

ENVIRONMENT, ENERGY & TECHNOLOGY COMMITTEE

ADMINISTRATIVE RULES REVIEW

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2011 Legislative Session

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IDAPA 58 - DEPARTMENT OF ENVIRONMENTAL QUALITY
58.01.01 - RULES FOR THE CONTROL OF AIR POLLUTION IN IDAHO
DOCKET NO. 58-0101-0904
NOTICE OF RULEMAKING - ADOPTION OF PENDING RULE

EFFECTIVE DATE: This rule has been adopted by the Board of Environmental Quality (Board) and is now pending review by the 2011 Idaho State Legislature for final approval. The pending rule will become final and effective immediately upon the adjournment *sine die* of the First Regular Session of the Sixty-first Idaho Legislature unless prior to that date the rule is rejected in whole or in part by concurrent resolution in accordance with Idaho Code Sections 67-5224 and 67-5291.

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.

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 4, 2010, Vol. 10-8, pages 101 through 138. After consideration of public comments, the rule has been adopted as initially proposed. The Rulemaking and Public Comment Summary can be obtained at http://www.deq.idaho.gov/rules/air/58_0101_0904_pending.cfm or by contacting the undersigned.

IDAHO CODE SECTION 39-107D STATEMENT:

(1) The legislature directs that any rule formulated and recommended by the department to the board which is broader in scope or more stringent than federal law or regulations, or proposes to regulate an activity not regulated by the federal government, is subject to the following additional requirements: the notice of proposed rulemaking and rulemaking record requirements under chapter 52, title 67, Idaho Code, must clearly specify that the proposed rule, or portions of the proposed rule, are broader in scope or more stringent than federal law or regulations, or regulate an activity not regulated by the federal government, and delineate which portions of the proposed rule are broader in scope or more stringent than federal law or regulations, or regulate an activity not regulated by the federal government.

The rule is not more stringent than federal law. The Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01, incorporate U.S. EPA regulations that address mercury. See IDAPA 58.01.107.03.i. Sources within a source category subject to regulation under federal mercury rules are specifically exempt from this rule. See IDAPA 58.01.01.215.01 and 401.02.b (proposed rule). Thus, the rule does not propose a more stringent standard, emission limit or control technology requirement than specifically prescribed by the federal Clean Air Act or the U.S. EPA. The rule does address mercury emissions from sources whose mercury emissions are not regulated under federal law. It requires that best available control technology be installed on new or modified sources with the potential to emit mercury, or existing sources with actual emissions of mercury, at certain threshold levels. An argument could be made that the rule is broader in scope than federal law, as it does regulate an activity not regulated by federal law.

(2) To the degree that a department action is based on science, in proposing any rule or portions of any rule subject to this section, the department shall utilize:

(a) The best available peer reviewed science and supporting studies conducted in accordance with sound and objective scientific practices; and

Mercury is widely recognized as a toxic element with significant health effects (particularly neurological effects on developing fetuses). (Clarkston 2006, EPA 2001, EPA 2009) It has been recognized as a hazardous air pollutant by Congress (under the Clean Air Act) and EPA. Regulations have been promulgated at the federal and state level to minimize mercury emissions. (EPA 2005b, NDEP 2006, DNR 2008) Deposition of mercury air emissions can eventually lead to bio-accumulation of mercury (as methylmercury) in fish which can lead to human exposure from fish consumption. (Mason, 1995)

(b) Data collected by accepted methods or best available methods if the reliability of the method and the nature of the decision justify use of the data.

Idaho DEQ has collected data in order to characterize the extent of mercury contamination throughout Idaho. (DEQ 2007b, DEQ 2008, DEQ 2009). All data collection events have followed a Quality Assurance Project Plan. The fish sampling performed by IDEQ has resulted in 19 fish advisories across the state.

(3) Any proposed rule subject to this section which proposes a standard necessary to protect human health and the environment shall also include in the rulemaking record requirements under chapter 52, title 67, Idaho Code, the following additional information:

(a) Identification of each population or receptor addressed by an estimate of public health effects or environmental effects; and

The population at risk are those who eat fish caught in the state of Idaho. Of particular concern are women of childbearing age, those pregnant, planning to become pregnant, or nursing; and children under the age of 15. (IFCAP 2009) There is also an ecological risk to fish and other species that eat fish.

(b) Identification of the expected risk or central estimate of risk for the specific population or receptor; and

The expected risk from mercury exposure are neurological. This is consistent with recent federal and other state analyses. Several studies have been performed that evaluate the IQ decrements among kids of fish eating populations.

(c) Identification of each appropriate upper bound or lower bound estimate of risk; and

A person's risk depends on a number factors including: the amount of Idaho fish consumed, the size of the fish, and the source of the fish. (IFCAP 2009) There is also risk from eating non-Idaho fish including store-bought fish.

(d) Identification of each significant uncertainty identified in the process of the assessment of public health effects or environmental effects and any studies that would assist in resolving the uncertainty; and

There are three major studies that have documented the health outcomes from eating fish contaminated with methyl mercury. Two of them (Faroe Islands and New Zealand) document evidence of in utero neurological impacts from low level exposures to methyl mercury. (Grandjean 1997, Crump 1998) Another study from the Seychelles does not support this conclusion. (Myers 2003) The National Research Council believes that when all of the data is considered there is still enough evidence to minimize low-level exposure to methyl mercury. (Stern 2004) This is the position taken by EPA when they promulgated CAMR and when they developed an oral reference dose for mercury. (EPA 2005b, EPA 2009) There have also been recent articles that discuss the mitigation of the neurological effects of mercury by selenium. This is an area of active research and no scientific consensus has been determined. (Peterson 2009)

DEQ acknowledges that one cannot technologically conclude that a specific reduction of mercury emissions from a local source will result in a specific reduction of mercury in Idaho's fish. This rule constitutes Idaho's best effort to ensure that significant sources of mercury emissions employ the best available control measures. As a result, the state can conclude it is doing its best to reduce its impact on the global pool of mercury emissions, which do in fact impact Idaho's resources.

(e) Identification of studies known to the department that support, are directly relevant to, or fail to support any estimate of public health effects or environmental effects and the methodology used to reconcile inconsistencies in the data.

The studies known to DEQ are listed above. See response to (d) above.

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 when the pending rule will become effective: Not applicable.

ASSISTANCE ON TECHNICAL QUESTIONS: For assistance on technical questions concerning this rulemaking, contact Martin Bauer at (208) 373-0440 or martin.bauer@deq.idaho.gov.

Dated this 7th day of October, 2010.

Paula J. Wilson
Hearing Coordinator
Department of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706-1255
(208)373-0418/Fax No. (208)373-0481
Paula.wilson@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.

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 19, 2010. If no such written request is received, a public hearing will not be held.

DESCRIPTIVE SUMMARY: The Department of Environmental Quality (DEQ) has initiated this rulemaking in response to a Petition for Initiation of Rulemaking filed by Idaho Conservation League (ICL) and P4 Production, LLC (P4). In the petition, ICL and P4 requested that the Board of Environmental Quality direct DEQ to initiate negotiated rulemaking to solicit public comment and involvement in developing air quality rules designed to limit and control mercury emissions from certain facilities. The petition was granted by the Board on July 29, 2009.

By August 11, 2010, a “white paper” providing assistance in understanding and achieving compliance with the requirements of these rules is available for review and may be obtained at http://www.deq.idaho.gov/rules/air/58_0101_0904_proposed.cfm or by contacting the undersigned.

Members of the regulated community who may be subject to Idaho's air quality rules as well as special interest groups, public officials, or 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.

After consideration of public comments, DEQ intends to present the final proposal to the Board of Environmental Quality at the October 2010 Board meeting for adoption as a pending rule. The rule is expected to be final and effective upon adjournment of the 2011 legislative session if adopted by the Board and approved by the Legislature.

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

NEGOTIATED RULEMAKING: The text of the proposed rule has been drafted based on discussions held and concerns raised during negotiations conducted pursuant to Idaho Code

Section 67-5220 and IDAPA 58.01.23.810-815.

On October 7, 2009, the Notice of Negotiated Rulemaking was published in the [Idaho Administrative Bulletin, Vol. 09-10, page 496](#), and a preliminary draft negotiated rule was made available for public review. Meetings were held on October 28, 2009, January 6, 2010, April 29, 2010, and June 10, 2010. Several members of the public participated in this negotiated rulemaking process by attending the meetings and by submitting written comments. A record of the negotiated rule drafts, written comments received, and documents distributed during the negotiated rulemaking process is available at http://www.deq.idaho.gov/rules/air/58_0101_0904_proposed.cfm.

IDAHO CODE SECTION 39-107D STATEMENT: *(1) The legislature directs that any rule formulated and recommended by the department to the board which is broader in scope or more stringent than federal law or regulations, or proposes to regulate an activity not regulated by the federal government, is subject to the following additional requirements: the notice of proposed rulemaking and rulemaking record requirements under chapter 52, title 67, Idaho Code, must clearly specify that the proposed rule, or portions of the proposed rule, are broader in scope or more stringent than federal law or regulations, or regulate an activity not regulated by the federal government, and delineate which portions of the proposed rule are broader in scope or more stringent than federal law or regulations, or regulate an activity not regulated by the federal government.*

The proposed rule is not more stringent than federal law. IDAPA 58.01.01, “Rules for the Control of Air Pollution in Idaho,” incorporates U.S. EPA regulations that address mercury. See IDAPA 58.01.107.03.i. Sources within a source category subject to regulation under federal mercury rules are specifically exempt from this proposed rule. See IDAPA 58.01.01.215.01 and 401.02.b. (proposed rule). Thus, the proposed rule does not propose a more stringent standard, emission limit or control technology requirement than specifically prescribed by the federal Clean Air Act or the U.S. EPA. The proposed rule does address mercury emissions from sources whose mercury emissions are not regulated under federal law. It requires that best available control technology be installed on new or modified sources with the potential to emit mercury, or existing sources with actual emissions of mercury, at certain threshold levels. An argument could be made that the proposed rule is broader in scope than federal law, as it does regulate an activity not regulated by federal law.

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fish consumption. (Mason, 1995)

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The expected risk from mercury exposure are neurological. This is consistent with recent federal and other state analyses. Several studies have been performed that evaluate the IQ decrements among kids of fish eating populations.

(c) Identification of each appropriate upper bound or lower bound estimate of risk; and

A person's risk depends on a number factors including: the amount of Idaho fish consumed, the size of the fish, and the source of the fish. (IFCAP 2009) There is also risk from eating non-Idaho fish including store-bought fish.

(d) Identification of each significant uncertainty identified in the process of the assessment of public health effects or environmental effects and any studies that would assist in resolving the uncertainty; and

There are three major studies that have documented the health outcomes from eating fish contaminated with methyl mercury. Two of them (Faroe Islands and New Zealand) document evidence of in utero neurological impacts from low level exposures to methyl mercury.(Grandjean 1997, Crump 1998) Another study from the Seychelles does not support this conclusion. (Myers 2003) The National Research Council believes that when all of the data is considered there is still enough evidence to minimize low-level exposure to methyl mercury. (Stern 2004) This is the position taken by EPA when they promulgated CAMR and when they developed an oral reference dose for mercury. (EPA 2005b, EPA 2009) There have also been recent articles that discuss the mitigation of the neurological effects of mercury by selenium. This is an area of active research

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DEQ acknowledges that one cannot technologically conclude that a specific reduction of mercury emissions from a local source will result in a specific reduction of mercury in Idaho's fish. This proposed rule constitutes Idaho's best effort to ensure that significant sources of mercury emissions employ the best available control measures. As a result, the state can conclude it is doing its best to reduce its impact on the global pool of mercury emissions, which do in fact impact Idaho's resources.

(e) Identification of studies known to the department that support, are directly relevant to, or fail to support any estimate of public health effects or environmental effects and the methodology used to reconcile inconsistencies in the data.

The studies known to DEQ are listed above. See response to (d) above.

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 Martin Bauer at (208) 373-0440 or martin.bauer@deq.idaho.gov.

Anyone may submit written comments by mail, fax or e-mail at the address below regarding this proposed rule. DEQ will consider all written comments received by the undersigned on or before September 1, 2010.

DATED this 6th day of July, 2010.

THE FOLLOWING IS THE TEXT OF DOCKET NO. 58-0101-0904

006. GENERAL DEFINITIONS.

01. Accountable. Any SIP emission trading program must account for the aggregate effect of the emissions trades in the demonstration of reasonable further progress, attainment, or maintenance. (4-5-00)

02. Act. The Environmental Protection and Health Act of 1972 as amended (Sections 39-101 through 39-130, Idaho Code). (5-1-94)

03. Actual Emissions. The actual rate of emissions of a pollutant from an emissions unit as determined in accordance with the following: (4-5-00)

a. In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The Department shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period. (4-5-00)

b. The Department may presume that the source-specific allowable emissions for the unit are equivalent to actual emissions of the unit. (4-5-00)

c. For any emissions unit (other than an electric utility steam generating unit as specified below) which has not yet begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date. (4-5-00)

d. For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit, provided the source owner or operator maintains and submits to the Department, on an annual basis for a period of five (5) years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed ten (10) years may be required by the Department if it determines such a period to be more representative of normal source post-change operations. (4-5-00)

04. Adverse Impact on Visibility. Visibility impairment which interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of the Federal Class I Area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency, and time of visibility impairments, and how these factors correlate with: (3-30-07)

a. Times of visitor use of the Federal Class I Area; and (3-30-07)

b. The frequency and timing of natural conditions that reduce visibility. (3-30-07)

c. This term does not include affects on integral vistas when applied to 40 CFR 51.307. (3-30-07)

05. Air Pollutant/Air Contaminant. Any substance, including but not limited to, dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon or particulate matter or any combination thereof. (4-5-00)

06. Air Pollution. The presence in the outdoor atmosphere of any air pollutant or combination thereof in such quantity of such nature and duration and under such conditions as would be injurious to human health or welfare, to animal or plant life, or to property, or to interfere unreasonably with the enjoyment of life or property. (4-5-00)

07. Air Quality. The specific measurement in the ambient air of a particular air pollutant at any given time. (5-1-94)

08. Air Quality Criterion. The information used as guidelines for decisions when establishing air quality goals and air quality standards. (5-1-94)

09. Allowable Emissions. The allowable emissions rate of a stationary source or facility calculated using the maximum rated capacity of the source or facility (unless the source or facility is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following: (4-5-00)

a. The applicable standards set forth in 40 CFR part 60 and 61; (4-5-00)

b. Any applicable State Implementation Plan emissions limitation including those with a future compliance date; or (4-5-00)

c. The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date. (4-5-00)

10. Ambient Air. That portion of the atmosphere, external to buildings, to which the general public has access. (5-1-94)

11. Ambient Air Quality Violation. Any ambient concentration that causes or contributes to an exceedance of a national ambient air quality standard as determined by 40 CFR Part 50. (4-11-06)

12. Atmospheric Stagnation Advisory. An air pollution alert declared by the Department when air pollutant impacts have been observed and/or meteorological conditions are conducive to additional air pollutant buildup. (4-11-06)

13. Attainment Area. Any area which is designated, pursuant to 42 U.S.C. Section 7407(d), as having ambient concentrations equal to or less than national primary or secondary ambient air quality standards for a particular air pollutant or air pollutants. (4-11-06)

14. BART-Eligible Source. Any of the following stationary sources of air pollutants, including any reconstructed source, which was not in operation prior to August 7, 1962, and was in existence on August 7, 1977, and has the potential to emit two hundred fifty (250) tons per year or more of any air pollutant. In determining potential to emit, fugitive emissions, to the extent quantifiable, must be counted. (3-30-07)

a. Fossil-fuel fired steam electric plants of more than two hundred fifty (250) million BTU's per hour heat input; (3-30-07)

b. Coal cleaning plants (thermal dryers); (3-30-07)

c. Kraft pulp mills; (3-30-07)

d. Portland cement plants; (3-30-07)

e. Primary zinc smelters; (3-30-07)

- f.** Iron and steel mill plants; (3-30-07)
- g.** Primary aluminum ore reduction plants; (3-30-07)
- h.** Primary copper smelters; (3-30-07)
- i.** Municipal incinerators capable of charging more than two hundred fifty (250) tons of refuse per day; (3-30-07)
- j.** Hydrofluoric, sulfuric, and nitric acid plants; (3-30-07)
- k.** Petroleum refineries; (3-30-07)
- l.** Lime plants; (3-30-07)
- m.** Phosphate rock processing plants; (3-30-07)
- n.** Coke oven batteries; (3-30-07)
- o.** Sulfur recovery plants; (3-30-07)
- p.** Carbon black plants (furnace process); (3-30-07)
- q.** Primary lead smelters; (3-30-07)
- r.** Fuel conversion plants; (3-30-07)
- s.** Sintering plants; (3-30-07)
- t.** Secondary metal production facilities; (3-30-07)
- u.** Chemical process plants; (3-30-07)
- v.** Fossil-fuel boilers of more than two hundred fifty (250) million BTU's per hour heat input; (3-30-07)
- w.** Petroleum storage and transfer facilities with a capacity exceeding three hundred thousand (300,000) barrels; (3-30-07)
- x.** Taconite ore processing facilities; (3-30-07)
- y.** Glass fiber processing plants; and (3-30-07)
- z.** Charcoal production facilities. (3-30-07)
- 15. Baseline (Area, Concentration, Date).** See Section 579. (5-1-94)

- 16. Best Available Retrofit Technology (BART).** Means an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility. The emission limitation must be established, on a case-by-case basis, taking into consideration the technology available, the costs of compliance, the energy and non-air quality environmental impacts of compliance, any pollution control equipment in use or in existence at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology. (3-30-07)
- 17. Board.** Idaho Board of Environmental Quality. (5-1-94)
- 18. Breakdown.** An unplanned failure of any equipment or emissions unit which may cause excess emissions. (4-5-00)
- 19. BTU.** British thermal unit. (5-1-94)
- 20. Clean Air Act.** The federal Clean Air Act, 42 U.S.C. Sections 7401 through 7671q. (5-1-94)
- 21. Collection Efficiency.** The overall performance of the air cleaning device in terms of ratio of materials collected to total input to the collector unless specific size fractions of the contaminant are stated or required. (5-1-94)
- 22. Commence Construction or Modification.** In general, this means initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operation, this term refers to those on-site activities, other than preparatory activities, which mark the initiation of the change. (4-5-00)
- 23. Complete.** A determination made by the Department that all information needed to process a permit application has been submitted for review. (5-1-94)
- 24. Construction.** Fabrication, erection, installation, or modification of a stationary source or facility. (5-1-94)
- 25. Control Equipment.** Any method, process or equipment which removes, reduces or renders less noxious, air pollutants discharged into the atmosphere. (5-1-94)
- 26. Controlled Emission.** An emission which has been treated by control equipment to remove all or part of an air pollutant before release to the atmosphere. (5-1-94)
- 27. Criteria Air Pollutant.** Any of the following: PM-10; sulfur oxides; ozone, nitrogen dioxide; carbon monoxide; lead. (4-5-00)
- 28. Deciview.** A measurement of visibility impairment. A deciview is a haze index derived from calculated light extinction, such that uniform changes in haziness correspond to uniform incremental changes in perception across the entire range of conditions, from pristine to

highly impaired. The deciview haze index is calculated based on the following equation (for the purposes of calculating deciview, the atmospheric light extinction coefficient must be calculated from aerosol measurements): Deciview Haze Index = $10 \ln_e (b_{\text{ext}} / 10 \text{Mm}^{-1})$ where b_{ext} = the atmospheric light extinction coefficient, expressed in inverse megameters (Mm^{-1}). (3-30-07)

- 29. Department.** The Department of Environmental Quality. (5-1-94)
- 30. Designated Facility.** Any of the following facilities: (5-1-94)
 - a.** Fossil-fuel fired steam electric plants of more than two hundred fifty (250) million BTU's per hour heat input; (5-1-94)
 - b.** Coal cleaning plants (thermal dryers); (5-1-94)
 - c.** Kraft pulp mills; (5-1-94)
 - d.** Portland cement plants; (5-1-94)
 - e.** Primary zinc smelters; (5-1-94)
 - f.** Iron and steel mill plants; (5-1-94)
 - g.** Primary aluminum ore reduction plants; (5-1-94)
 - h.** Primary copper smelters; (5-1-94)
 - i.** Municipal incinerators capable of charging more than two hundred and fifty (250) tons of refuse per day; (5-1-94)
 - j.** Hydrofluoric, sulfuric, and nitric acid plants; (5-1-94)
 - k.** Petroleum refineries; (5-1-94)
 - l.** Lime plants; (5-1-94)
 - m.** Phosphate rock processing plants; (5-1-94)
 - n.** Coke oven batteries; (5-1-94)
 - o.** Sulfur recovery plants; (5-1-94)
 - p.** Carbon black plants (furnace process); (5-1-94)
 - q.** Primary lead smelters; (5-1-94)
 - r.** Fuel conversion plants; (5-1-94)
 - s.** Sintering plants; (5-1-94)

- t.** Secondary metal production facilities; (5-1-94)
- u.** Chemical process plants; (5-1-94)
- v.** Fossil-fuel boilers (or combination thereof) of more than two hundred and fifty (250) million BTU's per hour heat input; (5-1-94)
- w.** Petroleum storage and transfer facilities with a capacity exceeding three hundred thousand (300,000) barrels; (5-1-94)
- x.** Taconite ore processing facilities; (5-1-94)
- y.** Glass fiber processing plants; and (5-1-94)
- z.** Charcoal production facilities. (5-1-94)
- 31. Director.** The Director of the Department of Environmental Quality or his designee. (5-1-94)
- 32. Effective Dose Equivalent.** The sum of the products of absorbed dose and appropriate factors to account for differences in biological effectiveness due to the quality of radiation and its distribution in the body of reference man. The unit of the effective dose equivalent is the rem. It is generally calculated as an annual dose. (5-1-94)
- 33. Emission.** Any controlled or uncontrolled release or discharge into the outdoor atmosphere of any air pollutants or combination thereof. Emission also includes any release or discharge of any air pollutant from a stack, vent, or other means into the outdoor atmosphere that originates from an emission unit. (5-1-94)
- 34. Emission Standard.** A permit or regulatory requirement established by the Department or EPA which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements which limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction. (4-5-00)
- 35. Emissions Unit.** An identifiable piece of process equipment or other part of a facility which emits or may emit any air pollutant. This definition does not alter or affect the term "unit" for the purposes of 42 U.S.C. Sections 7651 through 7651o. (5-1-94)
- 36. EPA.** The United States Environmental Protection Agency and its Administrator or designee. (5-1-94)
- 37. Environmental Remediation Source.** A stationary source that functions to remediate or recover any release, spill, leak, discharge or disposal of any petroleum product or petroleum substance, any hazardous waste or hazardous substance from any soil, ground water or surface water, and shall have an operational life no greater than five (5) years from the inception of any operations to the cessation of actual operations. Nothing in this definition shall be

construed so as to actually limit remediation projects to five (5) years or less of total operation. (5-1-95)

38. Excess Emissions. Emissions that exceed an applicable emissions standard established for any facility, source or emissions unit by statute, regulation, rule, permit, or order. (4-11-06)

39. Existing Stationary Source or Facility. Any stationary source or facility that exists, is installed, or is under construction on the original effective date of any applicable provision of this chapter. (5-1-94)

40. Facility. All of the pollutant-emitting activities which belong to the same industrial grouping, are located on one (1) or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same Major Group (i.e. which have the same two-digit code) as described in the Standard Industrial Classification Manual. The fugitive emissions shall not be considered in determining whether a permit is required unless required by federal law. (4-11-06)

41. Federal Class I Area. Any federal land that is classified or reclassified "Class I." (3-30-07)

42. Federal Land Manager. The Secretary of the department with authority over the Federal Class I Area (or the Secretary's designee). (3-30-07)

43. Federally Enforceable. All limitations and conditions which are enforceable by EPA and the Department under the Clean Air Act, including those requirements developed pursuant to 40 CFR Parts 60 and 61 requirements within any applicable State Implementation Plan, and any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Parts 51, 52, 60, or 63. (3-30-07)

44. Fire Hazard. The presence or accumulation of combustible material of such nature and in sufficient quantity that its continued existence constitutes an imminent and substantial danger to life, property, public welfare or adjacent lands. (5-1-94)

45. Fuel-Burning Equipment. Any furnace, boiler, apparatus, stack and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer. (5-1-94)

46. Fugitive Dust. Fugitive emissions composed of particulate matter. (5-1-94)

47. Fugitive Emissions. Those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. (5-1-94)

48. Garbage. Any waste consisting of putrescible animal and vegetable materials resulting from the handling, preparation, cooking and consumption of food including, but not limited to, waste materials from households, markets, storage facilities, handling and sale of produce and other food products. (5-1-94)

49. Gasoline. Any mixture of volatile hydrocarbons suitable as a fuel for the propulsion of motor vehicles or motor boats. Gasoline also means aircraft engine fuels when used for the operation or propulsion of motor vehicles or motor boats and includes gasohol, but does not include special fuels. (3-29-10)

50. Gasoline Cargo Tank. Any tank or trailer used for the transport of gasoline from sources of supply to underground gasoline storage tanks. (3-29-10)

51. Gasoline Dispensing Facility (GDF). Any facility with underground gasoline storage tanks used for dispensing gasoline. (3-29-10)

52. Grain Elevator. Any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded. (5-1-94)

53. Grain Storage Elevator. Any grain elevator located at any wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean extraction plant which has a permanent grain storage capacity of thirty five thousand two hundred (35,200) cubic meters (ca. 1 million bushels). (5-1-94)

