall~~ will provide for public participation in the state enforcement process by: (3-24-22)( )

a. Investigating and providing written responses to citizen complaints; ( )

b. Not opposing intervention by any citizen when permissive intervention may be authorized by statute, rule, or regulation; and (3-24-22)( )

c. Publishing notice of and providing at least thirty (30) days for public comment on any proposed settlement of a state enforcement action. (3-24-22)( )

**501. -- 599. (RESERVED)**

**600. ADMINISTRATIVE RECORDS AND DATA MANAGEMENT.**

**01. Administrative Record for Draft Permits.** (3-24-22)

~~a.~~ The provisions of a draft permit prepared by the Department under Subsection 108.01 ~~shall be~~ are based on the administrative record defined in this section. (3-24-22)( )

~~ba.~~ For ~~preparing~~ a draft permit, the record ~~shall~~ consists of: (3-24-22)( )

i. ~~The a~~ Application, if required, and any supporting data furnished by the applicant; (3-24-22)( )

ii. ~~The d~~ Draft permit or notice of intent to deny the application or to terminate the permit; (3-24-22)( )

iii. ~~The f~~ Fact sheet; (3-24-22)( )

iv. All documents cited in the fact sheet; and (3-24-22)( )

v. ~~Other d~~ Documents contained in the supporting file for the draft permit. (3-24-22)( )

~~eb.~~ Material readily available at the Department or published material ~~that is~~ generally available, and ~~that is~~ included in the administrative record under Subsection 600.01, need not be physically included with the rest of the record ~~as long as it is~~ if specifically referred to in the fact sheet. (3-24-22)( )

~~ec.~~ ~~This subsection a~~ Applies to ~~all~~ draft permits when public notice was given after the effective date of these rules. (3-24-22)( )

**02. Administrative Record for Final Permits.** (3-24-22)

~~a.~~ The Department ~~shall~~ will base final permit decisions on the administrative record ~~defined in this~~ section. (3-24-22)( )

~~ba.~~ The administrative record for any final permit, including issuance, denial, transfer, modification, revocation and reissuance, or termination, ~~shall~~ will consist of the administrative record for the draft permit and fact sheet, as defined in Subsection 600.01, the proposed permit and associated information, and ~~the following:~~ (3-24-22)( )

i. ~~All e~~ Comments received during the public comment period provided under Section 109 ~~(Public Notification and Comment);~~ (3-24-22)( )

ii. ~~The r~~ Record of, and any written materials submitted as part of, ~~any~~ meeting(s) held under Section 109 ~~(Public Notification and Comment);~~ (3-24-22)( )

iii. ~~The a~~Application or notice of intent to obtain coverage under a general permit, notice of intent to deny the application, or to terminate the permit, and ~~any~~ supporting data furnished by the applicant; (3-24-22)( )

iv. ~~The r~~Response to comments required by Subsections 109.02 and 109.03 and ~~any~~ new material placed in the record under that section; and (3-24-22)( )

v. ~~Any other r~~Relevant correspondence and documents. (3-24-22)( )

~~eb.~~ The final permit and fact sheet ~~shall~~ become part of the administrative record after the final permit is issued. (3-24-22)( )

~~dc.~~ The additional documents identified under Subsection 600.02.b., 107.03, and 109.02 ~~should~~ will be added to the record as soon as possible after their receipt or publication by the Department. The record ~~shall be~~ is complete on the date the final permit is issued. (3-24-22)( )

~~ed.~~ This subsection applies to all IPDES permits when the draft permit was included in a public notice. ( )

~~fe.~~ Material readily available from the Department or published materials ~~which that~~ are generally available and ~~which are~~ included in the administrative record under Subsection 600.02 or Section 109 ~~(Public Notification and Comment)~~, need not be physically included in the same file as the rest of the record ~~as long as~~ if it is specifically referred to in the fact sheet or in the response to comments. (3-24-22)( )

**03. Electronic Submittals.** ~~Any i~~Information ~~which~~ the Department requires to be submitted electronically, with an electronic signature approved by the Department, will become part of the Administrative Record in accordance with Subsections 600.01 and 02. (3-24-22)( )

**601. -- 999. (RESERVED)**