54. Grain Terminal Elevator. Any grain elevator which has a permanent storage capacity of more than eighty-eight thousand one hundred (88,100) cubic meters (ca. 2.5 million bushels), except those located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries, and livestock feedlots. (5-1-94)

55. Hazardous Air Pollutant (HAP). Any air pollutant listed pursuant to Section 112(b) of the Clean Air Act. Hazardous Air Pollutants are regulated air pollutants. (4-11-06)

56. Hazardous Waste. Any waste or combination of wastes of a solid, liquid, semisolid, or contained gaseous form which, because of its quantity, concentration or characteristics (physical, chemical or biological) may: (5-1-94)

a. Cause or significantly contribute to an increase in deaths or an increase in serious, irreversible, or incapacitating reversible illnesses; or (5-1-94)

b. Pose a substantial threat to human health or to the environment if improperly treated, stored, disposed of, or managed. Such wastes include, but are not limited to, materials which are toxic, corrosive, ignitable, or reactive, or materials which may have mutagenic, teratogenic, or carcinogenic properties; provided that such wastes do not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are allowed under a national pollution discharge elimination system permit, or source, special nuclear, or by-product material as defined by 42 U.S.C. Sections 2014(e),(z) or (aa). (5-1-94)

57. Hot-Mix Asphalt Plant. Those facilities conveying proportioned quantities or batch loading of cold aggregate to a drier, and heating, drying, screening, classifying, measuring and mixing the aggregate and asphalt for the purpose of paving, construction, industrial, residential or commercial use. (5-1-94)

58. Incinerator. Any source consisting of a furnace and all appurtenances thereto designed for the destruction of refuse by burning. "Open Burning" is not considered incineration. For purposes of these rules, the destruction of any combustible liquid or gaseous material by burning in a flare stack shall be considered incineration. (5-1-94)

59. Indian Governing Body. The governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government. (5-1-94)

60. Integral Vista. A view perceived from within the mandatory Class I Federal Area of a specific landmark or panorama located outside the boundary of the mandatory Class I Federal Area. (3-30-07)

61. Kraft Pulping. Any pulping process which uses, for a cooking liquor, an alkaline sulfide solution containing sodium hydroxide and sodium sulfide. (5-1-94)

62. Least Impaired Days. The average visibility impairment (measured in deciviews) for the twenty percent (20%) of monitored days in a calendar year with the lowest amount of visibility impairment. (3-30-07)

63. Lowest Achievable Emission Rate (LAER). For any source, the more stringent rate of emissions based on the following: (4-5-00)

a. The most stringent emissions limitation which is contained in any State Implementation Plan for such class or category of facility, unless the owner or operator of the proposed facility demonstrates that such limitations are not achievable; or (4-5-00)

b. The most stringent emissions limitation which is achieved in practice by such class or category of facilities. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the facility. In no event shall the application of the term permit a proposed new or modified facility to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance. (4-5-00)

64. Mandatory Class I Federal Area. Any area identified in 40 CFR 81.400 through 81.437. (3-30-07)

65. Member of the Public. For purposes of Subsection 006.103.a.xvi., a person located at any off-site point where there is a residence, school, business or office. (3-30-07)

66. Mercury. Total mercury including elemental mercury and mercury compounds. ()

67. Mercury Best Available Control Technology (MBACT). An emission standard for mercury based on the maximum degree of reduction practically achievable as specified by the Department on an individual case-by-case basis taking into account energy, economic and environmental impacts, and other relevant impacts specific to the source. A Department approved

MBACT shall be valid until the source subject to the MBACT is modified. If the proposed modification to the source subject to MBACT occurs within ten (10) years of the MBACT determination, a new MBACT review shall not be triggered as long as the source can meet the existing MBACT requirements. If the proposed modification occurs more than ten (10) years after the MBACT determination, then the proposed modification shall be subject to a new MBACT review. ()

668. Modification. (4-11-06)

a. Any physical change in, or change in the method of operation of, a stationary source or facility which results in an emission increase as defined in Section 007 or which results in the emission of any regulated air pollutant not previously emitted. (4-11-06)

b. Any physical change in, or change in the method of operation of, a stationary source or facility which results in an increase in the emissions rate of any state only toxic air pollutant, or emissions of any state only toxic air pollutant not previously emitted. (4-11-06)

c. Fugitive emissions shall not be considered in determining whether a permit is required for a modification unless required by federal law. (4-11-06)

d. For purposes of this definition of modification, routine maintenance, repair and replacement shall not be considered physical changes and the following shall not be considered a change in the method of operation: (3-30-07)

i. An increase in the production rate if such increase does not exceed the operating design capacity of the affected stationary source, and if a more restrictive production rate is not specified in a permit; (5-1-94)

ii. An increase in hours of operation if more restrictive hours of operation are not specified in a permit; and (5-1-94)

iii. Use of an alternative fuel or raw material if the stationary source is specifically designed to accommodate such fuel or raw material and use of such fuel or raw material is not specifically prohibited in a permit. (4-5-00)

679. Monitoring. Sampling and analysis, in a continuous or noncontinuous sequence, using techniques which will adequately measure emission levels and/or ambient air concentrations of air pollutants. (5-1-94)

6870. Most Impaired Days. The average visibility impairment (measured in deciviews) for the twenty percent (20%) of monitored days in a calendar year with the highest amount of visibility impairment. (3-30-07)

6971. Multiple Chamber Incinerator. Any article, machine, equipment, contrivance, structure or part of a structure used to dispose of combustible refuse by burning, consisting of three (3) or more refractory lined combustion furnaces in series physically separated by refractory walls, interconnected by gas passage ports or ducts and employing adequate parameters necessary for maximum combustion of the material to be burned. (5-1-94)

702. Natural Conditions. Includes naturally occurring phenomena that reduce visibility as measured in terms of light extinction, visual range, contrast, or coloration. (3-30-07)

713. New Stationary Source or Facility. (5-1-94)

a. Any stationary source or facility, the construction or modification of which is commenced after the original effective date of any applicable provision of this chapter; or (5-1-94)

b. The restart of a nonoperating facility shall be considered a new stationary source or facility if: (5-1-94)

i. The restart involves a modification to the facility; or (5-1-94)

ii. After the facility has been in a nonoperating status for a period of two (2) years, and the Department receives an application for a Permit to Construct in the area affected by the existing nonoperating facility, the Department will, within five (5) working days of receipt of the application notify the nonoperating facility of receipt of the application for a Permit to Construct. Upon receipt of this Departmental notification, the nonoperating facility will comply with the following restart schedule or be considered a new stationary source or facility when it does restart: Within thirty (30) working days after receipt of the Department's notification of the application for a Permit to Construct, the nonoperating facility shall provide the Department with a schedule detailing the restart of the facility. The restart must begin within sixty (60) days of the date the Department receives the restart schedule. (5-1-94)

724. Nonattainment Area. Any area which is designated, pursuant to 42 U.S.C. Section 7407(d), as not meeting (or contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant. (5-1-94)

735. Noncondensibles. Gases and vapors from processes that are not condensed at standard temperature and pressure unless otherwise specified. (5-1-94)

746. Odor. The sensation resulting from stimulation of the human sense of smell. (5-1-94)

757. Opacity. A state which renders material partially or wholly impervious to rays of light and causes obstruction of an observer's view, expressed as percent. (5-1-94)

768. Open Burning. The burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the ambient air without passing through a stack, duct or chimney. (5-1-94)

779. Operating Permit. A permit issued by the Director pursuant to Sections 300 through 386 and/or 400 through 461. (4-5-00)

780. Particulate Matter. Any material, except water in uncombined form, that exists as

a liquid or a solid at standard conditions. (5-1-94)

7981. Particulate Matter Emissions. All particulate matter emitted to the ambient air as measured by an applicable reference method, or any equivalent or alternative method in accordance with Section 157. (4-5-00)

802. Permit to Construct. A permit issued by the Director pursuant to Sections 200 through 228. (7-1-02)

813. Person. Any individual, association, corporation, firm, partnership or any federal, state or local governmental entity. (5-1-94)

824. PM-10. All particulate matter in the ambient air with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers as measured by a reference method based on Appendix J of 40 CFR Part 50 and designated in accordance with 40 CFR Part 53 or by an equivalent method designated in accordance with 40 CFR Part 53. (5-1-94)

835. PM-10 Emissions. All particulate matter, including condensible particulates, with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternative method in accordance with Section 157. (4-5-00)

846. Potential to Emit/Potential Emissions. The maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is state or federally enforceable. Secondary emissions do not count in determining the potential to emit of a facility or stationary source. (3-30-07)

857. Portable Equipment. Equipment which is designed to be dismantled and transported from one (1) job site to another job site. (5-1-94)

868. PPM (parts per million). Parts of a gaseous contaminant per million parts of gas by volume. (5-1-94)

879. Prescribed Fire Management Burning. The controlled application of fire to wildland fuels in either their natural or modified state under such conditions of weather, fuel moisture, soil moisture, etc., as will allow the fire to be confined to a predetermined area and at the same time produce the intensity of heat and rate of spread required to accomplish planned objectives, including: (5-1-94)

- a. Fire hazard reduction; (5-1-94)
- b. The control of pests, insects, or diseases; (5-1-94)
- c. The promotion of range forage improvements; (5-1-94)

- d. The perpetuation of natural ecosystems; (5-1-94)
- e. The disposal of woody debris resulting from a logging operation, the clearing of rights of way, a land clearing operation, or a driftwood collection system; (5-1-94)
- f. The preparation of planting and seeding sites for forest regeneration; and (5-1-94)
- g. Other accepted natural resource management purposes. (5-1-94)

890. Primary Ambient Air Quality Standard. That ambient air quality which, allowing an adequate margin of safety, is requisite to protect the public health. (5-1-94)

891. Process or Process Equipment. Any equipment, device or contrivance for changing any materials whatever or for storage or handling of any materials, and all appurtenances thereto, including ducts, stack, etc., the use of which may cause any discharge of an air pollutant into the ambient air but not including that equipment specifically defined as fuel-burning equipment or refuse-burning equipment. (5-1-94)

902. Process Weight. The total weight of all materials introduced into any source operation which may cause any emissions of particulate matter. Process weight includes solid fuels charged, but does not include liquid and gaseous fuels charged or combustion air. Water which occurs naturally in the feed material shall be considered part of the process weight. (5-1-94)

913. Process Weight Rate. The rate established as follows: (5-1-94)

a. For continuous or long-run steady-state source operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portion thereof; (4-5-00)

b. For cyclical or batch source operations, the total process weight for a period that covers a complete cycle of operation or an integral number of cycles, divided by the hours of actual process operation during such a period. Where the nature of any process or operation or the design of any equipment is such as to permit more than one (1) interpretation of this definition, the interpretation that results in the minimum value for allowable emission shall apply. (4-5-00)

924. Quantifiable. The Department must be able to determine the emissions impact of any SIP trading programs requirement(s) or emission limit(s). (4-5-00)

935. Radionuclide. A type of atom which spontaneously undergoes radioactive decay. (5-1-94)

946. Regional Haze. Visibility impairment that is caused by the emission of air pollutants from numerous sources located over a wide geographic area. Such sources include, but are not limited to, major and minor stationary sources, mobile sources, and area sources. (3-30-07)

957. Regulated Air Pollutant. (4-11-06)

a. For purposes of determining applicability of major source permit to operate requirements, issuing, and modifying permits pursuant to Sections 300 through 397, and in accordance with Title V of the federal Clean Air Act amendments of 1990, 42 U.S.C. Section 7661 et seq., “regulated air pollutant” shall have the same meaning as in Title V of the federal Clean Air Act amendments of 1990, and any applicable federal regulations promulgated pursuant to Title V of the federal Clean Air Act amendments of 1990, 40 CFR Part 70; (4-11-06)

b. For purposes of determining applicability of any other operating permit requirements, issuing, and modifying permits pursuant to Sections 400 through 410, the federal definition of “regulated air pollutant” as defined in Subsection 006.94.a. shall also apply; (3-30-07)

c. For purposes of determining applicability of permit to construct requirements, issuing, and modifying permits pursuant to Sections 200 through 228, except Section 214, and in accordance with Part D of Subchapter I of the federal Clean Air Act, 42 U.S.C. Section 7501 et seq., “regulated air pollutant” shall mean those air contaminants that are regulated in non-attainment areas pursuant to Part D of Subchapter I of the federal Clean Air Act and applicable federal regulations promulgated pursuant to Part D of Subchapter I of the federal Clean Air Act, 40 CFR 51.165; and (4-11-06)

d. For purposes of determining applicability of any other major or minor permit to construct requirements, issuing, and modifying permits pursuant to 200 through 228, except Section 214, “regulated air pollutant” shall mean those air contaminants that are regulated in attainment and unclassifiable areas pursuant to Part C of Subchapter I of the federal Clean Air Act, 40 CFR 52.21, and any applicable federal regulations promulgated pursuant to Part C of Subchapter I of the federal Clean Air Act, 42 U.S.C. Section 7470 et seq. (4-11-06)

968. Replicable. Any SIP procedures for applying emission trading shall be structured so that two (2) independent entities would obtain the same result when determining compliance with the emission trading provisions. (4-5-00)

979. Responsible Official. One (1) of the following: (5-1-94)

a. For a corporation: a 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 a duly authorized representative of such person if the representative is responsible for the overall operation of one (1) or more manufacturing, production, or operating facilities applying for or subject to a permit and either: (5-1-94)

i. The facilities employ more than two hundred fifty (250) persons or have gross annual sales or expenditures exceeding twenty-five million dollars (\$25,000,000) (in second quarter 1980 dollars); or (4-5-00)

ii. The delegation of authority to such representative is approved in advance by the Department. (5-1-94)

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively. (5-1-94)

c. For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of Section 123, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA). (4-5-00)

d. For Phase II sources: (5-1-94)

i. The designated representative in so far as actions, standards, requirements, or prohibitions under 42 U.S.C. Sections 7651 through 7651o or the regulations promulgated thereunder are concerned; and (5-1-94)

ii. The designated representative for any other purposes under 40 CFR Part 70. (5-1-94)

~~98~~100. 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. (4-5-00)

~~99~~101. Salvage Operation. Any source consisting of any business, trade or industry engaged in whole or in part in salvaging or reclaiming any product or material, such as, but not limited to, reprocessing of used motor oils, metals, chemicals, shipping containers, or drums, and specifically including automobile graveyards and junkyards. (5-1-94)

~~100~~2. 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. (3-20-97)

~~101~~3. Secondary Ambient Air Quality Standard. That ambient air quality which is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of air pollutants in the ambient air. (5-1-94)

~~102~~4. Secondary Emissions. Emissions which would occur as a result of the construction, modification, or operation of a stationary source or facility, but do not come from the stationary source or facility itself. Secondary emissions must be specific, well defined, quantifiable, and affect the same general area as the stationary source, facility, or modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the primary stationary source, facility or modification. Secondary emissions do not include any emissions which come directly from a mobile source regulated under 42 U.S.C. Sections 7521 through 7590. (3-30-07)

~~103~~5. 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. (5-1-94)

1046. Significant. In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following: (4-11-06)

- a. Pollutant and emissions rate: (4-11-06)
 - i. Carbon monoxide, one hundred (100) tons per year; (5-1-94)
 - ii. Nitrogen oxides, forty (40) tons per year; (5-1-94)
 - iii. Sulfur dioxide, forty (40) tons per year; (5-1-94)
 - iv. Particulate matter, twenty-five (25) tons per year of particulate matter emissions; fifteen (15) tons per year of PM₁₀ emissions; (4-11-06)
 - v. Ozone, forty (40) tons per year of volatile organic compounds; (4-11-06)
 - vi. Lead, six-tenths (0.6) of a ton per year; (5-1-94)
 - vii. Fluorides, three (3) tons per year; (5-1-94)
 - viii. Sulfuric acid mist, seven (7) tons per year; (5-1-94)
 - ix. Hydrogen sulfide (H₂S), ten (10) tons per year; (5-1-94)
 - x. Total reduced sulfur (including H₂S), ten (10) tons per year; (5-1-94)
 - xi. Reduced sulfur compounds (including H₂S), ten (10) tons per year; (5-1-94)
 - xii. Municipal waste combustor organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans), thirty-five ten-millionths (0.0000035) tons per year; (5-1-94)
 - xiii. Municipal waste combustor metals (measured as particulate matter), fifteen (15) tons per year; (5-1-94)
 - xiv. Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride), forty (40) tons per year; (5-1-94)
 - xv. Municipal solid waste landfill emissions (measured as nonmethane organic compounds), fifty (50) tons per year; or (4-11-06)
 - xvi. Radionuclides, a quantity of emissions, from source categories regulated by 40 CFR Part 61, Subpart H, that have been determined in accordance with 40 CFR Part 61, Appendix D and by Department approved methods, that would cause any member of the public to receive an annual effective dose equivalent of at least one tenth (0.1) mrem per year, if total facility-wide emissions contribute an effective dose equivalent of less than three (3) mrem per year; or any

radionuclide emission rate, if total facility-wide radionuclide emissions contribute an effective dose equivalent of greater than or equal to three (3) mrem per year. (5-1-95)

b. In reference to a net emissions increase or the potential of a source or facility to emit a regulated air pollutant not listed in Subsection 006.103.a. above and not a toxic air pollutant, any emission rate; or (3-30-07)

c. For a major facility or major modification which would be constructed within ten (10) kilometers of a Class I area, the emissions rate which would increase the ambient concentration of an emitted regulated air pollutant in the Class I area by one (1) microgram per cubic meter, twenty-four (24) hour average, or more. (4-5-00)

1057. Significant Contribution. Any increase in ambient concentrations which would exceed the following: (5-1-94)

a. Sulfur dioxide: (5-1-94)

i. One (1.0) microgram per cubic meter, annual average; (5-1-94)

ii. Five (5) micrograms per cubic meter, twenty-four (24) hour average; (5-1-94)

iii. Twenty-five (25) micrograms per cubic meter, three (3) hour average; (5-1-94)

b. Nitrogen dioxide, one (1.0) microgram per cubic meter, annual average; (5-1-94)

c. Carbon monoxide: (5-1-94)

i. One-half (0.5) milligrams per cubic meter, eight (8) hour average; (5-1-94)

ii. Two (2) milligrams per cubic meter, one (1) hour average; (5-1-94)

d. PM-10: (5-1-94)

i. One (1.0) microgram per cubic meter, annual average; (5-1-94)

ii. Five (5.0) micrograms per cubic meter, twenty-four (24) hour average. (5-1-94)

1068. Small Fire. A fire in which the material to be burned is not more than four (4) feet in diameter nor more than three (3) feet high. (5-1-94)

1079. Smoke. Small gas-borne particles resulting from incomplete combustion, consisting predominantly, but not exclusively, of carbon and other combustible material. (5-1-94)

10810. Smoke Management Plan. A document issued by the Director to implement Sections 606 through 616, Categories of Allowable Burning. (5-1-94)

10911. Smoke Management Program. A program whereby meteorological information, fuel conditions, fire behavior, smoke movement and atmospheric dispersal conditions are used as

a basis for scheduling the location, amount and timing of open burning operations so as to minimize the impact of such burning on identified smoke sensitive areas. (5-1-94)

1102. Source. A stationary source. (5-1-94)

1143. Source Operation. The last operation preceding the emission of air pollutants, when this operation: (5-1-94)

a. Results in the separation of the air pollutants from the process materials or in the conversion of the process materials into air pollutants, as in the case of fuel combustion; and (5-1-94)

b. Is not an air cleaning device. (5-1-94)

1124. Special Fuels. All fuel suitable as fuel for diesel engines; a compressed or liquefied gas obtained as a by-product in petroleum refining or natural gasoline manufacture, such as butane, isobutane, propane, propylene, butylenes, and their mixtures; and natural gas, either liquid or gas, and hydrogen, used for the generation of power for the operation or propulsion of motor vehicles. (3-29-10)

1135. Stack. Any point in a source arranged to conduct emissions to the ambient air, including a chimney, flue, conduit, or duct but not including flares. (5-1-94)

1146. Stage 1 Vapor Collection. Used during the refueling of underground gasoline storage tanks to reduce hydrocarbon emissions. Vapors in the tank, which are displaced by the incoming gasoline, are routed through a hose into the gasoline cargo tank and returned to the terminal for processing. Two (2) types of Stage 1 systems exist: coaxial and dual point. (3-29-10)

a. Coaxial System. A Stage 1 vapor collection system that requires only one (1) tank opening. The tank opening is usually four (4) inches in diameter with a three (3) inch diameter product fill tube inserted into the opening. Fuel flows through the inner tube while vapors are displaced through the annular space between the inner and outer tubes. (3-29-10)

b. Dual Point System. A Stage 1 vapor collection system that consists of two (2) separate tank openings, one (1) for delivery of the product and the other for the recovery of vapors. (3-29-10)

1157. Standard Conditions. Except as specified in Subsection 576.02 for ambient air quality standards, a dry gas temperature of twenty degrees Celsius (20C) sixty-eight degrees Fahrenheit (68F) and a gas pressure of seven hundred sixty (760) millimeters of mercury (14.7 pounds per square inch) absolute. (4-5-00)

1168. 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. (5-1-94)

1179. Stationary Source. Any building, structure, facility, emissions unit, or installation which emits or may emit any air pollutant. The fugitive emissions shall not be considered in

determining whether a permit is required unless required by federal law. (4-11-06)

11820. Tier I Source. Any of the following: (5-1-94)

a. Any source located at any major facility as defined in Section 008; (4-5-00)

b. Any source, including an area source, subject to a standard, limitation, or other requirement under 42 U.S.C. Section 7411 or 40 CFR Part 60, and required by EPA to obtain a Part 70 permit; (4-11-06)

c. Any source, including an area source, subject to a standard or other requirement under 42 U.S.C. Section 7412, 40 CFR Part 61 or 40 CFR Part 63, and required by EPA to obtain a Part 70 permit, except that a source is not required to obtain a permit solely because it is subject to requirements under 42 U.S.C. Section 7412(r); (4-11-06)

d. Any Phase II source; and (5-1-94)

e. Any source in a source category designated by the Department. (5-1-94)

11921. Total Suspended Particulates. Particulate matter as measured by the method described in 40 CFR 50 Appendix B. (4-5-00)

1202. Toxic Air Pollutant. An air pollutant that has been determined by the Department to be by its nature, toxic to human or animal life or vegetation and listed in Section 585 or 586. (5-1-94)

1213. Toxic Air Pollutant Carcinogenic Increments. Those ambient air quality increments based on the probability of developing excess cancers over a seventy (70) year lifetime exposure to one (1) microgram per cubic meter (1 ug/m³) of a given carcinogen and expressed in terms of a screening emission level or an acceptable ambient concentration for a carcinogenic toxic air pollutant. They are listed in Section 586. (5-1-94)

1224. Toxic Air Pollutant Non-carcinogenic Increments. Those ambient air quality increments based on occupational exposure limits for airborne toxic chemicals expressed in terms of a screening emission level or an acceptable ambient concentration for a non-carcinogenic toxic air pollutant. They are listed in Section 585. (5-1-94)

1235. Toxic Substance. Any air pollutant that is determined by the Department to be by its nature, toxic to human or animal life or vegetation. (5-1-94)

1246. Trade Waste. Any solid, liquid or gaseous material resulting from the construction or demolition of any structure, or the operation of any business, trade or industry including, but not limited to, wood product industry waste such as sawdust, bark, peelings, chips, shavings and cull wood. (5-1-94)

1257. TRS (Total Reduced Sulfur). Hydrogen sulfide, mercaptans, dimethyl sulfide, dimethyl disulfide and any other organic sulfide present. (5-1-94)

1268. Unclassifiable Area. An area which, because of a lack of adequate data, is unable to be classified pursuant to 42 U.S.C. Section 7407(d) as either an attainment or a nonattainment area. (5-1-94)

1279. Uncontrolled Emission. An emission which has not been treated by control equipment. (5-1-94)

12830. Upset. An unplanned disruption in the normal operations of any equipment or emissions unit which may cause excess emissions. (4-5-00)

12931. Visibility Impairment. Any humanly perceptible change in visibility (light extinction, visual range, contrast, coloration) from that which would have existed under natural conditions. (3-30-07)

1302. Visibility in Any Mandatory Class I Federal Area. Includes any integral vista associated with that area. (3-30-07)

1313. Wigwam Burner. Wood waste burning devices commonly called teepee burners, silos, truncated cones, and other such burners commonly used by the wood product industry for the disposal by burning of wood wastes. (5-1-94)

1324. Wood Stove Curtailment Advisory. An air pollution alert issued through local authorities and/or the Department to limit wood stove emissions during air pollution episodes. (5-1-94)

(BREAK IN CONTINUITY OF SECTIONS)

215. MERCURY EMISSION STANDARD FOR NEW OR MODIFIED SOURCES.

No owner or operator may commence construction or modification of a stationary source or facility that results in an increase in annual potential emissions of mercury of twenty-five (25) pounds or more unless the owner or operator has obtained a permit to construct under Sections 200 through 228 of these rules. The permit to construct application shall include an MACT analysis for the new or modified source or sources for review and approval by the Department. A determination of applicability under Section 215 shall be based upon the best available information. Fugitive emissions shall not be included in a determination of applicability under Section 215. ()

01. Exemptions. New or modified stationary sources within a source category subject to 40 CFR Part 63 are exempt from the requirements of Section 215. ()

02. Applicability. Except as provided in Subsection 215.01, Section 215 applies to all new or modified sources for which an application for a permit to construct was submitted to the Department on or after July 1, 2011. ()

2156. -- 219. (RESERVED).

(BREAK IN CONTINUITY OF SECTIONS)

221. CATEGORY I EXEMPTION.

No permit to construct is required for a source that satisfies the criteria set forth in Section 220 and the following: (4-5-00)

01. Below Regulatory Concern. The maximum capacity of a source to emit an air pollutant under its physical and operational design considering limitations on emissions such as air pollution control equipment, restrictions on hours of operation and restrictions on the type and amount of material combusted, stored or processed shall be less than ten percent (10%) of the significant emission rates set out in the definition of significant at Section 006. (4-5-00)

02. Radionuclides. The source shall have potential emissions that are less than one percent (1%) of the applicable radionuclides standard in 40 CFR Part 61, Subpart H. (4-5-00)

03. Toxic Air Pollutants. The source shall comply with Section 223. (4-5-00)

04. Mercury. The source shall have potential emissions that are less than twenty-five (25) pounds per year of mercury. Fugitive emissions shall not be included in the calculation of potential mercury emissions. ()

(BREAK IN CONTINUITY OF SECTIONS)

401. TIER II OPERATING PERMIT.

01. Optional Tier II Operating Permits. The owner or operator of any stationary source or facility which is not subject to (or wishes to accept limitations on the facility's potential to emit so as to not be subject to) Sections 300 through 399 may apply to the Department for an operating permit to: (7-1-02)

a. Authorize the use of alternative emission limits (bubbles) pursuant to Section 440; (5-1-94)

b. Authorize the use of an emission offset pursuant to Sections 204.02.b. or 206; (4-6-05)

c. Authorize the use of a potential to emit limitation, an emission reduction or netting transaction to exempt a facility or modification from certain requirements for a permit to construct; (4-5-00)

d. Authorize the use of a potential to emit limitation to exempt the facility from Tier I permitting requirements. (4-5-00)

e. Bank an emission reduction credit pursuant to Section 461; (5-1-94)

02. Required Tier II Operating Permits. ()

a. A Tier II operating permit is required for any stationary source or facility which: ()

i. ~~Is~~ not subject to Sections 300 through 399 with a permit to construct which establishes any emission standard different from those in these rules. (~~7-1-02~~)()

ii. Has annual actual mercury emissions in excess of sixty-two (62) pounds. Fugitive emissions shall not be included in a determination of the actual mercury emissions. The owner or operator of the stationary source or facility shall submit a Tier II permit application for review and approval by the Department, no later than twelve (12) months after becoming subject to Subsection 401.02.a.ii., that includes an MBACT analysis for all sources that emit mercury. A determination of applicability under Subsection 401.02 shall be based upon best available information. An MBACT analysis for review and approval by the Department shall be included in a Tier II renewal application for any mercury emitting source not otherwise subject to MBACT. ()

b. Stationary sources within a source category subject to 40 CFR Part 63 are exempt from the requirements of Subsection 401.02.a.ii. ()

03. Tier II Operating Permits Required by the Department. The Director may require or revise a Tier II operating permit for any stationary source or facility whenever the Department determines that: (5-1-94)

a. Emission rate reductions are necessary to attain or maintain any ambient air quality standard or applicable prevention of significant deterioration (PSD) increment; or(4-5-00)

b. Specific emission standards, or requirements on operation or maintenance are necessary to ensure compliance with any applicable emission standard or rule. (5-1-94)

04. Multiple Tier II Operating Permits. Subject to approval by EPA, the Director may issue one (1) or more Tier II operating permits to a facility which allow any specific stationary source or emissions unit within that facility a future compliance date of up to three (3) years beyond the compliance date of any provision of these rules, provided the Director has reasonable cause to believe such a future compliance date is warranted. (4-5-00)

05. Tier II Operating Permits Establishing a Facility Emissions Cap. The owner or operator of any stationary source or facility may request a Tier II operating permit establishing a Facility Emissions Cap (FEC) pursuant to Sections 175 through 181. (4-11-06)

(BREAK IN CONTINUITY OF SECTIONS)

585. TOXIC AIR POLLUTANTS NON-CARCINOGENIC INCREMENTS.

The screening emissions levels (EL) and acceptable ambient concentrations (AAC) for non-carcinogens are as provided in the following table. The AAC in this section are twenty-four (24) hour averages. (6-30-95)

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
60-35-5	Acetamide (NY)	--	0.002	0.0003
64-19-7	Acetic acid	25	1.67	1.25
108-24-7	Acetic anhydride	20	1.33	1
67-64-1	Acetone	1780	119	89
75-05-8	Acetonitrile	67	4.47	3.35
540-59-0	Acetylene dichloride, See 1,2-Dichloroethylene			
79-27-6	Acetylene tetrabromide	15	1	.75
107-02-8	Acrolein	0.25	0.017	0.0125
79-10-7	Acrylic acid	30	2	1.5
107-18-6	Allyl alcohol	5	0.333	.25
106-92-3	Allyl glycidyl ether	22	1.47	1.1
2179-59-1	Allyl propyl disulfide	12	0.8	0.6
7429-90-5	Aluminum Including:			
NA	Metal & Oxide	10	0.667	0.5
NA	Pyro powders	5	0.333	0.25
NA	Soluble salts	2	0.133	0.10
NA	Alkyls not otherwise classified	2	0.133	0.10
141-43-5	2-Aminoethanol, See Ethanolamine			
504-29-0	2-Aminopyridine	2	0.133	0.10
7664-41-7	Ammonia	18	1.2	0.9
12125-02-9	Ammonium chloride fume	10	0.667	0.5
3825-26-1	Ammonium perfluoro-octanoate	0.1	0.007	0.05
7773-06-0	Ammonium sulfamate	10	0.667	0.5
628-63-7	n-Amyl acetate	530	35.3	26.5
626-38-0	Sec-Amyl acetate	665	44.3	33.25
7440-36-0	Antimony & compounds, as Sb (handling & use)	0.5	0.033	0.025
86-88-4	ANTU	0.3	0.02	0.015

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
7784-42-1	Arsine	0.2	0.013	0.01
86-50-0	Azinphos-methyl	0.2	0.013	0.01
7440-39-3	Barium, soluble compounds, as Ba	0.5	0.033	0.025
17804-35-2	Benomyl	10	0.67	0.5
7106-51-4	p-Benzoquinone, See Quinone			
94-36-0	Benzoyl peroxide	5	0.333	0.25
92-52-4	Biphenyl	1.5	0.1	0.075
1304-82-1	Bismuth telluride undoped	10	0.667	0.05
NA	Bismuth telluride if selenium doped	5	0.333	0.25
1303-96-4	Borates, tetra odium salts - Including:			
NA	Anhydrous	1	0.067	0.05
NA	Decahydrate	5	0.333	0.25
NA	Pentahydrate	1	0.067	0.05
1303-86-2	Boron oxide	10	0.667	0.5
10294-33-4	Boron tribromide	10	0.667	0.5
7637-07-2	Boron trifluoride	3	0.2	0.25
314-40-9	Bromacil	10	0.667	0.5
7726-95-6	Bromine	0.7	0.047	0.035
7789-30-2	Bromine penta-fluoride	0.7	0.047	0.035
75-25-2	Bromoform	5	0.333	0.25
109-79-5	Butanethiol, see Butyl mercaptan			
78-93-3	2-Butanone, see Methyl ethyl ketone			
112-87-2	2-butoxyethyl acetate	---	8.33	1.25
111-76-2	2-Butoxyethanol (EGBG)	120	8	6
123-86-4	n-Butyl acetate	710	47.3	35.5
105-46-4	sec-Butyl acetate	950	63.3	47.5
540-88-5	tert-Butyl acetate	950	63.3	47.5
141-32-2	Butyl acrylate	55	3.67	2.75
71-36-3	n-Butyl alcohol	150	10	7.5
78-92-2	Sec-Butyl alcohol	305	20.3	15.25
75-65-0	tert-Butyl alcohol	300	20	15
109-73-9	Butylamine	15	1	.75
124-17-4	Butyl carbitol acetate (ID)	---	0.846	.625
1189-85-1	tert-Butyl chromate, as CrO3	0.1	0.007	.005

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
2426-08-6	n-Butyl glycidyl ether	135	9	6.75
138-22-7	n-Butyl lactate	25	1.67	1.25
109-79-5	Butyl mercaptan	1.8	0.12	0.09
89-72-5	o-sec-Butylphenol	30	2	1.5
98-51-1	p-tert-Butyltoluene	60	4	3
13765-19-0	Calcium carbonate	10	0.667	0.5
156-62-7	Calcium cyanamide	0.5	0.033	0.025
1305-62-0	Calcium hydroxide	5	0.333	0.25
1305-78-8	Calcium oxide	2	0.133	0.1
1344-95-2	Calcium silicate (synthetic)	10	0.667	0.5
13397-24-5	Calcium sulfate	10	0.667	0.5
76-22-2	Camphor, synthetic	12	0.8	0.6
105-60-2	Caprolactam - Including:			
	Dust	1	0.067	0.05
	Vapor	20	1.33	1.0
1333-86-4	Carbon black	3.5	0.23	0.175
2425-06-1	Captafol	0.1	0.007	0.005
133-06-2	Captan	5	0.333	0.25
463-58-1	Carbonyl sulfide	0.4	0.027	0.02
63-25-2	Carbaryl	5	0.333	0.25
1563-66-2	Carbofuran	0.1	0.007	0.005
75-15-0	Carbon disulfide	30	2	1.5
558-13-4	Carbon tetrabromide	1.4	0.093	0.07
75-44-5	Carbonyl chloride, See Phosgene			
353-50-4	Carbonyl fluoride	5	0.333	0.25
120-80-9	Catechol	20	1.33	1.0
21351-79-1	Cesium hydroxide	2	0.133	0.10
133-90-4	Chloramben (PL)	---	887	133
8001-35-2	Chlorinated camphene	0.5	0.0333	0.025
31242-93-0	Chlorinated diphenyl oxide	0.5	0.033	0.025
7782-50-5	Chlorine	3	0.2	0.15
10049-04-4	Chlorine dioxide	0.3	0.02	0.015
7790-91-2	Chlorine trifluoride (CL)	0.38	0.025	0.002
107-20-0	Chloroacetaldehyde	0.32	0.021	0.015

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
78-95-5	Chloroacetone	0.38	0.0253	0.019
532-27-4	a-Chloroacetophenone	0.32	0.021	0.016
79-04-9	Chloroacetyl chloride	0.2	0.013	0.01
108-90-7	Chlorobenzene	350	23.3	17.5
510-15-6	Chlorobenzilate (PL1)	---	0.047	0.035
2698-41-1	O-Chlorobenzylidene malononitrile (CL)	0.4	0.0027	0.03
126-99-8	2-Chloro-1,3-butadiene, see B-Chloroprene			
107-07-3	2-Chloroethanol, see Ethylene chlorohydrin			
600-25-9	1-Chloro-1-nitro propane	10	0.667	0.5
95-57-8	2-Chlorophenol (and all isomers) (ID)	---	0.033	0.025
76-06-2	Chloropicrin	0.7	0.047	0.037
126-99-8	B-chloroprene	36	2.4	1.8
2039-87-4	o-Chlorostyrene	285	19	14.25
95-49-8	o-Chlorotoluene	250	16.7	12.5
1929-82-4	2-Chloro-6-(tri-chloromethyl) pyridine, see Nitrapyrin			
2921-88-2	Chlorpyrifos	0.2	0.013	0.01
7440-47-3	Chromium metal - Including:	0.5	0.033	0.025
7440-47-3	Chromium (II) compounds, as Cr	0.5	0.033	0.025
7440-47-3	Chromium (III) compounds, as Cr	0.5	0.033	0.025
2971-90-6	Clopidol	10	0.667	0.5
NA	Coal dust (<5% silica)	2	0.133	0.1
10210-68-1	Cobalt carbonyl as Co	0.1	0.007	0.005
16842-03-8	Cobalt hydrocarbonyl as Co	0.1	0.007	0.005
7440-48-4	Cobalt metal, dust, and fume	0.05	0.0033	0.0025
7440-50-8	Copper:			
7440-50-8	Fume	0.2	0.013	0.01
7440-50-8	Dusts & mists, as Cu	1	0.067	0.05
95-48-7	o-Cresol	22	1.47	1.1
108-39-4	m-Cresol	22	1.47	1.1
106-44-5	p-Cresol	22	1.47	1.1
1319-77-3	Cresols/Cresylic Acid (isomers and mixtures)	22	1.47	1.1
123-73-9	Crotonaldehyde	5.7	0.38	0.285
299-86-5	Cruformate	5	0.333	0.25
98-82-8	Cumene	245	16.3	12.25

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
420-04-2	Cyanamide	2	0.133	0.1
592-01-8	Cyanide and compounds as CN	5	0.333	0.25
110-82-7	Cyclohexane	1050	70	52.5
108-93-0	Cyclohexanol	200	13.3	10
108-94-1	Cyclohexanone	100	6.67	5
110-83-8	Cyclohexene	1015	67.7	50.75
108-91-8	Cyclohexylamine	41	2.73	2.05
121-82-4	Cyclonite	1.5	0.1	0.075
542-92-7	Cyclopentadiene	200	13.3	10
287-92-3	Cyclopentane	1720	114.667	86
94-75-7	2,4-D	10	0.667	0.5
17702-41-9	Decaborane	0.3	0.02	0.015
8065-48-3	Demeton	0.1	0.007	0.005
123-42-2	Diacetone alcohol	240	16	12
39393-37-8	Dialkyl phthalate (ID)	---	16.4	2.46
107-15-3	1,2-Diaminoethane, See Ethylenediamine			
333-41-5	Diazinon	0.1	0.007	0.005
334-88-3	Diazomethane	0.34	0.023	0.017
19287-45-7	Diborane	0.1	0.007	0.005
102-81-8	2-N-Dibutylamino ethanol	14	0.933	0.7
2528-36-1	Dibutyl phenyl phosphate	3.5	0.233	0.175
107-66-4	Dibutyl phosphate	8.6	0.573	0.43
84-74-2	Dibutyl phthalate	5	0.333	0.25
7572-29-4	Dichloroacetylene	0.39	0.0026	0.0195
95-50-1	o-Dichlorobenzene	300	20	15
106-46-7	1,4-Dichlorobenzene	450	30	22.5
118-52-5	1,3-Dichloro-5, 5-dimethyl hydantoin	0.2	0.013	0.025
75-34-3	Dichloroethane	405	27	20.25
540-59-0	1,2-Dichloroethylene	790	52.7	39.5
111-44-4	Dichloroethyl ether	30	2	1.5
75-43-4	Dichlorofluoromethane	40	2.67	2
594-72-9	1, 1-Dichloro-1-nitroethane	10	0.667	0.5
78-87-5	1,2-Dichloropropane, see Propylene dichloride			
75-99-0	2,2-Dichloropropionic acid	6	0.4	0.3

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
62-73-7	Dichlorvos	1	0.067	0.05
141-66-2	Dicrotophos	0.25	0.017	0.125
77-73-6	Dicyclopentadiene	30	2	1.5
102-54-5	Dicyclopentadienyl iron	10	0.667	0.5
111-42-2	Diethanolamine	15	1	0.75
109-89-7	Diethylamine	30	2	1.5
100-37-8	2-Diethylamino-ethanol	50	3.33	2.5
111-40-0	Diethylene triamine	4	0.267	0.2
60-29-7	Diethyl ether, see Ethyl ether			
96-22-0	Diethyl Ketone	705	47	35.25
84-66-2	Diethyl phthalate	5	0.333	0.25
2238-07-5	Diglycidyl ether (DGE)	0.53	0.035	0.0265
123-31-9	Dihydroxybenzene, see Hydroquinone			
108-83-8	Diisobutyl ketone	145	9.67	7.25
108-18-9	Diisopropylamine	20	1.33	1
127-19-5	Dimethyl acetamide	35	2.33	1.75
124-40-3	Dimethylamine	9.2	0.613	0.46
60-11-7	Dimethyl aminoazo-benzene (NY)	---	0.002	0.0003
1300-73-8	Dimethylamino-benzene, see Xylidine			
121-69-7	Dimethylaniline (N,N-Dimethylaniline)	25	1.67	1.25
1330-20-7	Dimethylbenzene, see Xylene			
300-76-5	Dimethyl-1,2-dibromo-2-dichloroethyl phosphate, see Naled			
68-12-2	Dimethylformamide	30	2	1.5
108-83-8	2,6-Dimethyl-4-heptanone, see Diisobutyl ketone			
131-11-3	Dimethylphthalate	5	0.333	0.25
148-01-6	Dinitolmide	5	0.333	0.25
528-29-0	Dinitrobenzene	1	0.067	0.05
99-65-0	m (or) 1,3-Dinitrobenzene	1	0.067	0.05
100-25-4	p (or) 1,4-Dinitrobenzene	1	0.067	0.05
534-52-1	Dinitro-o-cresol	0.2	0.013	0.01
148-01-6	3,5-Dinitro-o-toluamide, see Dinitolmide			
117-84-0	N-Dioctyl Phthalate	5	0.333	0.25
78-34-2	Dioxathion	0.2	0.013	0.01

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
92-52-4	Diphenyl, see Biphenyl			
122-39-4	Diphenylamine	10	0.667	0.5
	Diphenyl methane diisocyanate, see Methylenediphenyl diisocyanate			
34590-94-8	Dipropylene glycol methyl ether	600	40	30
123-19-3	Dipropyl ketone	235	15.7	11.75
85-00-7	Diquat	0.5	0.033	0.01
97-77-8	Disulfiram	2	0.133	0.1
298-04-4	Disulfoton	0.1	0.007	0.005
128-37-0	2,6-Ditert. butyl-p-cresol	10	0.667	0.5
330-54-1	Diuron	10	0.667	0.5
108-57-6	Divinyl benzene	50	3.33	2.5
1302-74-5	Emery (corundum) total dust (> 1% silica)	10	0.667	0.5
115-29-7	Endosulfan	0.1	0.007	0.005
72-20-8	Endrin	0.1	0.007	0.005
13838-16-9	Enflurane	566	37.7	28.3
1395-21-7	Enzymes, see Subtilisins			
2104-64-5	EPN (Ethoxy-4-Nitro-phenoxy phenylphosphine)	0.5	0.033	0.025
106-88-7	1,2-Epoxybutane (MI)	---	0.8	0.6
75-56-9	1,2-Epoxypropane, see Propylene oxide			
556-52-5	2,3-Epoxy-1-propanol, see Glycidol			
75-08-1	Ethanethiol, see Ethyl mercaptan			
141-43-5	Ethanolamine	8	0.533	0.4
563-12-2	Ethion	0.4	0.027	0.02
110-80-5	2-Ethoxyethanol	19	1.27	0.95
111-15-9	2-Ethoxyethyl acetate (EGEEA)	27	1.8	1.35
141-78-6	Ethyl acetate	1400	93.3	70
64-17-5	Ethyl alcohol	1880	125	94
75-04-7	Ethylamine	18	1.2	0.9
541-85-5	Ethyl amyl ketone	130	8.67	6.5
100-41-4	Ethyl benzene	435	29	21.75
74-96-4	Ethyl bromide	22	1.47	1.1
106-35-4	Ethyl butyl ketone	230	15.3	11.5
51-79-6	Ethyl carbamate (Urethane) (WA)	---	0.002	0.0015

CAS NUMBER	SUBSTANCE	OEL (mg/m ³)	EL (lb/hr)	AAC (mg/m ³)
75-00-3	Ethyl chloride	2640	176	132
107-07-3	Ethylene chlorohydrin	3	0.2	0.15
107-15-3	Ethylenediamine	25	1.67	1.25
107-06-2	Ethylene dichloride	40	2.667	2
107-21-1	Ethylene glycol vapor (CL)	127	0.846	6.35
628-96-6	Ethylene glycol denigrate	0.31	0.021	0.016
110-49-6	Ethylene glycol methyl ether acetate, see 2-Methoxyethyl acetate			
96-45-7	Ethylene thiourea (PL2)	---	0.047	0.035
109-94-4	Ethyl formate	300	20	15
16219-75-3	Ethylidene norbornene (CL)	25	0.167	1.25
75-08-1	Ethyl mercaptan	1	0.067	0.05
100-74-3	N-Ethylmorpholine	23	1.53	1.15
78-10-4	Ethyl silicate	85	5.67	4.25
22224-92-6	Fenamiphos	0.1	0.007	0.005
115-90-2	Fensulfothion	0.1	0.007	0.005
55-38-9	Fenthion	0.2	0.013	0.01
14484-64-1	Ferbam	10	0.667	0.5
12604-58-9	Ferrovandium dust	1	0.067	0.05
NA	Fibrous glass dust	10	0.667	0.5
NA	Fine Mineral Fibers - Including: mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less. (ID)	--	0.661	0.5
NA	Fluorides, as F	2.5	0.167	0.125
7782-41-4	Fluorine	2	0.133	0.1
944-22-9	Fonofos	0.1	0.007	0.005
75-12-7	Formamide	30	2	1.5
64-18-6	Formic acid	9.4	0.627	0.47
98-01-1	Furfural	8	0.533	0.4
98-00-0	Furfuryl alcohol	40	2.67	2
7782-65-2	Germanium tetrahydride	0.6	0.04	0.03
NA	Glass, Fibrous or dust, see Fibrous glass dust			
111-30-8	Glutaraldehyde (CL)	0.82	0.0047	0.041
556-52-5	Glycidol	75	5	3.75

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
110-80-5	Glycol monoethyl ether, see 2-Ethoxyethanol			
7440-58-6	Hafnium	0.5	0.033	0.025
110-43-0	2-Heptanone, see Methyl n-amyl ketone			
106-35-4	3-Heptanone, see Ethyl butyl ketone			
151-67-7	Halothane	404	26.9	20.2
142-82-5	Heptane (n-Heptane)	1640	109	82
77-47-4	Hexachlorocyclopentadiene	0.1	0.007	0.005
1335-87-1	Hexachloronaphthalene	0.2	0.013	0.010
684-16-2	Hexafluoroacetone	0.7	0.047	0.035
822-06-0	Hexamethylene diisocyanate	0.03	0.002	0.0015
680-31-9	Hexamethylphosphoramide (WA)	---	0.002	0.0015
110-54-3	Hexane (n-Hexane)	180	12	9
591-78-6	2-Hexanone, see Methyl n-butyl ketone			
108-10-1	Hexone, see Methyl isobutyl ketone			
108-84-9	sec-Hexyl acetate	300	20	15
107-41-5	Hexylene glycol (CL)	121	0.806	6.05
37275-59-5	Hydrogenated terphenyls	5	0.333	0.25
10035-10-6	Hydrogen bromide (CL)	10	0.0667	0.5
7647-01-0	Hydrogen chloride (CL)	7.5	0.05	0.375
7722-84-1	Hydrogen peroxide	1.5	0.1	0.075
7783-06-4	Hydrogen sulfide	14	0.933	0.7
123-31-9	Hydroquinone	2	0.133	0.1
123-42-2	4-Hydroxy-4-Methyl-2-pentanone, see Diacetone alcohol			
996-61-1	2-Hydroxypropyl acrylate	3	0.2	0.15
95-13-6	Indene	45	3	2.25
7440-74-6	Indium & compounds as In	0.1	0.007	0.005
7553-56-2	Iodine (CL)	0.1	0.0067	0.005
75-47-8	Iodoform	10	0.667	0.5
1309-37-1	Iron oxide fume (Fe ₂ O ₃) as Fe	5	0.333	0.25
13463-40-6	Iron pentacarbonyl as Fe	0.8	0.053	0.04
7439-89-6	Iron salts, soluble, as Fe	1	0.067	0.05
123-92-2	Isoamyl acetate	525	35	26.25
123-51-3	Isoamyl alcohol	360	24	18
110-19-0	Isobutyl acetate	700	46.7	35

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
78-83-1	Isobutyl alcohol	150	10	6
26952-21-6	Isooctyl alcohol	270	18	13.5
78-59-1	Isophorone	28	1.867	1.4
4098-71-9	Isophorone diisocyanate	0.09	0.006	0.0045
109-59-1	Isopropoxyethanol	105	7	5.25
108-21-4	Isopropyl Acetate	1040	69.3	52
67-63-0	Isopropyl alcohol	980	65.3	49
75-31-0	Isopropylamine	12	0.8	0.6
643-28-7	N-Isopropylaniline	10	0.667	0.5
108-20-3	Isopropyl ether	1040	69.3	52
4016-14-2	Isopropyl glycidyl ether (IGE)	240	16	12
1332-58-7	Kaolin (respirable dust)	2	0.133	0.1
463-51-4	Ketene	0.9	0.06	0.045
7580-67-8	Lithium hydride	0.025	0.002	0.00125
546-93-0	Magnesite	10	0.667	0.5
1309-48-4	Magnesium oxide fume	10	0.667	0.5
121-75-5	Malathion	10	0.667	0.5
108-31-6	Maleic anhydride	1	0.067	0.05
7439-96-5	Manganese as Mn Including:			
7439-96-5	Dust & compounds	5	0.333	0.25
7439-96-5	Fume	1	0.067	0.05
101-68-8	MDI, see Methylene diphenyl isocyanate			
NA	Mercaptans not otherwise listed (ID)	---	0.033	0.025
7439-97-6	Mercury Including:			
NA	Mercury (Aryl & inorganic compounds as Hg)	0.1	0.007	0.005
NA	Mercury (Alkyl compounds as Hg)	0.01	0.001	0.0005
NA	Mercury (vapors except Alkyl as Hg)	0.05	0.003	0.0025
141-79-7	Mesityl oxide	60	4	3
79-41-4	Methacrylic acid	70	4.67	3.5
74-93-1	Methanethiol, see Methyl mercaptan			
67-56-1	Methanol	260	17.3	13
16752-77-5	Methomyl	2.5	0.17	0.125
72-43-5	Methoxychlor	10	0.667	0.5
109-86-4	2-Methoxyethanol	16	1.07	0.8

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
110-49-6	2-Methoxyethyl acetate	24	1.6	1.2
150-76-5	4-Methoxyphenol	5	0.333	0.25
108-65-6	1-methoxy-2-proanol acetate (ID)	n/a	24	3.6
79-20-9	Methyl acetate	610	40.7	30.5
74-99-7	Methyl acetylene	1640	109	82
NA	Methyl acetylene-propadiene mix (MAPP)	1640	109	82
96-33-3	Methyl acrylate	35	2.33	1.75
126-98-7	Methylacrylonitrile	3	0.2	0.15
74-89-5	Methylamine	12	0.8	0.6
108-11-2	Methyl emyl alcohol, see Methyl isobutyl carbinol			
110-43-0	Methyl n-amyl ketone	235	15.7	11.75
100-61-8	N-Methyl aniline	2	0.133	0.1
74-83-9	Methyl bromide	19	1.27	0.95
591-78-6	Methyl n-butyl ketone	20	1.33	1
109-86-4	Methyl cellosolve (2-Methoxyethanol)	15.6	1.04	0.78
74-87-3	Methyl chloride	103	6.867	5.15
71-55-6	Methyl chloroform	1910	127	95.5
137-05-3	Methyl 2-cyano-acrylate	8	0.533	0.4
25639-42-3	Methylcyclohexanol	235	15.7	11.75
583-60-8	o-Methylcyclohexanone	230	15.3	11.5
8022-00-2	Methyl demeton	0.5	0.033	0.01
101-68-8	Methylenediphenyl diisocyanate (MDI)	0.05	0.003	0.0025
5124-30-1	Methylene bis (4-cyclohexyl isocyanate)	0.11	0.007	0.0055
78-93-3	Methyl ethyl ketone (MEK)	590	39.3	29.5
1338-23-4	Methyl ethyl ketone peroxide (CL)	1.5	0.01	0.0075
107-31-3	Methyl formate	246	16.4	12.3
541-85-5	5-Methyl-3-heptanone, see Ethyl amyl ketone			
110-12-3	Methyl isoamyl ketone	240	16	12
108-11-2	Methyl isobutyl carbinol	104	6.93	5.2
108-10-1	Methyl isobutyl ketone	205	13.7	10.25
624-83-9	Methyl isocyanate	0.05	0.003	0.0025
563-80-4	Methyl isopropyl ketone	705	47	35.25
74-93-1	Methyl mercaptan	0.5	0.033	0.025
80-62-6	Methyl methacrylate	410	27.3	20.5

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
298-00-0	Methyl parathion	0.2	0.013	0.01
107-87-9	Methyl propyl ketone	700	46.7	35
681-84-5	Methyl silicate	6	0.4	0.3
98-83-9	a-Methyl styrene	240	16	10.20
109-87-5	Methylal (dimethoxymethane)	3110	207	155.5
108-87-2	Methylcyclohexane	1610	107	80.5
21087-64-9	Metribuzin	5	0.333	0.25
7786-34-7	Mevinphos	0.1	0.007	0.005
12001-26-2	Mica (Respirable dust)	3	0.2	0.15
NA	Mineral Wool Fiber (no asbestos)	10	0.667	0.5
7439-98-7	Molybdenum as Mo - Including:			
NA	Soluble compounds	5	0.333	0.25
NA	Insoluble compounds	10	0.667	0.5
108-90-7	Monochlorobenzene, see Chlorobenzene			
6923-22-4	Monocrotophos	0.25	0.017	0.0125
110-91-8	Morpholine	70	4.67	0.35
300-76-5	Naled	3	0.2	0.15
91-20-3	Naphthalene	50	3.33	2.5
54-11-5	Nicotine	0.5	0.033	0.025
1929-82-4	Nitrapyrin	10	0.667	0.5
7697-37-2	Nitric acid	5	0.333	0.25
100-01-6	p-Nitroaniline	3	0.2	0.15
98-95-3	Nitrobenzene	5	0.333	0.25
100-00-5	p-Nitrochlorobenzene	3	0.2	0.15
79-24-3	Nitroethane	310	20.7	15.5
7783-54-2	Nitrogen trifluoride	29	1.93	1.45
55-63-0	Nitroglycerin	0.46	0.031	0.023
75-52-5	Nitromethane	50	3.333	2.5
108-03-2	1-Nitropropane	90	6	4.5
99-08-1	m (or) 3-Nitrotoluene	11	0.733	0.55
88-72-2	o (or) 2-Nitrotoluene	11	0.733	0.55
99-99-0	p (or) 4-Nitrotoluene	11	0.733	0.55
76-06-2	Nitrotrichloromethane, see Chloropicrin			
10024-97-2	Nitrous oxide	90	6	4.5

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
111-84-2	Nonane	1050	70	52.5
2234-13-1	Octachloronaphthalene	0.1	0.007	0.005
111-65-9	Octane	1400	93.3	70
NA	Oil mist, mineral	5	0.333	0.25
20816-12-0	Osmium tetroxide as Os	0.002	0.0001	0.0001
144-62-7	Oxalic acid	1	0.067	0.05
7783-41-7	Oxygen difluoride (CL)	0.11	0.0007	0.0005
8002-74-2	Paraffin wax fume	2	0.133	0.1
4685-14-7	Paraquat	0.1	0.007	0.007
NA	Paraquat, all Compounds	0.1	0.007	0.005
56-38-2	Parathion	0.1	0.007	0.005
19624-22-7	Pentaborane	0.01	0.001	0.0005
1321-64-8	Pentachloronaphthalene	0.5	0.033	0.025
82-68-8	Pentachloronitrobenzene	0.5	0.0333	0.025
87-86-5	Pentachlorophenol	0.5	0.033	0.025
109-66-0	Pentane	1770	118	88.5
107-87-9	2-Pentanone, see Methyl propyl ketone			
594-42-3	Perchloromethyl mercaptan	0.8	0.053	0.04
7616-94-6	Perchloryl Fluoride	13	0.867	0.65
93763-70-3	Perlite	10	0.667	0.5
532-27-4	Phenacyl chloride, see a-Chloroacetophenone			
108-95-2	Phenol	19	1.27	0.95
92-84-2	Phenothiazine	5	0.333	0.25
108-45-2	m-Phenylenediamine	0.1	0.0067	0.005
106-50-3	p-Phenylenediamine	0.1	0.007	0.005
101-84-8	Phenyl ether, vapor	7	0.467	0.035
122-60-1	Phenyl glycidyl ether (PGE)	6	0.4	0.3
108-98-5	Phenyl mercaptan	2	0.133	0.1
638-21-1	Phenylphosphine (CL)	0.25	0.0017	0.00125
298-02-2	Phorate	0.05	0.003	0.001
7786-34-7	Phosdrin, see Mevinphos			
75-44-5	Phosgene	0.4	0.027	0.02
7803-51-2	Phosphine	0.4	0.027	0.02
7664-38-2	Phosphoric acid	1	0.067	0.05

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
7723-14-0	Phosphorus	0.1	0.007	0.005
10025-87-3	Phosphorus oxychloride	0.6	0.04	0.030
10026-13-8	Phosphorus penta-chloride	1	0.067	0.05
1313-80-3	Phosphorus penta-sulfide	1	0.067	0.05
1314-56-3	Phosphorus pentoxide (ID)	--	0.067	0.05
7719-12-2	Phosphorus trichloride	1.5	0.1	0.075
85-44-9	Phthalic anhydride	6	0.4	0.3
626-17-5	m-Phthalodinitrile	5	0.333	0.25
1918-02-1	Picloram	10	0.667	0.5
88-89-1	Picric acid	0.1	0.006	0.005
83-26-1	Pindone	0.1	0.007	0.005
142-64-3	Piperazine dihydro-chloride	5	0.333	0.25
83-26-1	2-Pivaloyl-1,3-indandione, see Pindone			
7440-06-4	Platinum - Including:			
7440-06-4	Metal	1	0.067	0.05
NA	Soluble salts, as Pt	0.002	0.0001	0.0001
65997-15-1	Portland cement	10	0.667	0.5
1310-58-3	Potassium hydroxide	2	0.133	0.1
107-19-7	Propargyl alcohol	2.3	0.153	0.115
123-38-6	Propionaldehyde (LA)	0.43	0.0287	0.0215
79-09-4	Propionic acid	30	2	1.5
114-26-1	Propoxur (Baygon)	0.5	0.033	0.025
109-60-4	n-Propyl acetate	840	56	42
71-23-8	Propyl alcohol	500	33.3	25
78-87-5	Propylene dichloride	347	23.133	17.35
6423-43-4	Propylene glycol dinitrate	0.34	0.023	0.017
107-98-2	Propylene glycol monomethyl ether	360	24	18
75-56-9	Propylene oxide	48	3.2	2.4
627-13-4	n-Propyl nitrate	105	7	5.25
8003-34-7	Pyrethrum	5	0.333	0.25
110-86-1	Pyridine	15	1	0.75
120-80-9	Pyrocatechol, see Catechol			
106-51-4	Quinone	0.4	0.027	0.02
121-84-4	RDX, see Cyclonite			

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
NA	Refractory Ceramic Fibers (see entry for specific content of emissions, ex: silica)			
108-46-3	Resorcinol	45	3	2.25
7440-16-6	Rhodium - Including:			
7440-16-6	Metal	1	0.067	0.05
NA	Insoluble compounds, as Rh	1	0.067	0.05
NA	Soluble compounds, as Rh	0.01	0.001	0.0005
299-84-3	Ronnel	10	0.667	0.5
83-79-4	Rotenone (commercial)	5	0.333	0.25
8030-30-6	Rubber solvent (Naphtha)	1590	106	79.5
14167-96-1	Salcoine as CO	0.1	0.007	0.005
7782-49-2	Selenium	0.2	0.013	0.010
NA	Selenium and compounds as Se	0.2	0.013	0.01
136-78-7	Sesone	10	0.667	0.5
7803-62-5	Silane, see silicon tectrahydride			
NA	Silica - amorphous - Including:			
61790-53-2	Diatomaceous earth (uncalcined)	10	0.667	0.5
112926-00-8	Precipitated silica	10	0.667	0.5
112926-00-8	Silica gel	10	0.667	0.5
NA	Silica, crystalline - Including:			
14464-46-1	Cristobalite	0.05	0.0033	0.0025
14808-60-7	quartz	0.1	0.0067	0.005
60676-86-0	silica, fused	0.1	0.0067	0.005
15468-32-3	tridymite	0.05	0.0033	0.0025
1317-95-9	Tripoli	0.1	0.0067	0.005
7440-21-3	Silicon	10	0.667	0.5
409-21-2	Silicon carbide	10	0.667	0.5
7803-62-5	Silicon tetrahydride	7	0.467	0.35
7440-22-4	Silver - Including			
7440-22-4	Metal	0.1	0.007	0.005
7440-22-4	Soluble compounds, as Ag	0.01	0.001	0.005
26628-22-8	Sodium azide (CL)	0.3	0.002	0.0015
7631-90-5	Sodium bisulfite	5	0.333	0.25

CAS NUMBER	SUBSTANCE	OEL (mg/m ³)	EL (lb/hr)	AAC (mg/m ³)
136-78-7	Sodium 2,4-dichloro-phenoxyethyl sulfate, see Sesone			
62-74-8	Sodium fluoroacetate	0.05	0.003	0.0025
1310-73-2	Sodium hydroxide	2	0.133	0.1
7681-57-4	Sodium metabisulfite	5	0.333	0.25
NA	Stearates (not including toxic metals)	10	0.667	0.5
7803-52-3	Stibine	0.5	0.033	0.025
8052-41-3	Stoddard solvent	525	35	26.25
57-24-9	Strychnine	0.15	0.01	0.0075
60-41-3	Strychnine sulfate as strichnine	0.15	0.01	0.01
100-42-5	Styrene monomer (ID)	--	6.67	1
1395-21-7	Subtilisins (Proteolytic enzymes as 100% pure crystalline enzyme)	0.00006	4.OE-07	3.0E-7
3689-24-5	Sulfotep	0.2	0.013	0.01
7664-93-9	Sulfuric acid	1	0.067	0.05
10025-67-9	Sulfur monochloride (CL)	6	0.04	0.03
5714-22-7	Sulfur pentafluoride (CL)	0.1	0.0007	0.0005
7783-60-0	Sulfur tetrafluoride (CL)	0.4	0.0027	0.002
2699-79-8	Sulfuryl fluoride	20	1.33	1
35400-43-2	Sulprofos	1	0.067	0.05
8065-48-3	Systox, see Demeton			
93-76-5	2,4,5-Trichlorophen-oxyacetic acid (2,4,5,-T)	10	0.667	0.05
7440-25-7	Tantalum	5	0.333	0.25
3689-24-5	TEDP, see Sulfotep			
13494-80-9	Tellurium & Compounds as Te	0.1	0.007	0.005
7783-80-4	Tellurium hexafluoride as Te	0.2	0.013	0.01
3383-96-8	Temephos	10	0.667	0.5
107-49-3	TEPP (Tetraethyl-pyrophosphate)	0.05	0.003	0.0025
26140-60-3	Terphenyls	4.7	0.313	0.235
1335-88-2	Tetrachloronaphthalene	2	0.133	0.10
78-00-2	Tetraethyl Lead	0.1	0.007	0.005
597-64-8	Tetraethyltin as organic tin	0.1	0.007	0.005
109-99-9	Tetrahydrofuran	590	39.3	29.5
75-74-1	Tetramethyl lead, as Pb	0.15	0.01	0.0075
3333-52-6	Tetramethyl succinonitrile	3	0.2	0.15

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
509-14-8	Tetranitromethane	8	0.533	0.4
7722-88-5	Tetrasodium pyrophosphate	5	0.333	0.25
479-45-8	Tetryl	1.5	0.1	0.075
7440-28-0	Thallium, soluble Compounds, as Tl	0.1	0.007	0.005
96-69-5	4,4-Thiobis (6 tert, butyl-m-cresol)	10	0.667	0.5
68-11-1	Thioglycolic acid	4	0.267	0.2
7719-09-7	Thionyl chloride (CL)	4.9	0.0327	0.245
137-26-8	Thiram	5	0.333	0.25
7440-31-5	Tin - Including:			
7440-31-5	Metal	2	0.133	0.1
NA	Oxide & inorganic compounds, except SnH4, as Sn	2	0.133	0.1
NA	Organic compounds as Sn	0.1	0.007	0.005
108-88-3	Toluene (toluol)	375	25	18.75
584-84-9	Toluene-2,4-di-isocyanate (TDI)	0.04	0.003	0.002
10-41-54	p-Toluenesulfonic acid (ID)	n/a	0.067	0.05
126-73-8	Tributyl phosphate	2.2	0.147	0.11
76-03-9	Trichloroacetic acid	7	0.467	0.35
120-82-1	1,2,4-Trichlorobenzene (CL)	37	2.47	1.85
79-01-6	Trichloroethylene	269	17.93	13.45
1321-65-9	Trichloronaphthalene	5	0.333	0.25
76-06-2	Trichloronitromethane, See Chloropicrin			
95-95-4	2,4,5-Trichlorophenol (MA)	---	---	0.0016
96-18-4	1,2,3-Trichloropropane	60	4	3
121-44-8	Triethylamine	4.1	0.27	0.2
1582-09-8	Trifluralin (PL3)	---	7.7	1.15
552-30-7	Trimellitic anhydride	0.04	0.003	0.002
75-50-3	Trimethylamine	12	0.8	0.6
25551-13-7	Trimethyl benzene (mixed and individual isomers)	123	8.2	6.15
540-84-1	2,2,4-Trimethyl-pentane	350	23.3	17.5
121-45-9	Trimethyl phosphite	10	0.667	0.5
479-45-8	2,4,6-Trinitrophenyl-methylnitramine, see Tetryl			
78-30-8	Triorthocresyl phosphate	0.1	0.007	0.005
603-34-9	Triphenyl amine	5	0.333	0.25
115-86-6	Triphenyl phosphate	3	0.2	0.15

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
7440-33-7	Tungsten - Including:			
NA	Insoluble compounds	5	0.333	0.25
NA	Soluble compounds	1	0.067	0.05
8006-64-2	Turpentine	560	37.3	28
7440-61-1	Uranium (natural) Soluble & insoluble compounds as U	0.2	0.013	0.01
110-62-3	n-Valeraldehyde	175	11.7	8.75
1314-62-1	Vanadium, as V2O5 Respirable Dust & fume	0.05	0.003	0.0025
108-05-4	Vinyl acetate (ID)	0.2		
25013-15-4	Vinyl toluene	240	16	12
8032-32-4	VM & P Naphtha	1370	91.3	68.5
81-81-2	Warfarin	0.1	0.007	0.005
1330-20-7	Xylene (o-, m-, p-isomers)	435	29	21.75
1477-55-0	m-Xylene a, a-diamine (CL)	0.1	0.0007	0.0005
1300-73-8	Xylidine	2.5	1.67	0.125
7440-65-5	Yttrium (Metal and compounds as Y)	1	0.067	0.05
7440-66-6	Zinc metal (ID)	--	0.667	0.5
7646-85-7	Zinc chloride fume	1	0.067	0.05
1314-13-2	Zinc oxide fume	5	0.333	0.05
1314-13-2	Zinc oxide dust	10	0.667	0.5
7440-67-7	Zirconium compounds as Zr	5	0.333	0.25

(6-30-95)()

IDAPA 58 - DEPARTMENT OF ENVIRONMENTAL QUALITY
58.01.01 - RULES FOR THE CONTROL OF AIR POLLUTION IN IDAHO
DOCKET NO. 58-0101-1002
NOTICE OF RULEMAKING - ADOPTION OF PENDING RULE

EFFECTIVE DATE: This rule has been adopted by the Board of Environmental Quality (Board) and is now pending review by the 2011 Idaho State Legislature for final approval. The pending rule will become final and effective immediately upon the adjournment *sine die* of the First Regular Session of the Sixty-first Idaho Legislature unless prior to that date the rule is rejected in whole or in part by concurrent resolution in accordance with Idaho Code Sections 67-5224 and 67-5291.

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 citations to the federal regulations incorporated by reference as mandated by the U.S. Environmental Protection Agency (EPA) for approval of the state'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.

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 4, 2010, Vol. 10-8, pages 139 through 147](#). DEQ received no public comments, and the rule has been adopted as initially proposed. The Rulemaking and Public Comment Summary can be obtained at http://www.deq.idaho.gov/rules/air/58_0101_1002_pending.cfm or by contacting the undersigned.

IDAHO CODE SECTION 39-107D STATEMENT: This 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 when the pending rule will become effective: Not applicable.

ASSISTANCE ON TECHNICAL QUESTIONS: For assistance on technical questions concerning this rulemaking, contact Martin Bauer at (208) 373-0440 or martin.bauer@deq.idaho.gov.

Dated this 7th day of October, 2010.

Paula J. Wilson, Hearing Coordinator
Department of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706-1255
(208)373-0418/Fax No. (208)373-0481
Paula.wilson@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 citations to the federal regulations incorporated by reference as mandated by the U.S. Environmental Protection Agency (EPA) for approval of the state'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.

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

Wednesday, September 8, 2010 at 3:30 p.m.

**Department of Environmental Quality
Conference Room B
1410 N. Hilton, Boise, Idaho**

The hearing site(s) will be accessible to persons with disabilities. Requests for accommodation must be made no later than five (5) days prior to the hearing. For arrangements, contact the undersigned at (208) 373-0418.

DESCRIPTIVE SUMMARY: This rulemaking is necessary to ensure that the Rules for the Control of Air Pollution in Idaho are consistent with federal regulations. This proposed rule updates citations to federal regulations incorporated by reference at Sections 008 and 107 to include those revised as of July 1, 2010. In addition, this proposed rule revises Section 577, Ambient Air Quality Standards, and Section 581, Prevention of Significant Deterioration Increments, by deleting rule text that has become obsolete or unnecessary due to the update of federal regulations incorporated by reference in Section 107.

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.

After consideration of public comments, DEQ intends to present the final proposal to the Board of Environmental Quality at the October 2010 Board meeting for adoption as a pending rule. The rule is expected to be final and effective upon adjournment of the 2011 legislative session if adopted by the Board and approved by the Legislature.

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:

Incorporation by reference is necessary to ensure that the state rules are consistent with federal regulations. An electronic copy of the federal regulations incorporated by reference can be obtained at <http://www.gpoaccess.gov/ecfr/index.html>.

NEGOTIATED RULEMAKING: Due to the nature of this rulemaking, negotiations were not held.

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 Martin Bauer at (208) 373-0440 or martin.bauer@deq.idaho.gov.

Anyone may submit written comments by mail, fax or e-mail at the address below regarding this proposed rule. DEQ will consider all written comments received by the undersigned on or before September 8, 2010.

DATED this 29th day of June, 2010.

THE FOLLOWING IS THE TEXT OF DOCKET NO. 58-0101-1002

008. DEFINITIONS FOR THE PURPOSES OF SECTIONS 300 THROUGH 386.

- 01. Affected States.** All States: (5-1-94)
- a.** Whose air quality may be affected by the emissions of the Tier I source and that are contiguous to Idaho; or (5-1-94)
- b.** That are within fifty (50) miles of the Tier I source. (5-1-94)
- 02. Allowance.** An authorization allocated to a Phase II source by the EPA to emit during or after a specified calendar year, one (1) ton of sulfur dioxide. (5-1-94)
- 03. Applicable Requirement.** All of the following if approved or promulgated by EPA as they apply to emissions units in a Tier I source (including requirements that have been

promulgated through rulemaking at the time of permit issuance but which have future-effective compliance dates): (5-1-94)

a. Any standard or other requirement provided for in the applicable state implementation plan, including any revisions to that plan that are specified in 40 CFR Parts 52.670 through 52.690. (5-1-94)

b. Any term or condition of any permits to construct issued by the Department pursuant to Sections 200 through 223 or by EPA pursuant to 42 U.S.C. Sections 7401 through 7515; provided that terms or conditions relevant only to toxic air pollutants are not applicable requirements. (4-5-00)

c. Any standard or other requirement under 42 U.S.C. Section 7411 including 40 CFR Part 60; (5-1-94)

d. Any standard or other requirement under 42 U.S.C. Section 7412 including 40 CFR Part 61 and 40 CFR Part 63; (5-1-94)

e. Any standard or other requirement of the acid rain program under 42 U.S.C. Sections 7651 through 7651o; (5-1-94)

f. Any requirements established pursuant to 42 U.S.C. Section 7414(a)(3), 42 U.S.C. Section 7661c(b) or Sections 120 through 128 of these rules; (3-23-98)

g. Any standard or other requirement governing solid waste incineration, under 42 U.S.C. Section 7429; (5-1-94)

h. Any standard or other requirement for consumer and commercial products and tank vessels, under 42 U.S.C. Sections 7511b(e) and (f); and (5-1-94)

i. Any standard or other requirement under 42 U.S.C. Sections 7671 through 7671q including 40 CFR Part 82. (5-1-94)

j. Any ambient air quality standard or increment or visibility requirement provided in 42 U.S.C. Sections 7470 through 7492, but only as applied to temporary sources receiving Tier I operating permits under Section 324. (5-1-94)

04. Designated Representative. A responsible person or official authorized by the owner or operator of a Phase II unit to represent the owner or operator in matters pertaining to the holding, transfer, or disposition of allowances allocated to a Phase II unit, and the submission of and compliance with permits, permit applications, and compliance plans for the Phase II unit. (5-1-94)

05. Draft Permit. The version of a Tier I operating permit that is made available by the Department for public participation and affected State review. (5-1-94)

06. Emergency. For the purposes of Section 332, an emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or

operator, including acts of God, which situation requires immediate corrective action to restore normal operation and that causes the Tier I source to exceed a technology-based emission limitation under the Tier I operating permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. (4-5-00)

07. Final Permit. The version of a Tier I permit issued by the Department that has completed all review procedures required in Sections 364 and 366. (5-1-94)

08. General Permit. A Tier I permit issued pursuant to Section 335. (3-23-98)

09. Insignificant Activity. Those activities that qualify as insignificant in accordance with Section 317. (3-23-98)

10. Major Facility. A facility (as defined in Section 006) is major if the facility meets any of the following criteria: (3-23-98)

a. For hazardous air pollutants: (3-23-98)

i. The facility emits or has the potential to emit ten (10) tons per year (tpy) or more of any hazardous air pollutant, other than radionuclides, which has been listed pursuant to 42 U.S.C. Section 7412(b); provided that emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any oil or gas pipeline compressor or pump station shall not be aggregated with emissions from other similar emission units within the facility. (5-1-94)

ii. The facility emits or has the potential to emit twenty-five (25) tpy or more of any combination of any hazardous air pollutants, other than radionuclides, which have been listed pursuant to 42 U.S.C. 7412(b); provided that emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any oil or gas pipeline compressor or pump station shall not be aggregated with emissions from other similar emission units within the facility. (5-1-94)

b. For non-attainment areas: (3-23-98)

i. The facility is located in a “serious” particulate matter (PM-10) nonattainment area and the facility has the potential to emit seventy (70) tpy or more of PM-10. (5-1-94)

ii. The facility is located in a “serious” carbon monoxide nonattainment area in which stationary sources are significant contributors to carbon monoxide levels and the facility has the potential to emit fifty (50) tpy or more of carbon monoxide. (5-1-94)

iii. The facility is located in an ozone transport region established pursuant to 42 U.S.C. Section 7511c and the facility has the potential to emit fifty (50) tpy or more of volatile organic compounds. (5-1-94)

iv. The facility is located in an ozone nonattainment area and, depending upon the

classification of the nonattainment area, the facility has the potential to emit the following amounts of volatile organic compounds or oxides of nitrogen; provided that oxides of nitrogen shall not be included if the facility has been identified in accordance with 42 U.S.C. Section 7411a(f)(1) or (2) if the area is “marginal” or “moderate,” one hundred (100) tpy or more, if the area is “serious,” fifty (50) tpy or more, if the area is “severe,” twenty-five (25) tpy or more, and if the area is “extreme,” ten (10) tpy or more. (3-23-98)

c. The facility emits or has the potential to emit one hundred (100) tons per year or more of any regulated air pollutant. The fugitive emissions shall not be considered in determining whether the facility is major unless the facility belongs to one (1) of the following categories: (4-11-06)

i. Designated facilities. (3-23-98)

ii. All other source categories regulated by 40 CFR Part 60, 40 CFR Part 61 or 40 CFR Part 63, but only with respect to those air pollutants that have been regulated for that category and only if determined by rule by the Administrator of EPA pursuant to Section 302(j) of the Clean Air Act. (4-5-00)

11. Part 70. Unless specified otherwise in this chapter, all definitions adopted under 40 CFR Part 70, revised as of July 1, 20~~09~~10, are hereby incorporated by reference. (~~3-29-10~~)()

(BREAK IN CONTINUITY OF SECTIONS)

107. INCORPORATIONS BY REFERENCE.

01. General. Unless expressly provided otherwise, any reference in these rules to any document identified in Subsection 107.03 shall constitute 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. (5-1-94)

02. Availability of Referenced Material. Copies of the documents incorporated by reference into these rules are available at the following locations: (5-1-94)

a. All federal publications: U.S. Government Printing Office, <http://www.gpoaccess.gov/ecfr/index.html>; and (~~3-20-04~~)()

b. All documents herein incorporated by reference: (7-1-97)

i. Department of Environmental Quality, 1410 N. Hilton, Boise, Idaho 83706-1255 at (208) 373-0502. (7-1-97)

ii. State Law Library, 451 W. State Street, P.O. Box 83720, Boise, Idaho 83720-0051,
(208) 334-3316. (7-1-97)

03. Documents Incorporated by Reference. The following documents are
incorporated by reference into these rules: (5-1-94)

a. Requirements for Preparation, Adoption, and Submittal of Implementation Plans
~~and Appendix W to Part 51—Guideline on Air Quality Models.~~ 40 CFR Part 51 revised as of July
1, 2009~~10~~. The following portions of 40 CFR Part 51 are expressly excluded from any
incorporation by reference into these rules: (3-29-10)()

i. All sections included in 40 CFR Part 51, Subpart P, Protection of Visibility, except
that 40 CFR 51.301, 51.304(a), 51.307, and 51.308 are incorporated by reference into these rules;
and (3-30-07)

ii. Appendix Y to Part 51, Guidelines for BART Determinations Under the Regional
Haze Rule. (3-30-07)

b. National Primary and Secondary Ambient Air Quality Standards, 40 CFR Part 50,
revised as of July 1, 2009~~10~~. (3-29-10)()

~~**c.** Requirements for Preparation, Adoption, and Submittal of Implementation Plans;
Protection of Visibility, 40 CFR 51.301, 51.304(a), 51.307, and 51.308, revised as of July 1, 2009.
(3-29-10)~~

~~**d.** Approval and Promulgation of Implementation Plans, 40 CFR Part 52 revised as of
July 1, 2009~~10~~. (3-29-10)()~~

~~**e.** Ambient Air Monitoring Reference and Equivalent Methods, 40 CFR Part 53,
revised as of July 1, 2009~~10~~. (3-29-10)()~~

~~**f.** Ambient Air Quality Surveillance, ~~Quality Assurance Requirements for
Prevention of Significant Deterioration (PSD Air Monitoring)~~, 40 CFR Part 58, ~~Appendix B,~~
revised as of July 1, 2009~~10~~. (3-29-10)()~~

~~**g.** Standards of Performance for New Stationary Sources, 40 CFR Part 60, revised as
of July 1, 2009~~10~~. (3-29-10)()~~

~~**h.** National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61,
revised as of July 1, 2009~~10~~. (3-29-10)()~~

~~**i.** National Emission Standards for Hazardous Air Pollutants for Source Categories,
40 CFR Part 63, revised as of July 1, 2009~~10~~. (3-29-10)()~~

~~**j.** Compliance Assurance Monitoring, 40 CFR Part 64, revised as of July 1, 2009~~10~~.
(3-29-10)()~~

~~**k.** Permits, 40 CFR Part 72, revised as of July 1, 2009~~10~~. (3-29-10)()~~

- ~~k.~~ Sulfur Dioxide Allowance System, 40 CFR Part 73, revised as of July 1, 20~~09~~10.
(~~3-29-10~~)()
- ~~l.~~ Protection of Stratospheric Ozone, 40 CFR Part 82, revised as of July 1, 20~~09~~10.
(~~3-29-10~~)()
- ~~m.~~ Clean Air Act, 42 U.S.C. Sections 7401 through 7671g (1997). (3-19-99)
- ~~n.~~ Determining Conformity of Federal Actions to State or Federal Implementation Plans: Conformity to State or Federal Implementation Plans of Transportation Plans, Programs and Projects Developed, Funded or Approved Under Title 23 U.S.C. or the Federal Transit Laws, 40 CFR Part 93, Subpart A, Sections 93.100 through 93.129, revised as of July 1, 20~~09~~10, except that Sections 93.102(c), 93.104(d), 93.104(e)(2), 93.105, 93.109(c)-(f), 93.118(e), 93.119(f)(3), 93.120(a)(2), 93.121(a)(1), and 93.124(b) are expressly omitted from the incorporation by reference.
(~~3-29-10~~)()
- ~~o.~~ The final rule for Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 70 Fed. Reg. 28,606 (May 18, 2005), corrected at 70 Fed. Reg. 51,266 the final rule for Standards of Performance for Electric Utility Steam Generating Units, Industrial-Commercial-Institutional Steam Generating Units, and Small Industrial-Commercial-Institutional Steam Generating Units, only as it applies to coal fired electric steam generating units as defined in 40 CFR 60.24, 71 Fed. Reg. 9865 (February 27, 2006); Revision of December 2000 Clean Air Act Section 112(n) Finding Regarding Electric Utility Steam Generating Units; and Standards of Performance for New and Existing Electric Utility Steam Generating Units: Reconsideration, 71 Fed. Reg. 33,388 (June 9, 2006) are expressly excluded from any incorporation by reference into these rules. (3-30-07)
- ~~p.~~ The final rule for Primary National Ambient Air Quality Standards for Sulfur Dioxide, 75 Fed. Reg. 35,520 through 35,603 (June 22, 2010) to be codified at 40 CFR Part 50 (National Primary and Secondary Ambient Air Quality Standards), 40 CFR Part 53 (Ambient Air Monitoring Reference and Equivalent Methods), and 40 CFR Part 58 (Ambient Air Quality Surveillance). This final rule is effective on August 23, 2010. ()
- ~~q.~~ The final rule for Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, 75 Fed. Reg. 31,514 through 31,608 (June 3, 2010) to be codified at 40 CFR Part 51 (Requirements for Preparation, Adoption, and Submittal of Implementation Plans), 40 CFR Part 52 (Approval and Promulgation of Implementation Plans), and 40 CFR Part 70 (State Operating Permit Programs). This final rule is effective on August 2, 2010. ()

(BREAK IN CONTINUITY OF SECTIONS)

577. AMBIENT AIR QUALITY STANDARDS FOR ~~SPECIFIC AIR POLLUTANTS~~ FLUORIDES.

~~01. **Particulate Matter.** PM-10—particles with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers. (5-1-94)~~

~~a. **Primary and Secondary Standards.** Primary and secondary PM-10 standards are: (5-1-94)~~

~~i. **Annual Standard.** Fifty (50) micrograms per cubic meter, as an annual arithmetic mean—never expected to be exceeded in any calendar year. (5-1-94)~~

~~ii. **Twenty-four (24) Hour Standard.** One hundred fifty (150) micrograms per cubic meter as a maximum twenty-four (24) hour concentration—never expected to be exceeded more than once in any calendar year. (5-1-94)~~

~~b. **Attainment and Expected Exceedance Determination.** For the purpose of determining attainment of the primary and secondary PM-10 standards, expected exceedances shall be determined in accordance with Appendix K of 40 CFR Part 50. (5-1-94)~~

~~02. **Sulfur Oxides (Sulfur Dioxide).** (5-1-94)~~

~~a. **Primary Standards.** Primary sulfur dioxide air quality standards are: (5-1-94)~~

~~i. **Annual Standard.** Eighty (80) micrograms per cubic meter (0.03 ppm), as an annual arithmetic mean—not to be exceeded in any calendar year. (5-1-94)~~

~~ii. **Twenty-four (24) Hour Standard.** Three hundred sixty five (365) micrograms per cubic meter (0.14 ppm), as a maximum twenty-four (24) hour concentration—not to be exceeded more than once in any calendar year. (5-1-94)~~

~~b. **Secondary Standards.** Secondary air quality standards are one thousand three hundred (1,300) micrograms per cubic meter (0.50 ppm), as a maximum three (3) hour concentration—not to be exceeded more than once in any calendar year. (5-1-94)~~

~~03. **Ozone.** Primary and secondary air quality standards are 0.12 ppm (two hundred thirty five (235) micrograms per cubic meter)—maximum one (1) hour concentration not expected to be exceeded more than once per year. (5-1-94)~~

~~04. **Nitrogen Dioxide.** Primary and secondary air quality standards are one hundred (100) micrograms per cubic meter (0.05 ppm)—annual arithmetic mean. (5-1-94)~~

~~05. **Carbon Monoxide.** Primary and secondary air quality standards are: (5-1-94)~~

~~a. **Eight (8) Hour Standard.** Ten (10) milligrams per cubic meter (9 ppm)—maximum eight (8) hour concentration not to be exceeded more than once per year. (5-1-94)~~

~~b. **One (1) Hour Standard.** Forty (40) milligrams per cubic meter (35 ppm)—maximum one (1) hour concentration not to be exceeded more than once per year. (5-1-94)~~

~~06. **Fluorides.** Primary and secondary air quality standards are those concentrations in~~

the ambient air which result in a total fluoride content in vegetation used for feed and forage of no more than: (5-1-94)

a01. Annual Standard. Forty (40) ppm, dry basis -- annual arithmetic mean. (5-1-94)

b02. Bimonthly Standard. Sixty (60) ppm, dry basis -- monthly concentration for two (2) consecutive months. (5-1-94)

e03. Monthly Standard. Eighty (80) ppm, dry basis -- monthly concentration never to be exceeded. (5-1-94)

~~**07. Lead.** Primary and secondary standards for lead and its compounds, measured as elemental lead, are one and one-half (1.5) micrograms per cubic meter (1.5 ug/m³), as a quarterly arithmetic mean -- not to be exceeded in any quarter of any calendar year. (5-1-94)~~

(BREAK IN CONTINUITY OF SECTIONS)

581. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENTS.

The purpose of Section 581 is to establish the allowable degree of deterioration for the areas within the State which have air quality better than the ambient standards. (5-1-94)

01. Incorporated Federal Program Requirements - Class I, II and III Areas. ~~In any area designated as Class I, II, or III, increases in any ambient concentration over the baseline concentration shall be limited to the following:~~ Class I, II, and III area PSD increment requirements contained in 40 CFR 52.21(c) are incorporated by reference into these rules at Section 107. These CFR sections have been codified in the electronic CFR which is available at www.gpoaccess.gov/ecfr.

CLASS AREAS	Maximum Allowable Increase (Micrograms per cubic meter)
CLASS I AREAS	
PM-10:	
Annual arithmetic mean	4
Maximum twenty-four (24) hour average	8
Sulfur dioxide:	
Annual arithmetic mean	2
Maximum twenty-four (24) hour average	5
Maximum three (3) hour average	25
Nitrogen dioxide:	
Annual arithmetic mean	2.5
CLASS II AREAS	

<i>CLASS AREAS</i>	<i>Maximum Allowable Increase (Micrograms per cubic meter)</i>
<i>PM-10:</i>	
<i>Annual arithmetic mean</i>	17
<i>Maximum twenty-four (24) hour average</i>	30
<i>Sulfur dioxide:</i>	
<i>Annual arithmetic mean</i>	20
<i>Maximum twenty-four (24) hour average</i>	91
<i>Maximum three (3) hour average</i>	512
<i>Nitrogen dioxide:</i>	
<i>Annual arithmetic mean</i>	25
<i>CLASS III AREAS</i>	
<i>PM-10:</i>	
<i>Annual arithmetic mean</i>	34
<i>Maximum twenty-four (24) hour average</i>	60
<i>Sulfur dioxide:</i>	
<i>Annual arithmetic mean</i>	40
<i>Maximum twenty-four (24) hour average</i>	182
<i>Maximum three (3) hour average</i>	700
<i>Nitrogen dioxide:</i>	
<i>Annual arithmetic mean</i>	50

(5-3-03)()

02. Exceedances. For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one (1) such period per year at any one (1) location. (5-1-94)

03. Exclusions. The following concentrations shall be excluded in determining compliance with the maximum allowable increases: (5-1-94)

a. Concentrations attributable to the increase in emissions from facilities which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act, over the emissions from such facilities before the effective date of such order or plan; this shall not apply more than five (5) years after the effective date of such order or plan; (5-1-94)

b. Concentrations of PM-10 attributable to the increase in emissions from construction or other temporary emission-related activities of new or modified facilities; (7-1-97)

c. The increase in concentrations attributable to new facilities outside the United

States over the concentrations attributable to existing facilities which are included in the baseline concentration; and (5-1-94)

d. Concentrations attributable to the temporary increase in emissions of sulfur dioxide, nitrogen dioxide, or particulate matter from facilities which are affected by a revision to the SIP approved by the U.S. Environmental Protection Agency; this exclusion shall not exceed two (2) years unless a longer time is approved by the U.S. Environmental Protection Agency, is not renewable, and applies only to revisions which: (5-1-94)

i. Would not affect the applicable pollutant concentrations in a Class I area or an area where an applicable increment is known to be violated and would not cause or contribute to a violation of an ambient air quality standard; and (4-11-06)

ii. Require limitations to be in effect at the end of the approved time period which would ensure that the emissions from facilities affected by the revision would not exceed those concentrations occurring before the revision was approved. (5-1-94)

(BREAK IN CONTINUITY OF SECTIONS)

751. GENERAL RULES.

Any owner or operator of a facility subject to Sections 750 and 751 shall demonstrate compliance with Section 751 by January 1, 1982, in accordance with a compliance schedule, listing increments of progress, which shall be submitted to the Department on or before August 1, 1980. (5-1-94)

01. Emission Limitations -- Phosphate Fertilizer Plants. No person shall allow, suffer, cause or permit the discharge into the atmosphere of total fluoride emissions in gaseous and in particulate form, expressed as fluoride (F-), from the phosphate fertilizer plant sources listed in Subsection 751.03 in excess of thirty hundredths (0.30) pounds of fluoride per ton of P₂O₅ input to the calciner operation, calculated at maximum rated capacity. (5-1-94)

02. Monitoring, Testing, and Reporting Requirements. Compliance with Subsection 751.01 will be adjudged upon the results of the continuing program of fluoride sampling of potential grazing areas and alfalfa growing areas conducted by the Department. Sampling conducted by any person subject to Section 751 may be accepted for determining compliance with Subsection 751.01 if such sampling is conducted at sites approved by the Department in advance of sampling, using analytical procedures appearing in the Procedures Manual for Air Pollution Control, Section I (Source Test Methods) or equivalent methods approved by the Department in advance of sampling. Compliance with Subsection 751.01 shall be demonstrated by testing methods approved in advance by the Department. When approved by the Director in advance of sampling, engineering calculations may be submitted in lieu of emission data. Monitoring and reporting requirements shall be included in operating permits granted to each facility. (5-1-94)

03. Source Specific Permits. To assure compliance with Subsection 751.01, the

Director shall specify methods for calculating total allowable emissions and shall issue source specific permits containing emission limitations for the following sources within phosphate fertilizer plants: (5-1-94)

- a. Calciner operation; and (5-1-94)
- b. Wet phosphoric acid plants; and (5-1-94)
- c. Super phosphoric acid production; and (5-1-94)
- d. Diammonium phosphate plants; and (5-1-94)
- e. Monoammonium phosphate production; and (5-1-94)
- f. Triple super phosphate (mono calcium phosphate) production. (5-1-94)

04. Exemptions. The provisions of Subsections 751.01, 751.02, and 751.03 shall not apply to any phosphate fertilizer facility which produces mono ammonium phosphate exclusively if no animal feed is grown or if no animal grazing occurs or if the animal feed and forage meets the ambient air quality standards for fluorides specified in ~~Subsection 577.06~~ within a three (3) mile radius of such facility. This exemption shall only apply if the owner or operator of the facility, on an annual basis: ~~(7-1-97)~~()

- a. Conducts a fluoride sampling program of potential grazing areas at locations approved in advance of sampling by the Department, using analytical techniques appearing in the Procedures Manual for Air Pollution Control, Section I (Source Test Methods); and (5-1-94)
- b. Submits the results of such sampling program to the Department as soon as they become available. (5-1-94)

IDAPA 58 - DEPARTMENT OF ENVIRONMENTAL QUALITY

58.01.02 - WATER QUALITY STANDARDS

DOCKET NO. 58-0102-1001

NOTICE OF RULEMAKING - ADOPTION OF PENDING RULE

EFFECTIVE DATE: This rule has been adopted by the Board of Environmental Quality (Board) and is now pending review by the 2011 Idaho State Legislature for final approval. The pending rule will become final and effective immediately upon the adjournment sine die of the First Regular Session of the Sixty-first Idaho Legislature unless prior to that date the rule is rejected in whole or in part by concurrent resolution in accordance with Idaho Code Sections 67-5224 and 67-5291.

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 39-3601 et seq., 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 1, 2010, Vol. 10-9, pages 445 through 469](#). After consideration of public comments, the rule has been revised at Sections 010 and 052. The remainder of the rule has been adopted as proposed. The Rulemaking and Public Comment Summary can be obtained at http://www.deq.idaho.gov/rules/water/58_0102_1001_pending.cfm or by contacting the undersigned.

In addition, two documents providing assistance in understanding and achieving compliance with the requirements of these rules can be obtained at http://www.deq.idaho.gov/rules/water/58_0102_1001_pending.cfm. These documents are titled “Antidegradation Implementation Scenarios” and “Examples of New and Increased Discharge.”

IDAHO CODE SECTION 39-107D STATEMENT: The standards included in this rule are not broader in scope, nor more stringent, than federal regulations and do not regulate an activity not regulated by the federal government.

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 when the pending rule will become effective: Implementation of this rule is estimated to annually require 1.6 FTE DEQ staff time at a cost of approximately \$145,500 in current dollars. In addition, one time startup costs for staff training are estimated to be about \$16,500. The workload strategy at this time is for the DEQ regional office surface water quality staff assigned to conduct Clean Water Act Section 401 Water Quality Certifications to implement the antidegradation rules in coordination with a state office water quality standards staff person. Existing surface water quality work such as monitoring and assessments will be reduced in order to shift duties to antidegradation review and analysis.

ASSISTANCE ON TECHNICAL QUESTIONS: For assistance on technical questions concerning this rulemaking, contact Don Essig at don.essig@deq.idaho.gov, (208)373-0119.

Dated this 12th day of November, 2010.

Paula J. Wilson
Hearing Coordinator
Department of Environmental Quality
1410 N. Hilton, Boise, Idaho 83706-1255
(208)373-0418/Fax No. (208)373-0481
paula.wilson@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 Sections 39-105, 39-107, and 39-3601 et seq., 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 17, 2010. If no such written request is received, a public hearing will not be held.

DESCRIPTIVE SUMMARY: The Clean Water Act requires Idaho to protect the existing uses of all state waters and to protect high quality waters from degradation that, upon public review, is not necessary and important.

This is known as antidegradation. Federal law requires the state to have both an antidegradation policy and methods to implement the policy. Although Idaho has an antidegradation policy in rule, there are no procedures in the rules on how to implement the antidegradation policy.

In September 2009, the U.S. Environmental Protection Agency (EPA) was given a 60-day notice of intent to sue by the Idaho Conservation League over EPA's failure, in oversight of Idaho's water quality rules, to require Idaho to identify its antidegradation implementation procedure. If Idaho does not act, EPA may be forced to act, and this may result in a federal rule requiring antidegradation review. DEQ initiated negotiated rulemaking in an effort to forestall the pending legal action against EPA that would force EPA to take action with respect to Idaho's rule. DEQ held six rulemaking meetings in developing this proposed rule and intends to develop supporting guidance.

DEQ proposes to revise its Water Quality Standards, IDAPA 58.01.02, to include

procedures for implementing efforts to limit degradation of water quality. This proposed rule addresses:

1. Activities subject to antidegradation review;
2. Definition of degradation and impairment and the information needed to determine them;
3. How it is decided where each of the three levels of protection from degradation is applied;
4. Exemptions to antidegradation review;
5. Determination of insignificant discharges not warranting analysis of their degradation to high quality water;
6. How DEQ will evaluate changes in water quality;
7. Waste treatment alternatives analysis to identify least degrading option for significant degradation of high quality water;
8. Socioeconomic analysis needed to justify degradation of high quality water; and
9. What is needed to document existing sources of pollution are meeting required controls.

Idahoans that recreate in, drink from, or fish Idaho's surface waters and all who discharge pollutants to those same waters 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.

Please note that language in proposed rule Subsection 052.10 is existing language that has been moved from Section 055, Outstanding Resource Waters, and Subsection 350.04., Restriction of Nonpoint Source Activities on Outstanding Resource Waters. With the exception of Subsection 052.10.g. and a few nonsubstantive revisions, the proposed text is the same as that found in Section 055 and Subsection 350.04 of the existing rules.

After consideration of public comments, DEQ intends to present the final proposal to the Board of Environmental Quality at the November 2010 Board meeting for adoption as a pending rule. The rule is expected to be final and effective upon the adjournment of the 2011 legislative session if adopted by the Board and approved by the Legislature.

NEGOTIATED RULEMAKING: The text of the rule has been drafted based on discussions held and concerns raised during negotiations conducted pursuant to Idaho Code Section 67-5220 and IDAPA 58.01.23.810-815.

On April 7, 2010, the Notice of Negotiated Rulemaking was published in the Idaho Administrative Bulletin, Vol. 10-4, pages 26 through 27, and a preliminary draft rule was made available for public review. Meetings were held on April 22, May 12, June 2, June 15, July 8, and July 21, 2010. Members of the public participated in this negotiated rulemaking process by attending the meetings and submitting written comments. A record of the negotiated rule drafts, written comments received, and documents distributed during the negotiated rulemaking process is available at http://www.deq.idaho.gov/rules/water/58_0102_1001_proposed.cfm.

IDAHO CODE SECTION 39-107D STATEMENT: The standards included in this proposed rule are not broader in scope, nor more stringent, than federal regulations and do not regulate an activity not regulated by the federal government.

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: Not applicable.

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 when the pending rule will become effective:

Implementation of this rule is estimated to annually require 1.6 FTE DEQ staff time at a cost of approximately \$145,500 in current dollars. In addition, one time startup costs for staff training are estimated to be about \$16,500. The workload strategy at this time is for the DEQ regional office surface water quality staff assigned to conduct Clean Water Act Section 401 Water Quality Certifications to implement the antidegradation rules in coordination with a state office water quality standards staff person. Existing surface water quality work such as monitoring and assessments will be reduced in order to shift duties to antidegradation review and analysis.

ASSISTANCE ON TECHNICAL QUESTIONS AND SUBMISSION OF WRITTEN COMMENTS: For assistance on technical questions concerning this rulemaking, contact Don Essig at don.essig@deq.idaho.gov, (208)373-0119.

Anyone may submit written comments by mail, fax or e-mail at the address below regarding this proposed rule. DEQ will consider all written comments received by the undersigned on or before October 1, 2010.

DATED this 30th day of July, 2010.

THE FOLLOWING IS THE TEXT OF DOCKET NO. 58-0102-1001

010. DEFINITIONS.

For the purpose of the rules contained in IDAPA 58.01.02, "Water Quality Standards," the following definitions apply: (4-11-06)

01. Activity. *For purposes of antidegradation review, an activity that causes a discharge to a water subject to the jurisdiction of the Clean Water Act.* ()

02. Acute. A stimulus severe enough to induce a rapid response. In aquatic toxicity tests, acute refers to a single or short-term (i.e., ninety-six (96) hours or less) exposure to a concentration of a toxic substance or effluent which results in death to fifty percent (50%) of the test organisms. When referring to human health, an acute effect is not always measured in terms

of lethality. (3-30-07)

03. Acute Criteria. Unless otherwise specified in these rules, the maximum instantaneous or one (1) hour average concentration of a toxic substance or effluent which ensures adequate protection of sensitive species of aquatic organisms from acute toxicity due to exposure to the toxic substance or effluent. Acute criteria are expected to adequately protect the designated aquatic life use if not exceeded more than once every three (3) years. This is also known as the Criterion Maximum Concentration (CMC). There are no specific acute criteria for human health; however, the human health criteria are based on chronic health effects and are expected to adequately protect against acute effects. (3-30-07)

04. Aquatic Species. Any plant or animal that lives at least part of its life in the water column or benthic portion of waters of the state. (8-24-94)

05. Assigned Criteria. *Criteria associated with beneficial uses from Section 100 of these rules.* ()

046. 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 be measured. (8-24-94)

057. Basin Advisory Group. No less than one (1) advisory group named by the Director, in consultation with the designated agencies, for each of the state's six (6) major river basins which shall generally advise the Director on water quality objectives for each basin, work in a cooperative manner with the Director to achieve these objectives, and provide general coordination of the water quality programs of all public agencies pertinent to each basin. Each basin advisory group named by the Director shall reflect a balanced representation of the interests in the basin and shall, where appropriate, include representatives from each of the following: agriculture, mining, nonmunicipal point source discharge permittees, forest products, local government, livestock, Indian tribes (for areas within reservation boundaries), water-based recreation, and environmental interests. (3-20-97)

068. Beneficial Use. Any of the various uses which may be made of the water of Idaho, including, but not limited to, domestic water supplies, industrial water supplies, agricultural water supplies, navigation, recreation in and on the water, wildlife habitat, and aesthetics. The beneficial use is dependent upon actual use, the ability of the water to support a non-existing use either now or in the future, and its likelihood of being used in a given manner. The use of water for the purpose of wastewater dilution or as a receiving water for a waste treatment facility effluent is not a beneficial use. (8-24-94)

079. Best Management Practice. A practice or combination of practices, techniques or measures developed, or identified, by the designated agency and identified in the state water quality management plan which are determined to be the cost-effective and practicable means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals. (3-20-97)

0810. Bioaccumulation. The process by which a compound is taken up by, and accumulated in the tissues of an aquatic organism from the environment, both from water and through food. (8-24-94)

0911. 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. (8-24-94)

102. Board. The Idaho Board of Environmental Quality. (7-1-93)

113. Chronic. A stimulus that persists or continues for a long period of time relative to the life span of an organism. In aquatic toxicity tests, chronic refers to continuous exposure to a concentration of a toxic substance or effluent which results in mortality, injury, reduced growth, impaired reproduction, or other adverse effect to aquatic organisms. The test duration is long enough that sub-lethal effects can be reliably measured. When referring to human health, a chronic effect is usually measured in terms of estimated changes in rates (# of cases/ 1000 persons) of illness over a lifetime of exposure. (3-30-07)

124. Chronic Criteria. Unless otherwise specified in these rules, the four (4) day average concentration of a toxic substance or effluent which ensures adequate protection of sensitive species of aquatic organisms from chronic toxicity due to exposure to the toxic substance or effluent. Chronic criteria are expected to adequately protect the designated aquatic life use if not exceeded more than once every three (3) years. This is also known as the Criterion Continuous Concentration (CCC). Human health chronic criteria are based on lifetime exposure. (3-30-07)

135. Compliance Schedule or Schedule Of Compliance. A schedule of remedial measures including an enforceable sequence of actions or operations leading to compliance with an effluent limitation, other limitation, prohibition, or standard. (8-24-94)

16. Cost-Effective and Reasonable Best Management Practices (BMPs) for Nonpoint Sources. All approved BMPs specified in Subsections 350.03 and 055.07 of these rules. BMPs for activities not specified are, in accordance with Section 350, determined on a case-by-case basis. ()

147. Daily Maximum (Minimum). The highest (lowest) value measured during one (1) calendar day or a twenty-four (24) hour period, as appropriate. For ambient monitoring of dissolved oxygen, pH, and temperature, multiple measurements should be obtained at intervals short enough that the difference between consecutive measurements around the daily maximum (minimum) is less than zero point two (0.2) ppm for dissolved oxygen, zero point one (0.1) SU for pH, or zero point five (0.5) degree C for temperature. (3-30-07)

158. Daily Mean. The average of at least two (2) appropriately spaced measurements, acceptable to the Department, calculated over a period of one (1) day: (3-20-97)

a. Confidence bounds around the point estimate of the mean may be required to determine the sample size necessary to calculate a daily mean; (8-24-94)

b. If any measurement is greater or less than five-tenths (0.5) times the average, additional measurements over the one-day period may be needed to obtain a more representative average; (3-20-97)

c. In calculating the daily mean for dissolved oxygen, values used in the calculation shall not exceed the dissolved oxygen saturation value. If a measured value exceeds the dissolved oxygen saturation value, then the dissolved oxygen saturation value will be used in calculating the daily mean. (8-24-94)

d. For ambient monitoring of temperature, the daily mean should be calculated from equally spaced measurements, at intervals such that the difference between any two (2) consecutive measurements does not exceed one point zero (1.0) degree C. (3-30-07)

19. Degradation or Lower Water Quality. For purposes of antidegradation review, degradation or lower water quality means a change in a pollutant that is adverse to *designated or existing uses as calculated upon appropriate mixing of the discharge and receiving water.* ()

~~16~~**20. Deleterious Material.** Any nontoxic substance which may cause the tainting of edible species of fish, taste and odors in drinking water supplies, or the reduction of the usability of water without causing physical injury to water users or aquatic and terrestrial organisms. (8-24-94)

~~17~~**21. Department.** The Idaho Department of Environmental Quality. (7-1-93)

~~18~~**22. Design Flow.** The critical flow used for steady-state wasteload allocation modeling. (8-24-94)

~~19~~**23. Designated Agency.** The department of lands for timber harvest activities, oil and gas exploration and development, and mining activities; the soil conservation commission for grazing and agricultural activities; the transportation department for public road construction; the department of agriculture for aquaculture; and the Department's division of environmental quality for all other activities. (3-20-97)

204. Designated Beneficial Use or Designated Use. Those beneficial uses assigned to identified waters in Idaho Department of Environmental Quality Rules, IDAPA 58.01.02, "Water Quality Standards and Wastewater Treatment Requirements," Sections 110 through 160, whether or not the uses are being attained. (4-5-00)

215. Desirable Species. Species indigenous to the area or those introduced species identified as desirable by the Idaho Department of Fish and Game. (3-15-02)

226. Director. The Director of the Idaho Department of Environmental Quality or his authorized agent. (7-1-93)

237. Discharge. When used without qualification, any spilling, leaking, emitting, escaping, leaching, or disposing of a pollutant into the waters of the state. *For purposes of antidegradation review, means "discharge" as used in Section 401 of the Clean Water Act.* (8-24-94)()

248. Dissolved Oxygen (DO). The measure of the amount of oxygen dissolved in the water, usually expressed in mg/l. (7-1-93)

259. Dissolved Product. Petroleum product constituents found in solution with water. (8-24-94)

2630. Dynamic Model. A computer simulation model that uses real or derived time series data to predict a time series of observed or derived receiving water concentrations. Dynamic modeling methods include continuous simulation, Monte Carlo simulations, lognormal probability modeling, or other similar statistical or deterministic techniques. (8-24-94)

2731. E. coli (Escherichia coli). A common fecal and intestinal organism of the coliform group of bacteria found in warm-blooded animals. (4-5-00)

2832. Effluent. Any wastewater discharged from a treatment facility. (7-1-93)

2933. Effluent Biomonitoring. The measurement of the biological effects of effluents (e.g., toxicity, biostimulation, bioaccumulation, etc.). (8-24-94)

304. EPA. The United States Environmental Protection Agency. (7-1-93)

315. Ephemeral Waters. A stream, reach, or water body that flows naturally only in direct response to precipitation in the immediate watershed and whose channel is at all times above the water table. (4-11-06)

36. Existing Activity or Discharge. An activity or discharge that has been previously authorized or did not previously require authorization. ()

327. Existing Beneficial Use Or Existing Use. Those beneficial uses actually attained in waters on or after November 28, 1975, whether or not they are designated for those waters in Idaho Department of Environmental Quality Rules, IDAPA 58.01.02, "Water Quality Standards." (4-11-06)

338. Facility. As used in Section 850 only, any building, structure, installation, equipment, pipe or pipeline, well pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock or aircraft, area, place or property from which an unauthorized release of hazardous materials has occurred. (8-24-94)

349. Four Day Average. The average of all measurements within a period of ninety-six (96) consecutive hours. While a minimum of one (1) measurement per each twenty-four (24) hours is preferred, for toxic chemicals in Section 210, any number of data points is acceptable. (3-30-07)

3540. Free Product. A petroleum product that is present as a nonaqueous phase liquid. Free product includes the presence of petroleum greater than one-tenth (0.1) inch as measured on the water surface for surface water or the water table for ground water. (7-1-93)

3641. Full Protection, Full Support, or Full Maintenance of Designated Beneficial Uses of Water. Compliance with those levels of water quality criteria listed in Sections 200, 210, 250, 251, 252, 253, and 275 (if applicable) or where no major biological group such as fish, macroinvertebrates, or algae has been modified by human activities significantly beyond the natural range of the reference streams or conditions approved by the Director in consultation with the appropriate basin advisory group. (3-15-02)

3742. Geometric Mean. The geometric mean of “n” quantities is the “nth” root of the product of the quantities. (7-1-93)

3843. Ground Water. Any water of the state which occurs beneath the surface of the earth in a saturated geological formation of rock or soil. (3-30-07)

3944. Harmonic Mean Flow. The number of daily flow measurements divided by the sum of the reciprocals of the flows (i.e., the reciprocal of the mean of reciprocals). (8-24-94)

405. Hazardous Material. A material or combination of materials which, when discharged in any quantity into state waters, presents a substantial present or potential hazard to human health, the public health, or the environment. Unless otherwise specified, published guides such as Quality Criteria for Water (1976) by EPA, Water Quality Criteria (Second Edition, 1963) by the state of California Water Quality Control Board, their subsequent revisions, and more recent research papers, regulations and guidelines will be used in identifying individual and specific materials and in evaluating the tolerances of the identified materials for the beneficial uses indicated. (7-1-93)

46. Highest Statutory and Regulatory Requirements for Point Sources. All applicable effluent limits required by the Clean Water Act and other permit conditions. It also includes any compliance schedules or consent orders requiring measures to achieve applicable effluent limits and other permit conditions required by the Clean Water Act. ()

417. Hydrologic Unit Code (HUC). A unique eight (8) digit number identifying a subbasin. A subbasin is a United States Geological Survey cataloging unit comprised of water body units. (4-5-00)

428. Hydrologically-Based Design Flow. A statistically derived receiving water design flow based on the selection and identification of an extreme value (e.g., 1Q10, 7Q10). The underlying assumption is that the design flow will occur X number of times in Y years, and limits the number of years in which one (1) or more excursions below the design flow can occur. (8-24-94)

439. Hypolimnion. The bottom layer in a thermally-stratified body of water. It is fairly uniform in temperature and lays beneath a zone of water which exhibits a rapid temperature drop with depth such that mixing with overlying water is inhibited. (3-30-07)

50. Integrated Report. Refers to the consolidated listing and reporting of the state's water quality status pursuant to Sections 303(d), 305(b), and 314 of the Clean Water Act. ()

4451. Inter-Departmental Coordination. Consultation with those agencies responsible

for enforcing or administering the practices listed as approved best management practices in Subsection 350.03. (7-1-93)

452. Intermittent Waters. A stream, reach, or water body which naturally has a period of zero (0) flow for at least one (1) week during most years. Where flow records are available, a stream with a 7Q2 hydrologically-based unregulated flow of less than one-tenth (0.1) cubic feet per second (cfs) is considered intermittent. Streams with natural perennial pools containing significant aquatic life uses are not intermittent. (4-11-06)

4653. LC-50. The toxicant concentration killing fifty percent (50%) of exposed organisms at a specific time of observation (e.g., ninety-six (96) hours). (3-20-97)

4754. Load Allocation (LA). The portion of a receiving water's loading capacity that is attributed either to one (1) of its existing or future nonpoint sources of pollution or to natural background sources. (8-24-94)

4855. Loading Capacity. The greatest amount of pollutant loading that a water can receive without violating water quality standards. (8-24-94)

~~**49. Lower Water Quality.** A measurable and adverse anthropogenic change in a chemical, physical, or biological parameter of water relevant to a beneficial use, and which can be expressed numerically. Measurable change may be determined by a statistically significant difference using standard methods for analysis and statistical interpretation appropriate to the parameter. Statistical significance is defined as the ninety-five percent (95%) confidence limit when significance is not otherwise defined for the parameter in standard methods or practices. (3-30-07)~~

506. Lowest Observed Effect Concentration (LOEC). The lowest concentration of a toxic substance or an effluent that results in observable adverse effects in the aquatic test population. (3-30-07)

517. Man-Made Waterways. Canals, flumes, ditches, wasteways, drains, laterals, and/or associated features, constructed for the purpose of water conveyance. This may include channels modified for such purposes prior to November 28, 1975. These waterways may have uniform and rectangular cross-sections, straight channels, follow rather than cross topographic contours, be lined to reduce water loss, and be operated or maintained to promote water conveyance. (3-30-07)

528. Maximum Weekly Maximum Temperature (MWMT). The weekly maximum temperature (WMT) is the mean of daily maximum temperatures measured over a consecutive seven (7) day period ending on the day of calculation. When used seasonally, e.g., spawning periods, the first applicable WMT occurs on the seventh day into the time period. The MWMT is the single highest WMT that occurs during a given year or other period of interest, e.g., a spawning period. (3-30-07)

539. Milligrams Per Liter (mg/l). Milligrams of solute per liter of solution, equivalent to parts per million, assuming unit density. (7-1-93)

5460. 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. (7-1-93)

5561. National Pollutant Discharge Elimination System (NPDES). Point source permitting program established pursuant to Section 402 of the federal Clean Water Act. (8-24-94)

562. Natural Background Conditions. The physical, chemical, biological, or radiological conditions existing in a water body without human sources of pollution within the watershed. Natural disturbances including, but not limited to, wildfire, geologic disturbance, diseased vegetation, or flow extremes that affect the physical, chemical, and biological integrity of the water are part of natural background conditions. Natural background conditions should be described and evaluated taking into account this inherent variability with time and place. (3-30-07)

5763. Nephelometric Turbidity Units (NTU). A measure of turbidity based on a comparison of the intensity of the light scattered by the sample under defined conditions with the intensity of the light scattered by a standard reference suspension under the same conditions. (8-24-94)

64. New Activity or Discharge. *An activity or discharge that has not been previously authorized. Existing activities or discharges not currently permitted or licensed will be presumed to be new unless the Director determines to the contrary based on review of available evidence. An activity or discharge that has previously taken place without need for a license or permit is not a new activity or discharge when first licensed or permitted.* ()

5865. Nonpoint Source Activities. Activities on a geographical area on which pollutants are deposited or dissolved or suspended in water applied to or incident on that area, the resultant mixture being discharged into the waters of the state. Nonpoint source activities on ORWs do not include issuance of water rights permits or licenses, allocation of water rights, operation of diversions, or impoundments. Nonpoint sources activities include, but are not limited to: (3-20-97)

- a. Irrigated and nonirrigated lands used for: (7-1-93)
 - i. Grazing; (7-1-93)
 - ii. Crop production; (7-1-93)
 - iii. Silviculture; (7-1-93)
- b. Log storage or rafting; (7-1-93)
- c. Construction sites; (7-1-93)
- d. Recreation sites; (3-20-97)

- e. Septic tank disposal fields. (8-24-94)
- f. Mining; (3-20-97)
- g. Runoff from storms or other weather related events; and (3-20-97)
- h. Other activities not subject to regulation under the federal national pollutant discharge elimination system. (3-20-97)

5966. Nuisance. Anything which is injurious to the public health or an obstruction to the free use, in the customary manner, of any waters of the state. (7-1-93)

607. Nutrients. The major substances necessary for the growth and reproduction of aquatic plant life, consisting of nitrogen, phosphorus, and carbon compounds. (7-1-93)

618. One Day Minimum. The lowest daily instantaneous value measured. (3-20-97)

6269. One Hour Average. The mean of at least two (2) appropriately spaced measurements, as determined by the Department, calculated over a period of one (1) hour. When three (3) or more measurements have been taken, and if any measurement is greater or less than five-tenths (0.5) times the mean, additional measurements over the one-hour period may be needed to obtain a more representative mean. (3-20-97)

6370. Operator. For purposes of Sections 851 and 852, any person presently or who was at any time during a release in control of, or having responsibility for, the daily operation of the petroleum storage tank (PST) system. (4-2-03)

6471. Outstanding Resource Water (ORW). A high quality water, such as water of national and state parks and wildlife refuges and water of exceptional recreational or ecological significance, which has been designated by the legislature and subsequently listed in this chapter. ORW constitutes an outstanding national or state resource that requires protection from point and nonpoint source activities that may lower water quality. (3-20-97)

6572. Outstanding Resource Water Mixing Zone. An area or volume of an ORW where pollutants are allowed to mix with the ORW receiving water at a location distinct from the sampling point where compliance with ORW quality standards is measured. An ORW mixing zone will be downstream from the discharge of a tributary or a segment immediately upstream which contains man caused pollutants as a result of nonpoint source activities occurring on that tributary or segment. As a result of the discharge, the mixing zone may not meet all water quality standards applicable to the ORW, but shall still be protected for existing beneficial uses. The Department, after consideration of input from interested parties, will determine the size, configuration and location of mixing zones which are necessary to meet the requirements of this chapter. (7-1-93)

6673. Owner. For purposes of Sections 851 and 852, any person who owns or owned a petroleum storage tank (PST) system any time during a release and the current owner of the property where the PST system is or was located. (4-2-03)

74. Permit or License. A permit or license for an activity that is subject to certification by the state under Section 401 of the Clean Water Act, including, for example, NPDES permits, dredge and fill permits, and FERC licenses. ()

675. 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, which is recognized by law as the subject of rights and duties. (3-20-97)

6876. Petroleum Products. Products derived from petroleum through various refining processes. (7-1-93)

6977. Petroleum Storage Tank (PST) System. Any one (1) or combination of storage tanks or other containers, including pipes connected thereto, dispensing equipment, and other connected ancillary equipment, and stationary or mobile equipment, that contains petroleum or a mixture of petroleum with de minimis quantities of other regulated substances. (7-1-93)

708. 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, or vessel or other floating craft, from which pollutants are, or may be, discharged. This term does not include return flows from irrigated agriculture, discharges from dams and hydroelectric generating facilities or any source or activity considered a nonpoint source by definition. (7-1-93)

719. Pollutant. Dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, unitions, chemical waste, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, silt, cellar dirt; and industrial, municipal and agricultural waste, gases entrained in water; or other materials which, when discharged to water in excessive quantities, cause or contribute to water pollution. Provided however, biological materials shall not include live or occasional dead fish that may accidentally escape into the waters of the state from aquaculture facilities. (3-20-97)

7280. Project Plans. Documents which describe actions to be taken under a proposed activity. These documents include environmental impact statements, environmental assessments, and other land use or resource management plans. (7-1-93)

7381. Public Swimming Beaches. Areas indicated by features such as signs, swimming docks, diving boards, slides, or the like, boater exclusion zones, map legends, collection of a fee for beach use, or any other unambiguous invitation to public swimming. Privately owned swimming docks or the like which are not open to the general public are not included in this definition. (4-11-06)

7482. Receiving Waters. Those waters which receive pollutants from point or nonpoint sources. (7-1-93)

7583. Reference Stream or Condition. A water body which represents the minimum conditions necessary to fully support the applicable designated beneficial uses as further specified

in these rules, or natural conditions with few impacts from human activities and which are representative of the highest level of support attainable in the basin. In highly mineralized areas or in the absence of such reference streams or water bodies, the Director, in consultation with the basin advisory group and the technical advisors to it, may define appropriate hypothetical reference conditions or may use monitoring data specific to the site in question to determine conditions in which the beneficial uses are fully supported. (3-20-97)

7684. Release. Any unauthorized spilling, leaking, emitting, discharging, escaping, leaching, or disposing into soil, ground water, or surface water. (8-24-94)

7785. Resident Species. Those species that commonly occur in a site including those that occur only seasonally or intermittently. This includes the species, genera, families, orders, classes, and phyla that: (8-24-94)

- a. Are usually present at the site; (8-24-94)
- b. Are present only seasonally due to migration; (8-24-94)
- c. Are present intermittently because they periodically return or extend their ranges into the site; (8-24-94)
- d. Were present at the site in the past but are not currently due to degraded conditions, and are expected to be present at the site when conditions improve; and (8-24-94)
- e. Are present in nearby bodies of water but are not currently present at the site due to degraded conditions, and are expected to be present at the site when conditions improve. (8-24-94)

786. Responsible Persons in Charge. Any person who: (8-24-94)

- a. By any acts or omissions, caused, contributed to or exacerbated an unauthorized release of hazardous materials; (8-24-94)
- b. Owns or owned the facility from which the unauthorized release occurred and the current owner of the property where the facility is or was located; or (8-24-94)
- c. Presently or who was at any time during an unauthorized release in control of, or had responsibility for, the daily operation of the facility from which an unauthorized release occurred. (8-24-94)

7987. Sediment. Undissolved inorganic matter. (3-30-07)

808. Seven Day Mean. The average of the daily mean values calculated over a period of seven (7) consecutive days. (3-20-97)

819. 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. (8-24-94)

8290. Short-Term or Temporary Activity. An activity which is as short as possible but lasts for no more than one (1) year, is limited in scope and is expected to have only minimal impact on water quality as determined by the Director. Short-term or temporary activities include, but are not limited to, those activities described in Subsection 080.02. (3-30-07)

8391. Silviculture. Those activities associated with the regeneration, growing and harvesting of trees and timber including, but not limited to, disposal of logging slash, preparing sites for new stands of trees to be either planted or allowed to regenerate through natural means, road construction and road maintenance, drainage of surface water which inhibits tree growth or logging operations, fertilization, application of herbicides or pesticides, all logging operations, and all forest management techniques employed to enhance the growth of stands of trees or timber. (3-20-97)

8492. Sludge. The semi-liquid mass produced by partial dewatering of potable or spent process waters or wastewater. (7-1-93)

8593. Special Resource Water. Those specific segments or bodies of water which are recognized as needing intensive protection: (7-1-93)

a. To preserve outstanding or unique characteristics; or (7-1-93)

b. To maintain current beneficial use. (7-1-93)

8694. Specialized Best Management Practices. Those practices designed with consideration of geology, land type, soil type, erosion hazard, climate and cumulative effects in order to fully protect the beneficial uses of water, and to prevent or reduce the pollution generated by nonpoint sources. (3-3-87)

8795. State. The state of Idaho. (7-1-93)

8896. State Water Quality Management Plan. The state management plan developed and updated by the Department in accordance with Sections 205, 208, and 303 of the Clean Water Act. (3-20-97)

897. Suspended Sediment. The undissolved inorganic fraction of matter suspended in surface water. (3-30-07)

908. Suspended Solids. The undissolved organic and inorganic matter suspended in surface water. (3-30-07)

919. Technology-Based Effluent Limitation. Treatment requirements under Section 301(b) of the Clean Water Act that represent the minimum level of control that must be imposed in a permit issued under Section 402 of the Clean Water Act. (8-24-94)

92100. Total Maximum Daily Load (TMDL). The sum of the individual wasteload allocations (WLAs) for point sources, load allocations (LAs) for nonpoint sources, and natural background. Such load shall be established at a level necessary to implement the applicable water

quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality.

(8-24-94)

93101. Toxicity Test. A procedure used to determine the toxicity of a chemical or an effluent using living organisms. A toxicity test measures the degree of response of an exposed test organism to a specific chemical or effluent.

(8-24-94)

94102. Toxic Substance. Any substance, material or disease-causing agent, or a combination thereof, which after discharge to waters of the State 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 malfunctions in reproduction) or physical deformations in affected organisms or their offspring. Toxic substances include, but are not limited to, the one hundred twenty-six (126) priority pollutants identified by EPA pursuant to Section 307(a) of the federal Clean Water Act.

(8-24-94)

90103. Treatment. A process or activity conducted for the purpose of removing pollutants from wastewater.

(7-1-93)

96104. Treatment System. Any physical facility or land area for the purpose of collecting, treating, neutralizing or stabilizing pollutants including treatment by disposal plants, the necessary intercepting, outfall and outlet sewers, pumping stations integral to such plants or sewers, equipment and furnishing thereof and their appurtenances. A treatment system may also be known as a treatment facility.

(4-11-06)

97105. Twenty-Four Hour Average. The mean of at least two (2) appropriately spaced measurements, as determined by the Department, calculated over a period of twenty-four (24) consecutive hours. When three (3) or more measurements have been taken, and if any measurement is greater or less than five-tenths (0.5) times the mean, additional measurements over the twenty-four (24)-hour period may be needed to obtain a more representative mean.

(3-20-97)

98106. Unique Ecological Significance. The attribute of any stream or water body which is inhabited or supports an endangered or threatened species of plant or animal or a species of special concern identified by the Idaho Department of Fish and Game, which provides anadromous fish passage, or which provides spawning or rearing habitat for anadromous or desirable species of lake dwelling fishes.

(8-24-94)

99107. Wasteload Allocation (WLA). The portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution.

(8-24-94)

1008. Wastewater. Unless otherwise specified, sewage, industrial waste, agricultural waste, and associated solids or combinations of these, whether treated or untreated, together with such water as is present.

(7-1-93)

1019. Water Body Unit. Includes all named and unnamed tributaries within a drainage and is considered a single unit unless designated otherwise.

(4-5-00)

10210. Water Pollution. Any alteration of the physical, thermal, chemical, biological, or radioactive properties of any waters of the state, or the discharge of any pollutant into the waters of the state, which 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. (8-24-94)

10311. Water Quality-Based Effluent Limitation. An effluent limitation that refers to specific levels of water quality that are expected to render a body of water suitable for its designated or existing beneficial uses. (8-24-94)

10412. Water Quality Limited Water Body. After monitoring, evaluation of required pollution controls, and consultation with the appropriate basin and watershed advisory groups, a water body identified by the Department, which does not meet applicable water quality standards, and/or is not expected to meet applicable water quality standards after the application of required pollution controls. A water body identified as water quality limited shall require the development of a TMDL or other equivalent process in accordance with Section 303 of the Clean Water Act and Sections 39-3601 et seq., Idaho Code. (3-20-97)

10513. Waters and Waters Of The State. All the accumulations of water, surface and underground, natural and artificial, public and private, or parts thereof which are wholly or partially within, which flow through or border upon the state. (7-1-93)

10614. Watershed. The land area from which water flows into a stream or other body of water which drains the area. (3-20-97)

10715. Watershed Advisory Group. An advisory group appointed by the Director, with the advice of the appropriate Basin Advisory Group, which will recommend to the Department those specific actions needed to control point and nonpoint sources of pollution affecting water quality limited water bodies within the watershed. Members of each watershed advisory group shall be representative of the industries and interests affected by the management of that watershed, along with representatives of local government and the land managing or regulatory agencies with an interest in the management of that watershed and the quality of the water bodies within it. (3-20-97)

10816. Whole-Effluent Toxicity. The aggregate toxic effect of an effluent measured directly with a toxicity test. (8-24-94)

10917. Zone of Initial Dilution (ZID). An area within a Department authorized mixing zone where acute criteria may be exceeded. This area should be as small as practicable and assure that drifting organisms are not exposed to acute concentrations for more than one (1) hour more than once in three (3) years. The actual size of the ZID will be determined by the Department for a discharge on a case-by-case basis, taking into consideration mixing zone modeling and associated size recommendations and any other pertinent chemical, physical, and biological data available. (4-11-06)

(BREAK IN CONTINUITY OF SECTIONS)

051. ANTIDegradation POLICY.

01. **Maintenance of Existing Uses for All Waters (Tier I Protection).** The existing in stream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected. ~~(7-1-93)~~()

02. **High Quality Waters (Tier II Protection).** Where the quality of the waters exceeds levels necessary to support propagation of fish, shellfish and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the Department finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the Department's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the Department shall assure water quality adequate to protect existing uses fully. Further, the Department shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and cost-effective and reasonable best management practices for nonpoint source control. In providing such assurance, the Department may enter together into an agreement with other state of Idaho or federal agencies in accordance with Sections 67-2326 through 67-2333, Idaho Code. ~~(7-1-93)~~()

03. **Outstanding Resource Waters (Tier III Protection).** Where high quality waters designated by the legislature constitute an outstanding national resource, such as waters of national and state parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected from the impacts of point and nonpoint source activities. ~~(3-20-97)~~()

04. **Thermal Discharges.** In those cases where potential water quality impairment associated with a thermal discharge is involved, antidegradation shall be implemented consistent with Section 316 of the Clean Water Act. ()

05. **Waters Subject to the Antidegradation Policy.** Idaho's antidegradation policy only applies to waters subject to the jurisdiction of the Clean Water Act. ()

052. **IMPLEMENTATION.**

The antidegradation policy shall be implemented as follows: ()

01. **Waters Protected.** All waters receive Tier I protection. Waters receiving Tier II protection will be identified using a water body by water body approach during the antidegradation review. Waters given Tier III protection are designated in law. ()

02. **Restoration Projects.** Changes in water quality may be allowed by the Department without an antidegradation review where determined necessary to secure long-term water quality improvement through restoration projects designed to trend toward natural characteristics and associated uses to a water body where those characteristics and uses have been lost or diminished. Restoration projects shall implement best management practices. ()

03. General Permits. For general permits issued on or after July 1, 2011, the Department will conduct antidegradation review, including *any required* Tier II analysis, at the time at which general permits are certified. For general permits that *the Department determines* adequately address antidegradation, review of individual applications for coverage will not be required unless it is required by the general permit. For general permits that *the Department determines* do not adequately address antidegradation, *the Department shall ensure that antidegradation is adequately addressed. To achieve this* the Department may conclude that other conditions, such as the submittal of additional information or individual certification at the time an application is submitted for coverage under a general permit, *are necessary in the general permit to provide reasonable assurance of compliance with the antidegradation policy. If supported by the permit record, the Department may also conclude that discharges authorized under a general permit are insignificant or that the pollution controls required in the general permit are the least degrading alternative as specified in Subsection 052.08.c.* ()

04. Initiation of Antidegradation Review. Review of degradation potential and application of the appropriate level of protection from degradation will be triggered by an application for a new or reissued permit or license. ()

05. Identification of Tier II Waters. The Department will utilize a water body by water body approach in determining where Tier II protection is appropriate in addition to Tier I protection. This approach shall be based on an assessment of the chemical, physical, biological, and other information regarding the water body. The most recent federally approved Integrated Report and supporting data will be used to determine the appropriate level of protection as follows: ()

a. Water bodies identified in the Integrated Report as *fully supporting assessed uses* will be provided Tier II protection. ()

b. Water bodies identified in the Integrated Report as not assessed will be provided an appropriate level of protection on a case-by-case basis using information available at the time of a proposal for a new or reissued permit or license. ()

c. Water bodies identified in the Integrated Report as not *fully supporting* will receive Tier I protection, *except* as follows: ()

i. For aquatic life uses *listed only for one or more of the following causes: dissolved oxygen, nutrients, pH, sediment, or temperature*, if biological or aquatic habitat parameters show a healthy, balanced biological community is present, as described in the "Water Body Assessment Guidance" published by the Idaho Department of Environmental Quality, then the water body shall receive Tier II protection for aquatic life. If these data are insufficient to determine a healthy, balanced biological community is present, then the water body will be provided an appropriate level of protection on a case-by-case basis using information available at the time of a proposal for a new or reissued permit or license. ()

ii. For recreational uses, if water quality data show compliance with those levels of water quality criteria listed in Sections 200, 210, 251, and 275 (where applicable), then the water body shall receive Tier II protection for recreational uses. ()

06. Evaluation of Effect of an Activity or Discharge on Water Quality. The Department will evaluate the effect on water quality for each *pollutant*. The Department will determine whether an activity or discharge results in an improvement, no change, or degradation of water quality. ()

a. Effect on water quality will be based on the calculated change in concentration in the receiving water as a result of a new or reissued permit or license. With respect to a discharge, this calculation will take into account dilution using appropriate mixing of the receiving water under critical conditions coupled with the design flow of the discharge. For a reissued permit or license, the calculated change will be the difference in water quality that would result from the activity or discharge as authorized in the current permit or license and the water quality that would result from the activity or discharge as proposed in the reissued permit or license. For a new permit or license, the calculated change will be the difference between the existing receiving water quality and water quality that would result from the activity or discharge as proposed in the new permit or license. ()

i. Current Discharge Quality. For *pollutants* that are currently limited, current discharge quality shall be based on limits in the current permit or license. For *pollutants* not currently limited, current discharge quality shall be based on available discharge quality data collected within five years of the application for a permit or license *or other relevant information*. ()

ii. Proposed Quality for an Existing Discharge. Future discharge quality shall be based on proposed permit limits. For *pollutants* not limited in the proposed permit or license, future discharge quality will be estimated from available discharge quality data since the last permit or license was issued accounting for any changes in production, treatment or operation. For the proposed discharge of a new *pollutant* or a proposed increased discharge of a *pollutant*, future discharge quality will be estimated based on information provided by the applicant or other relevant information. ()

iii. New Permit Limits for an Existing Discharge. When new permit limits are proposed for the first time for a *pollutant* in an existing discharge, then for purposes of calculating the change in water quality, any statistical procedures used to derive the proposed new limits will be applied to *past* discharge quality as well, where appropriate. ()

iv. Proposed Quality for a New Discharge. Future discharge quality shall be based on proposed permit limits. For *pollutants* not limited in the proposed permit or license, future discharge quality will be based on information provided by the applicant or other relevant information. ()

b. Receiving water quality will be the quality measured, or modeled as appropriate, immediately above the discharge for flowing waters and outside any Department authorized mixing zone for lakes and reservoirs. ()

c. Offsets. In determining the effect of an activity or discharge on water quality of Tier II or Tier III waters, the Department may take into account reductions in pollution from other sources that are tied to the proposed activity or discharge. These offsets in pollution must be

upstream of the degradation in water quality due to the proposed activity or discharge and occur before the activity or discharge is allowed to begin. The applicant seeking a permit or license for an activity or discharge based on offsets will be held responsible for assuring offsets are achieved and maintained as a condition of their permit or license. ()

07. Tier I Review. Tier I review will be performed for all new or reissued permits or licenses. Existing uses and the water quality necessary to protect the existing uses must always be maintained and protected. No degradation or lowering of water quality may be allowed that would cause or contribute to violation of water quality criteria as calculated after authorized mixing of the discharge with the receiving water. Identification of existing uses and the water quality necessary for their protection will be based on all available information, including any water quality related data and information submitted during the public comment period for the permit or license. ()

08. Tier II Analysis. A Tier II analysis will only be conducted for activities or discharges, subject to a permit or a license, that cause degradation. The Department may allow significant degradation of surface water quality that is better than assigned criteria only if it is determined to be necessary to accommodate important economic or social development in the area in which the waters are located. The process and standard for this determination are set forth below. ()

a. Insignificant Activity or Discharge. The Department shall consider the size and character of an activity or discharge or the magnitude of its effect on the receiving stream and shall determine whether it is insignificant. If an activity or discharge is determined to be insignificant, then no further Tier II analysis, as set forth in Subsections 052.08.b., 052.08.c., and 052.08.d., shall be required. ()

i. The Department shall determine insignificance when the proposed change in an activity or discharge, from conditions as of July 1, 2011: ()

(1) Will not increase ambient concentrations by more than ten percent (10%); and ()

(2) Will not cumulatively decrease assimilative capacity by more than ten percent (10%). ()

ii. The Department reserves the right to request additional information from the applicant in making a determination a proposed change in an activity or discharge is insignificant. ()

b. Other Source Controls. In allowing any degradation of high water quality, the Department must assure that there shall be achieved in the watershed the highest statutory and regulatory requirements for all new and existing point sources and cost-effective and reasonable best management practices for all nonpoint source controls. In providing such assurance, the Department may enter together into an agreement with other State of Idaho or federal agencies in accordance with Sections 67-2326 through 67-2333, Idaho Code. ()

c. Alternatives Analysis. Degradation will be deemed necessary only if there are no

reasonable alternatives to discharging at the levels proposed. The applicant seeking authorization to degrade high water quality must provide an analysis of alternatives aimed at selecting the best combination of site, structural, managerial and treatment approaches that can be reasonably implemented to avoid or minimize the degradation of water quality. To identify the least degrading alternative that is reasonable, the following principles shall be followed: ()

i. Controls to avoid or minimize degradation should be considered at the earliest possible stage of project design. ()

ii. Alternatives that must be evaluated *as appropriate, are:* ()

(1) Relocation or configuration of outfall or diffuser; ()

(2) Process changes/improved efficiency that reduces pollutant discharge; ()

(3) Seasonal discharge to avoid critical time periods for water quality; ()

(4) Non-discharge alternatives such as land application; and ()

(5) Offsets to the activity or discharge's effect on water quality. ()

iii. The Department retains the discretion to require the applicant to examine specific alternatives or provide additional information to conduct the analysis. ()

iv. In selecting the preferred alternative the applicant shall: ()

(1) Evaluate economic impacts (total cost effectiveness, incremental cost effectiveness) of all technologically feasible alternatives; ()

(2) Rank all technologically feasible treatment alternatives by their cost effectiveness at pollutant reduction; ()

(3) Consider the environmental costs and benefits across media and between pollutants; and ()

(4) Select the least degrading option or show that a more degrading alternative is justified based on Subsections 052.08.c.iv.(1), 052.08.c.iv.(2), or 052.08.c.iv.(3) above. ()

d. Socioeconomic Justification. Degradation of water quality deemed necessary must also be determined by the Department to accommodate important economic or social development. Therefore, the applicant seeking authorization to degrade water quality must at a minimum identify the important economic or social development for which lowering water quality is necessary and should use the following steps to demonstrate this: ()

i. Identify the affected community; ()

ii. Describe the important social or economic development associated with the activity which can include cleanup/restoration of a closed facility; ()

iii. Identify the relevant social, economic and environmental health benefits and costs associated with the proposed degradation in water quality for the preferred alternative. Benefits and costs that must be analyzed include, but are not limited to: ()

(1) Economic benefits to the community such as changes in employment, household incomes and tax base; ()

(2) Provision of necessary services to the community; ()

(3) Potential health impacts related to the proposed activity; ()

(4) Impacts to direct and indirect uses associated with high quality water, e.g., fishing, recreation, and tourism; and ()

(5) Retention of assimilative capacity for future activities or discharges. ()

iv. Factors identified in the socioeconomic justification should be quantified whenever possible but for those factors that cannot be quantified a qualitative description of the impacts may be accepted; and ()

v. If the Department determines that more information is required, then the Department may require the applicant to provide further information or seek additional sources of information. ()

e. Process. ()

i. Analysis. The Department in cooperation with State of Idaho designated management agencies and/or federal agencies will collect information regarding the other source controls specified in Subsection 052.08.b. The applicant for a new or reissued permit or license is responsible for providing information pertinent to determining significance/insignificance of proposed changes in water quality and completing an alternatives analysis and socioeconomic justification as appropriate and submitting them to the Department for review. ()

ii. Departmental review. The Department shall review all pertinent information and, after intergovernmental coordination, public notice and input, make a determination as to whether there is assurance that the other source controls specified in Subsection 052.08.b. shall be achieved, and whether degradation of water quality is necessary to accommodate important economic or social development. ()

iii. Public Involvement. The Department will satisfy the public participation provisions of Idaho's continuing planning process. Public notice and review of antidegradation will be coordinated with existing 401 certification notices for public review. ()

09. Tier III - Outstanding Resource Waters (ORWs). ORWs are designated by the legislature. Subsection 052.09 describes the nomination, public notice and comment, public hearing, and board review process for directing the Department to develop legislation designating ORWs. Only the legislature may designate ORWs. Once designated by the legislature, the ORWs

are listed in these rules. ()

a. Nominations. Any person may request, in writing to the board, that a stream segment be considered for designation as an Outstanding Resource Water. To be considered for ORW designation, nominations must be received by the board by April 1 or ten (10) days after the adjournment sine die of that year's regular session of the legislature, whichever is later, for consideration during the next regular session of the legislature. All nominations shall be addressed to:

Idaho Board of Environmental Quality
Department of Environmental Quality
Outstanding Resource Water Nomination
1410 N. Hilton
Boise, Idaho 83706-1255

The nomination shall include the following information: ()

- i. The name, description and location of the stream segment; ()
- ii. The boundaries upstream and downstream of the stream segment; ()
- iii. An explanation of what makes the segment a candidate for the designation; ()
- iv. A description of the existing water quality and any technical data upon which the description is based as can be found in the most current basin status reports; ()
- v. A discussion of the types of nonpoint source activities currently being conducted that may lower water quality, together with those activities that are anticipated during the next two (2) years, as described in the most current basin status reports; and ()
- vi. Any additional evidence to substantiate such a designation. ()

b. Public Notice and Public Comment. The board will give public notice that one (1) or more stream segments are being considered for recommendation to the legislature as outstanding resource waters. Public notice will also be given if a public hearing is being held. Public comments regarding possible designation will be accepted by the board for a period of at least forty-five (45) days. Public comments may include, but are not limited to, discussion of socioeconomic considerations; fish, wildlife or recreational values; and other beneficial uses. ()

c. Public Hearing. A public hearing(s) may be held at the board's discretion on any stream segment nominated for ORW designation. Public notice will be given if a hearing is held. The decision to hold a hearing may be based on the following criteria: ()

- i. One (1) or more requests contain supporting documentation and valid reasons for designation; ()
- ii. A stream segment is generally recognized as constituting an outstanding national

resource, such as waters of national and state parks, and wildlife refuges; ()

iii. A stream segment is generally recognized as waters of exceptional recreational or ecological significance; ()

iv. The board shall give special consideration to holding a hearing and to recommending for designation by the legislature, waters which meet criteria found in Subsections 052.09.c.ii. and 052.09.c.iii.; ()

v. Requests for a hearing will be given due consideration by the board. Public hearings may be held at the board's discretion. ()

d. Board Review. The board shall review the stream segments nominated for ORW designation and based on the hearing or other written record, determine the segments to recommend as ORWs to the legislature. The board shall submit a report for each stream segment it recommends for ORW designation. The report shall contain the information specified in Subsection 052.09.a. and information from the hearing record or other written record concerning the impacts the designation would have on socioeconomic conditions; fish, wildlife and recreational values; and other beneficial uses. The Department shall then prepare legislation for each segment that will be recommended to the legislature as an ORW. The legislation shall provide for the listing of designated segments in these rules without the need for formal rulemaking procedures, pursuant to Sections 67-5201, et seq., Idaho Code. ()

e. Designated Waters. Those stream segments designated by the legislature as ORWs are listed in Sections 110 through 160. ()

f. Restriction of Nonpoint Source Activities on ORWs. Nonpoint source activities on ORWs shall be restricted as follows: ()

i. The water quality of ORWs shall be maintained and protected. After the legislature has designated a stream segment as an outstanding resource water, no person shall conduct a new or substantially modify an existing nonpoint source activity that can reasonably be expected to lower the water quality of that ORW, except for conducting short term or temporary nonpoint source activities which do not alter the essential character or special uses of a segment, allocation of water rights, or operation of water diversions or impoundments. Stream segments not designated as ORWs that discharge directly into an ORW shall not be subject to the same restrictions as an ORW, nor shall the ORW mixing zone be subject to the same restrictions as an ORW. A person may conduct a new or substantially modify an existing nonpoint source activity that can reasonably be expected to lower the water quality of a tributary or stream segment, which discharges directly into an ORW or an ORW mixing zone, provided that the water quality of that ORW below the mixing zone shall not be lowered. ()

ii. After the legislature has designated a stream segment as an outstanding resource water as outlined in Subsection 052.09.e., existing nonpoint source activities may continue and shall be conducted in a manner that maintains and protects the current water quality of an ORW. The provisions of this section shall not affect short term or temporary activities that do not alter the essential character or special uses of a segment, allocation of water rights, or operations of water diversions or impoundments, provided that such activities shall be conducted in

conformance with applicable laws and regulations. ()

g. Restriction of Point Source Discharges to ORWs. The water quality of ORWs shall be maintained and protected. Point source discharges that may cause degradation to ORWs may be allowed only if they are offset by reductions in other discharges per Subsection 052.06.c. ()

0523. PUBLIC PARTICIPATION.

In providing general coordination of water quality programs within each basin, in carrying out the duties of the Basin Advisory Groups as assigned, and in carrying out the provisions of Sections 39-3601, et seq., Idaho Code, the Director and the Basin Advisory Groups shall employ all means of public involvement deemed necessary, including the public involvement required under Section 67-2340 through Section 67-2347, Idaho Code, Section 051 of this rule or required in Chapter 52, Title 67, Idaho Code, and shall cooperate fully with the public involvement or planning processes of other appropriate public agencies. (3-20-97)

0534. BENEFICIAL USE SUPPORT STATUS.

In determining whether a water body fully supports designated and existing beneficial uses, the Department shall determine whether all of the applicable water quality standards are being achieved, including any criteria developed pursuant to these rules, and whether a healthy, balanced biological community is present. The Department shall utilize biological and aquatic habitat parameters listed below and in the current version of the "Water Body Assessment Guidance," as published by the Idaho Department of Environmental Quality, as a guide to assist in the assessment of beneficial use status. Revisions to this guidance will be made after notice and an opportunity for public comment. These parameters are not to be considered or treated as individual water quality criteria or otherwise interpreted or applied as water quality standards. The Department shall employ a weight of evidence approach in evaluating a combination of water quality data types (including, but not limited to, aquatic habitat and biological parameters), when such a combination of data are available, in making its final use support determination. (3-30-07)

01. Aquatic Habitat Parameters. These parameters may include, but are not limited to, stream width, stream depth, stream shade, measurements of sediment impacts, bank stability, water flows, and other physical characteristics of the stream that affect habitat for fish, macroinvertebrates or other aquatic life. (3-30-07)

02. Biological Parameters. These parameters may include, but are not limited to, evaluation of aquatic macroinvertebrates including Ephemeroptera, Plecoptera and Trichoptera (EPT), Hilsenhoff Biotic Index, measures of functional feeding groups, and the variety and number of fish or other aquatic life to determine biological community diversity and functionality. (3-20-97)

03. Use of Data Regarding pH, Turbidity, Dissolved Oxygen, and Temperature. In making use support determinations, the Department may give less weight to departures from criteria in Section 250 for pH, turbidity, dissolved oxygen, and temperature that are infrequent, brief, and small if aquatic habitat and biological data indicate to the assessor that aquatic life beneficial uses are otherwise supported. Unless otherwise determined by the Department, "infrequent" means less than ten percent (10%) of valid, applicable, representative measurements when continuous data are available; "brief" means two (2) hours or less; and "small" means

conditions that avoid acute effects. Subsection 05~~34~~.03 only applies to use of this data for determination of beneficial use support status. Subsection 05~~34~~.03 does not apply to or affect the application of criteria for any other regulatory purpose including, but not limited to, determining whether a particular discharge or activity violates water quality standards. (~~3-30-07~~)()

04. Natural Conditions. There is no impairment of beneficial uses or violation of water quality standards where natural background conditions exceed any applicable water quality criteria as determined by the Department, and such natural background conditions shall not, alone, be the basis for placing a water body on the list of water quality limited water bodies described in Section 05~~45~~. (~~3-15-02~~)()

05. Rigor, Quality and Relevance of Data. In making any use support determination, the Department shall consider the scientific rigor associated with the collection of samples or data (e.g., the scientific methods used to collect samples or data); the quality of measurements and/or analysis of the samples (e.g., methodology, instrumentation, accuracy, precision, and limits of detection where applicable); and the relevance of the data (e.g., the relationship to a water quality standard, beneficial use or cause of impairment, and how representative the samples or data are of the water body in question). (3-30-07)

05~~45~~. WATER QUALITY LIMITED WATERS AND TMDLS.

01. After Determining That Water Body Does Not Support Use. After determining that a water body does not fully support designated or existing beneficial uses in accordance with Section 05~~34~~, the Department, in consultation with the applicable basin and watershed advisory groups, shall evaluate whether the application of required pollution controls to sources of pollution affecting the impaired water body would restore the water body to full support status. This evaluation may include the following: (~~3-20-97~~)()

a. Identification of significant sources of pollution affecting the water body by past and present activities; (3-20-97)

b. Determination of whether the application of required or cost-effective interim pollution control strategies to the identified sources of pollution would restore the water body to full support status within a reasonable period of time; (3-20-97)

c. Consultation with appropriate basin and watershed advisory groups, designated agencies and landowners to determine the feasibility of, and assurance that required or cost-effective interim pollution control strategies can be effectively applied to the sources of pollution to achieve full support status within a reasonable period of time; (3-20-97)

d. If pollution control strategies are applied as set forth in this Section, the Department shall subsequently monitor the water body to determine whether application of such pollution controls were successful in restoring the water body to full support status. (3-20-97)

02. Water Bodies Not Fully Supporting Beneficial Uses. After following the process identified in Subsection 05~~45~~.01, water bodies not fully supporting designated or existing beneficial uses and not meeting applicable water quality standards despite the application of required pollution controls shall be identified by the Department as water quality limited water

bodies, and shall require the development of TMDLs or other equivalent processes, as described under Section 303(d)(1) of the Clean Water Act. A list of water quality limited water bodies shall be published periodically by the Department in accordance with Section 303(d) of the Clean Water Act and be subject to public review prior to submission to EPA for approval. Informational TMDLs may be developed for water bodies fully supporting beneficial uses as described under Section 303(d)(3) of the Clean Water Act, however, they will not be subject to the provisions of this Section. ~~(3-20-97)~~()

03. Priority of TMDL Development. The priority of TMDL development for water quality limited water bodies identified in Subsection 05~~4~~⁵.02 shall be determined by the Director in consultation with the Basin Advisory Groups as described in Sections 39-3601, et seq., Idaho Code, depending upon the severity of pollution and the uses of the water body, including those of unique ecological significance. Water bodies identified as a high priority through this process will be the first to be targeted for development of a TMDL or equivalent process. ~~(3-20-97)~~()

04. High Priority Provisions. Until a TMDL or equivalent process is completed for a high priority water quality limited water body, new or increased discharge of pollutants which have caused the water quality limited listing may be allowed if interim changes, such as pollutant trading, or some other approach for the pollutant(s) of concern are implemented and the total load remains constant or decreases within the watershed. Interim changes shall maximize the use of cost effective measures to cap or decrease controllable human-caused discharges from point and nonpoint sources. Once the TMDL or equivalent process is completed, any new or increased discharge of causative pollutants will be allowed only if consistent with the approved TMDL. Nothing in this section shall be interpreted as requiring best management practices for agricultural operations which are not adopted on a voluntary basis. (3-20-97)

05. Medium and Low Priority Provisions. Until TMDLs or equivalent processes are developed for water quality limited water bodies identified as medium or low priority, the Department shall require interim changes in permitted discharges from point sources and best management practices for nonpoint sources deemed necessary to prohibit further impairment of the designated or existing beneficial uses. Nothing in this section shall be interpreted as requiring best management practices for agricultural operations which are not adopted on a voluntary basis. (3-20-97)

a. In determining the necessity for interim changes to existing activities and limitations upon proposed activities, the Department, in consultation with basin and watershed advisory groups, shall evaluate the water quality impacts caused by past regulated and unregulated activities in the affected watershed. (3-20-97)

b. Consideration of interim changes shall maximize the use of cost-effective and timely measures to ensure no further impairment of designated or existing uses. (3-20-97)

06. Pollutant Trading. Development of TMDLs or equivalent processes or interim changes under these rules may include pollutant trading with the goal of restoring water quality limited water bodies to compliance with water quality standards. (3-20-97)

07. Idaho Agriculture Pollution Abatement Plan. Use of best management practices by agricultural activities is strongly encouraged in high, medium and low priority watersheds. The

Idaho Agriculture Pollution Abatement Plan is the source for best management practices for the control of nonpoint sources of pollution for agriculture. (3-20-97)

~~055. OUTSTANDING RESOURCE WATERS (ORW).~~

~~01. Nominations for Outstanding Resource Water Designation. Any person may request, in writing to the Board, that a stream segment be considered for designation as an outstanding resource water. To be considered for ORW designation, nominations must be received by the Board by April 1 or ten (10) days after the adjournment sine die of that year's regular session of the legislature, whichever is later, for consideration during the next regular session of the legislature. All nominations shall be addressed to:~~

~~Idaho Board of Environmental Quality
Department of Environmental Quality
Outstanding Resource Water Nomination
1410 N. Hilton
Boise, Idaho 83706-1255~~

~~The nomination shall include the following information: (3-23-98)~~

- ~~a. The name, description and location of the stream segment; (7-1-93)~~
- ~~b. The boundaries upstream and downstream of the stream segment; (7-1-93)~~
- ~~c. An explanation of what makes the segment a candidate for the designation; (7-1-93)~~
- ~~d. A description of the existing water quality and any technical data upon which the description is based as can be found in the most current basin status reports; (7-1-93)~~
- ~~e. A discussion of the types of nonpoint source activities currently being conducted that may lower water quality, together with those activities that are anticipated during the next two (2) years, as described in the most current basin status reports; and (7-1-93)~~
- ~~f. Any additional evidence to substantiate such a designation. (7-1-93)~~

~~02. Public Notice and Public Comment. The Board will give public notice that one (1) or more stream segments are being considered for recommendation to the legislature as outstanding resource waters. Public notice will also be given if a public hearing is being held. Public comments regarding possible designation will be accepted by the Board for a period of at least forty five (45) days. Public comments may include, but are not limited to, discussion of socio-economic considerations; fish, wildlife or recreational values; and other beneficial uses. (7-1-93)~~

~~03. Public Hearing. A public hearing(s) may be held at the Board's discretion on any stream segment nominated for ORW designation. Public notice will be given if a hearing is held. The decision to hold a hearing may be based on the following criteria: (7-1-93)~~

~~a. One (1) or more requests contain supporting documentation and valid reasons for designation; (7-1-93)~~

~~b. A stream segment is generally recognized as constituting an outstanding national resource, such as waters of national and state parks, and wildlife refuges; (7-1-93)~~

~~c. A stream segment is generally recognized as waters of exceptional recreational or ecological significance; (7-1-93)~~

~~d. The Board shall give special consideration to holding a hearing and to recommending for designation by the legislature, waters which meet criteria found in Subsection 055.03.b. and 055.03.c.; (3-20-97)~~

~~e. Requests for a hearing will be given due consideration by the Board. Public hearings may be held at the Board's discretion. (7-1-93)~~

~~04. **Board Review.** The Board shall review the stream segments nominated for ORW designation and based on the hearing or other written record, determine the segments to recommend as ORWs to the legislature. The Board shall submit a report for each stream segment it recommends for ORW designation. The report shall contain the information specified in Subsection 055.01 and information from the hearing record or other written record concerning the impacts the designation would have on socio-economic conditions; fish, wildlife and recreational values; and other beneficial uses. The Department shall then prepare legislation for each segment that will be recommended to the legislature as an ORW. The legislation shall provide for the listing of designated segments in these regulations without the need for formal rule-making procedures, pursuant to Sections 67-5200, et seq., Idaho Code. (3-20-97)~~

~~05. **Designated Waters.** Those stream segments designated by the legislature as ORWs are listed in Sections 110 through 160. (7-1-93)~~

~~06. **Restriction of Nonpoint Source Activities on Outstanding Resource Waters.** Nonpoint source activities on ORWs shall be restricted as specified in Subsection 350.04. (7-1-93)~~

(BREAK IN CONTINUITY OF SECTIONS)

350. RULES GOVERNING NONPOINT SOURCE ACTIVITIES.

01. Implementation Policy. (7-1-93)

a. Nonpoint sources are the result of activities essential to the economic and social welfare of the state. The a real extent of most nonpoint source activities prevents the practical application of conventional wastewater treatment technologies. Nonpoint source pollution management, including best management practices, is a process for protecting the designated beneficial uses and ambient water quality. Best management practices should be designed,

implemented and maintained to provide full protection or maintenance of beneficial uses. Violations of water quality standards which occur in spite of implementation of best management practices will not be subject to enforcement action. However, if subsequent water quality monitoring and surveillance by the Department, based on the criteria listed in Sections 200, 210, 250, 251, 252, and 253, indicate water quality standards are not met due to nonpoint source impacts, even with the use of current best management practices, the practices will be evaluated and modified as necessary by the appropriate agencies in accordance with the provisions of the Administrative Procedure Act. If necessary, injunctive or other judicial relief may be initiated against the operator of a nonpoint source activity in accordance with the Director's authorities provided in Section 39-108, Idaho Code. In certain cases, revision of the water quality standards may be appropriate. (4-5-00)

b. As provided in Subsections 350.01.a. and 350.02.a. for nonpoint source activities, failure to meet general or specific water quality criteria, or failure to fully protect a beneficial use, shall not be considered a violation of the water quality standards for the purpose of enforcement. Instead, water quality monitoring and surveillance of nonpoint source activities will be used to evaluate the effectiveness of best management practices in protecting beneficial uses as stated in Subsections 350.01.a. and 350.02.b. (12-31-91)

02. Limitation to Nonpoint Source Restrictions. Nonpoint source activities will be subject to the following: (7-1-93)

a. Except as provided in Subsections 350.02.b. and 350.02.c., so long as a nonpoint source activity is being conducted in accordance with applicable rules, regulations and best management practices as referenced in Subsection 350.03, or in the absence of referenced applicable best management practices, conducted in a manner that demonstrates a knowledgeable and reasonable effort to minimize resulting adverse water quality impacts, the activity will not be subject to conditions or legal actions based on Subsections 400.01.b. or 080.01. In all cases, if it is determined by the Director that imminent and substantial danger to the public health or environment is occurring, or may occur as a result of a nonpoint source by itself or in combination with other point or nonpoint source activities, then the Director may seek immediate injunctive relief to stop or prevent that danger as provided in Section 39-108, Idaho Code. (7-1-93)

b. If the Director determines through water quality monitoring and surveillance that water quality criteria are not being met, or that beneficial uses are being impaired as a result of a nonpoint source activity by itself or in combination with other point and nonpoint source activities then: (3-3-87)

i. For an activity occurring in a manner not in accordance with approved best management practices, or in a manner which does not demonstrate a knowledgeable and reasonable effort to minimize resulting adverse water quality impacts, the Director may with appropriate inter-Departmental coordination. (3-3-87)

(1) Prepare a compliance schedule as provided in Section 39-116, Idaho Code; and/or (2-2-83)

(2) Institute administrative or civil proceedings including injunctive relief under Section 39-108, Idaho Code. (3-3-87)

ii. For activities conducted in compliance with approved best management practices, or conducted in a manner which demonstrates knowledgeable and reasonable effort to minimize resulting adverse water quality impacts, the Director may, with appropriate inter-Departmental coordination: (3-3-87)

(1) For those activities with approved best management practices as listed in Subsection 350.03 formally request that the responsible agency conduct a timely evaluation and modification of the practices to insure full protection of beneficial uses. (12-31-91)

(2) For all other nonpoint source activities which do not have approved best management practices as listed in Subsection 350.03, develop and recommend to the operator control measures necessary to fully protect the beneficial uses. Such control measures may be implemented on a voluntary basis, or where necessary, through appropriate administrative or civil proceedings. (12-31-91)

(3) If, in a reasonable and timely manner the approved best management practices are not evaluated or modified by the responsible agency, or if the appropriate control measures are not implemented by the operator, then the Director may seek injunctive relief to prevent or stop imminent and substantial danger to the public health or environment as provided in Section 39-108, Idaho Code. (3-3-87)

c. The Director may review for compliance project plans for proposed nonpoint source activities, based on whether or not the proposed activity will fully maintain or protect beneficial uses as listed in Sections 200, 250, 251, 252, and 253. In the absence of relevant criteria in those Sections, the review for compliance will be based on whether or not the proposed activity: (4-5-00)

i. Will comply with approved or specialized best management practices; and (3-3-87)

ii. Provides a monitoring plan which, when implemented, will provide information to the Director adequate to determine the effectiveness of the approved or specialized best management practices in protecting the beneficial uses of water; and (3-3-87)

iii. Provides a process for modifying the approved or site-specific best management practices in order to protect beneficial uses of water. (3-3-87)

d. For projects determined not to comply with those requirements, the plan may be revised and resubmitted for additional review by the Department. Any person aggrieved by a final determination of the Director may, within thirty (30) days, file a written request for a hearing before the Board in accordance with the Idaho Administrative Procedures Act. In all cases, implementation of projects detailed in a plan shall be conducted in a manner which will not result in imminent and substantial danger to the public health or environment. (3-3-87)

03. Approved Best Management Practices. The following are approved best management practices for the purpose of Subsection 350.02: (12-31-91)

- a. “Rules Pertaining to the Idaho Forest Practices Act,” IDAPA 20.02.01, as adopted by Board of Land Commissioners; (12-31-91)
- b. Idaho Department of Environmental Quality Rules, IDAPA 58.01.06, “Solid Waste Management Rules and Standards”; (7-1-93)
- c. Idaho Department of Environmental Quality Rules, IDAPA 58.01.03, “Individual/Subsurface Sewage Disposal Rules”; (7-1-93)
- d. “Stream Channel Alteration Rules,” IDAPA 37.03.07, as adopted by the Board of Water Resources; (7-1-93)
- e. For the Spokane Valley Rathdrum Prairie Aquifer, “Rathdrum Prairie Sewage Disposal Regulations,” as adopted by the Panhandle District Health Department Board of Health and approved by the Idaho Board of Environmental Quality; (7-1-93)
- f. “Rules Governing Exploration, Surface Mining, and Closure of Cyanidation Facilities,” IDAPA 20.03.02, as adopted by the Board of Land Commissioners; and (7-1-93)
- g. “Dredge and Placer Mining Operations in Idaho,” IDAPA 20.03.01, as adopted by the Board of Land Commissioners. (7-1-93)
- h. “Rules Governing Dairy Waste,” IDAPA 02.04.14, as adopted by the Department of Agriculture. (3-20-97)

~~**04. Restriction of Nonpoint Source Activities on Outstanding Resource Waters.**~~
~~(12-31-91)~~

~~**a.** The water quality of ORWs shall be maintained and protected. After the legislature has designated a stream segment as an outstanding resource water, no person shall conduct a new or substantially modify an existing nonpoint source activity that can reasonably be expected to lower the water quality of that ORW, except for conducting short term or temporary nonpoint source activities which do not alter the essential character or special uses of a segment, allocation of water rights, or operation of water diversions or impoundments. Stream segments not designated as ORWs that discharge directly into an ORW shall not be subject to the same restrictions as an ORW, nor shall the ORW mixing zone be subject to the same restrictions as an ORW. A person may conduct a new or substantially modify an existing nonpoint source activity that can reasonably be expected to lower the water quality of a tributary or stream segment, which discharges directly into an ORW or an ORW mixing zone, provided that the water quality of that ORW below the mixing zone shall not be lowered.~~ (12-31-91)

~~**b.** After the legislature has designated a stream segment as an outstanding resource water as outlined in Subsection 055.05, existing nonpoint source activities may continue and shall be conducted in a manner that maintains and protects the current water quality of an ORW. The provisions of this section shall not affect short term or temporary activities that do not alter the essential character or special uses of a segment, allocation of water rights, or operations of water diversions or impoundments, provided that such activities shall be conducted in conformance with applicable laws and regulations.~~ (3-20-97)

IDAPA 58 - DEPARTMENT OF ENVIRONMENTAL QUALITY

58.01.05 - RULES AND STANDARDS FOR HAZARDOUS WASTE

DOCKET NO. 58-0105-1001

NOTICE OF RULEMAKING - ADOPTION OF PENDING RULE

EFFECTIVE DATE: This rule has been adopted by the Board of Environmental Quality (Board) and is now pending review by the 2011 Idaho State Legislature for final approval. The pending rule will become final and effective immediately upon the adjournment *sine die* of the First Regular Session of the Sixty-first Idaho Legislature unless prior to that date the rule is rejected in whole or in part by concurrent resolution in accordance with Idaho Code Sections 67-5224 and 67-5291.

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 44 and 58, Title 39, Idaho Code. In addition, 40 CFR 271.21(e) and Section 39-4404, Idaho Code, require DEQ to adopt amendments to federal law as proposed under this docket.

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 4, 2010, Vol. 10-8, pages 148 through 154. DEQ received no public comments, and the rule has been adopted as initially proposed. The Rulemaking and Public Comment Summary can be obtained at http://www.deq.idaho.gov/rules/haz_waste/58_0105_1001_pending.cfm or by contacting the undersigned.

IDAHO CODE SECTION 39-107D STATEMENT: This 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 when the pending rule will become effective: Not applicable.

ASSISTANCE ON TECHNICAL QUESTIONS: For assistance on technical questions concerning this rulemaking, contact John Brueck, john.brueck@deq.idaho.gov, (208)373-0458.

Dated this 7th day of October, 2010.

Paula J. Wilson
Hearing Coordinator
Department of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706-1255
(208)373-0418/Fax No. (208)373-0481
paula.wilson@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 proposed rulemaking. The action is authorized by Chapters 44 and 58, Title 39, Idaho Code. In addition, 40 CFR 271.21(e) and Section 39-4404, Idaho Code, require DEQ to adopt amendments to federal law as proposed under this docket.

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 19, 2010. If no such written request is received, a public hearing will not be held.

DESCRIPTIVE SUMMARY: Idaho's Rules and Standards for Hazardous Waste are updated annually to maintain consistency with the U.S. Environmental Protection Agency's federal regulations implementing the Resource Conservation and Recovery Act (RCRA) as directed by the Idaho Hazardous Waste Management Act (HWMA).

This proposed rule updates the federal regulations incorporated by reference to include those revised as of July 1, 2010. In addition, this proposed rule revises Section 005, Identification and Listing of Hazardous Waste, and deletes Section 014, Interim Status Surface Impoundments. The Section 005 revisions are necessary due to corrections made to the federal regulations under the Hazardous Waste Technical Corrections and Clarification Rule. Section 014 has been deleted because the permitting requirements have been included in Sections 008 and 009 and the state of Idaho does not have interim status surface impoundments that receive hazardous waste.

Groups interested in hazardous waste and handlers of hazardous waste including generators, transporters, and treatment, storage, and disposal facilities 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.

After consideration of public comments, DEQ intends to present the final proposal to the Board of Environmental Quality at the October 2010 Board meeting for adoption as a pending rule. The rule is expected to be final and effective upon the conclusion of the 2011 legislative session if adopted by the Board and approved by the Legislature.

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:

Idaho has historically adopted both required and optional federal regulations so that Idaho's hazardous waste rules are the same as federal requirements. Optional federal regulations usually allow more flexibility to the regulated community; required federal

regulations are necessary to maintain program primacy. Adoption by reference allows the Department of Environmental Quality (DEQ) to keep its rules up to date with federal regulation changes and minimizes the EPA Region 10 effort needed to keep Idaho's authorization current. Adoption by reference also simplifies compliance for the regulated community. An electronic copy of the federal regulations incorporated by reference can be obtained at <http://www.gpoaccess.gov/ecfr/index.html>.

NEGOTIATED RULEMAKING: Due to the nature of this rulemaking, negotiations were not held.

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, SUBMISSION OF WRITTEN COMMENTS: For assistance on questions concerning the proposed rulemaking, contact John Brueck, john.brueck@deq.idaho.gov, (208)373-0458.

Anyone can submit written comments by mail, fax or e-mail at the address below regarding this proposed rule. The Department will consider all written comments received by the undersigned on or before September 1, 2010.

Dated this 29th day of June, 2010.

THE FOLLOWING IS THE TEXT OF DOCKET NO. 58-0105-1001

002. INCORPORATION BY REFERENCE OF FEDERAL REGULATIONS.

Any reference in these rules to requirements, procedures, or specific forms contained in the Code of Federal Regulations (CFR), Title 40, Parts 124, 260 - 268, 270, 273, 278, and 279 shall constitute the full adoption by reference of that part and Subparts as they appear in 40 CFR, revised as of July 1, 2009~~10~~, including any notes and appendices therein, unless expressly provided otherwise in these rules. ~~(3-29-10)()~~

01. Exceptions. Nothing in 40 CFR Parts 260 - 268, 270, 273, 278, 279 or Part 124 as pertains to permits for Underground Injection Control (U.I.C.) under the Safe Drinking Water Act, the Dredge or Fill Program under Section 404 of the Clean Water Act, the National Pollution Discharge Elimination System (NPDES) under the Clean Water Act or Prevention of Significant Deterioration Program (PSD) under the Clean Air Act is adopted or included by reference herein. (5-8-09)

02. Availability of Referenced Material. The federal regulations adopted by reference throughout these rules are maintained at the following locations: (7-2-97)

- a. U.S. Government Printing Office, <http://www.gpoaccess.gov/ecfr/index.html>; and
(3-20-04)()
- b. State Law Library, 451 W. State Street, P.O. Box 83720, Boise, ID 83720-0051,
(208)334-3316; and (7-2-97)
- c. Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255,
(208)373-0502. (7-2-97)

(BREAK IN CONTINUITY OF SECTIONS)

004. HAZARDOUS WASTE MANAGEMENT SYSTEM.

40 CFR Part 260 and all Subparts, except 40 CFR 260.2, are herein incorporated by reference as provided in 40 CFR, revised as of July 1, 2009¹⁰. For purposes of 40 CFR 260.10, in the definition of hazardous waste constituent, “Administrator” shall be defined as the U.S. Environmental Protection Agency Administrator. For purposes of 40 CFR 260.20, “Federal Register” shall be defined as the Idaho Administrative Bulletin. (3-29-10)()

005. IDENTIFICATION AND LISTING OF HAZARDOUS WASTE.

40 CFR Part 261 and all Subparts, except the language “in the Region where the sample is collected” in 40 CFR 261.4(e)(3)(iii), ~~except remanded waste codes “K064, K065, K066, K090 and K091” listed in 40 CFR Part 261 Appendix VII, and except 40 CFR 261.23(a)(8)~~, are herein incorporated by reference as provided in 40 CFR, revised as of July 1, 2009¹⁰. For purposes of 40 CFR 261.10 and 40 CFR 261.11, “Administrator” shall be defined as the U.S. Environmental Protection Agency Administrator. For purposes of 40 CFR 261.41(a), Regional Administrator shall be defined as U.S. Environmental Protection Agency Region 10 Regional Administrator. Copies of advance notification required under this section should also be sent to the Director. For purposes of 40 CFR 261.4(b)(11)(ii), 40 CFR 261.39(a)(5), and 40 CFR 261 Appendix IX, “EPA” shall be defined as the U.S. Environmental Protection Agency. (3-29-10)()

01. Excluded Wastes. Chemically Stabilized Electric Arc Furnace Dust (CSEAFD) generated by Envirosafe Services of Idaho, Inc. (ESII) at ESII’s facility in Grand View, Idaho using the Super Detox(R) treatment process as modified by ESII and that is disposed of in a Subtitle D or Subtitle C landfill is excluded from the lists of hazardous waste provided ESII implements a program that meets the following conditions: (3-16-96)

- a. Verification Testing Requirements. Sample Collection and analyses, including quality control procedures, conducted pursuant to Subsections 005.01.b. and 005.01.c., must be performed according to SW-846 methodologies and the RCRA Part B permit, including future revisions. (3-16-96)

- b. Initial Verification Testing.** (3-16-96)
- i. For purposes of Subsections 005.01.b., “new source” shall mean any generator of Electric Arc Furnace Dust (EAFD), EPA and Idaho Department of Environmental Quality Hazardous Waste No. KO61, whose waste has not previously been processed by ESII using the Super Detox(R) treatment process resulting in processed EAFD which has been subjected to initial verification testing and has demonstrated compliance with the delisting levels specified in Subsection 005.01.d. (3-16-96)
- ii. Prior to the initial treatment of any new source of EAFD, ESII must notify the Department in writing. The written notification shall include: (3-16-96)
- (1) The waste profile information; and (3-16-96)
- (2) The name and address of the generator. (3-16-96)
- iii. The first four (4) consecutive batches treated must be sampled in accordance with Subsection 005.01.a. Each of the four (4) samples shall be analyzed to determine if the CSEAFD generated meets the delisting levels specified in Subsection 005.01.d. (3-16-96)
- iv. If the initial verification testing demonstrates that the CSEAFD samples meet the delisting levels specified in Subsection 005.01.d., ESII shall submit the operational and analytical test data, including quality control information, to the Department, in accordance with Subsection 005.01.f. Subsequent to such data submittal, the CSEAFD generated from EAFD originating from the new source shall be considered delisted. (3-16-96)
- v. CSEAFD generated by ESII from EAFD originating from a new source shall be managed as hazardous waste in accordance with Subtitle C of RCRA until: (3-16-96)
- (1) Initial verification testing demonstrates that the CSEAFD meets the delisting levels specified in Subsection 005.01.d.; and (3-16-96)
- (2) The operational and analytical test data is submitted to the Department pursuant to Subsection 005.01.b.iv. (3-16-96)
- vi. For purposes of Subsections 005.01.b. and 005.01.c., “batch” shall mean the CSEAFD which results from a single treatment episode in a full scale mixing vessel. (3-16-96)
- c. Subsequent Verification Testing.** (3-16-96)
- i. Subsequent to initial verification testing, ESII shall collect a representative sample, in accordance with Subsection 005.01.a., from each batch of CSEAFD generated by ESII. ESII may, at its discretion, conduct subsequent verification testing on composite samples. In no event shall a composite sample consist of representative samples from more than twenty (20) batches of CSEAFD. (3-16-96)
- ii. The samples shall be analyzed prior to disposal of each batch of CSEAFD to determine if the CSEAFD meets the delisting levels specified in Subsection 005.01.d. (3-16-96)

iii. Each batch of CSEAFD generated by ESII shall be subjected to subsequent verification testing no later than thirty (30) days after it is generated by ESII. (3-16-96)

iv. If the levels of constituents measured in a sample, or composite sample, of CSEAFD do not exceed the levels set forth in Subsection 005.01.d., then any batch of CSEAFD which contributed to the sample that does not exceed the levels set forth in Subsection 005.01.d. is non-hazardous and may be managed and/or disposed of in a Subtitle D or Subtitle C landfill. (3-16-96)

v. If the constituent levels in a sample, or composite sample, exceed any of the delisting levels set forth in Subsection 005.01.d., then ESII must submit written notification of the results of the analysis to the Department within fifteen (15) days from receiving the final analytical results, and any CSEAFD which contributed to the sample must be: (3-16-96)

(1) Retested, and retreated if necessary, until it meets the levels set forth in Subsection 005.01.d.; or (3-16-96)

(2) Managed and disposed of in accordance with Subtitle C of RCRA. (3-16-96)

vi. Each batch of CSEAFD shall be managed as hazardous waste in accordance with Subtitle C of RCRA until subsequent verification testing demonstrates that the CSEAFD meets the delisting levels specified in Subsection 005.01.d. (3-16-96)

d. Delisting Levels. (3-16-96)

i. All leachable concentrations for these metals must not exceed the following levels (mg/l):

antimony	0.06	mercury	0.009
arsenic	0.50	nickel	1
barium	7.60	selenium	0.16
beryllium	0.010	silver	0.30
cadmium	0.050	thallium	0.020
chromium	0.33	vanadium	2
lead	0.15	zinc	70

(3-16-96)

ii. Metal concentrations must be measured in the waste leachate by the method specified in 40 CFR Part 261.24. (3-16-96)

e. Modification of Treatment Process. (3-16-96)

i. If ESII makes a decision to modify the Super Detox(R) treatment process from the description of the process as set forth in ESII's Petition for Delisting Treated K061 Dust by the

Super Detox(R) Process submitted to the Department on July 14, 1995, ESII shall notify the Department in writing prior to implementing the modification. (3-16-96)

ii. After ESII's receipt of written approval from the Department, and subject to any conditions included with the approval, ESII may implement the proposed modification. (3-16-96)

iii. If ESII modifies its treatment process without first receiving written approval from the Department, this exclusion of waste will be void from the time the process was modified. (3-16-96)

iv. ESII's Petition for Delisting Treated K061 Dust by the Super Detox(R) Process submitted to the Department on July 14, 1995 is available at the Department of Environmental Quality, Permits and Enforcement, 1410 N. Hilton, Boise, Idaho 83706. (3-16-96)

f. Records and Data Retention and Submittal. (3-16-96)

i. Records of disposal site, operating conditions and analytical data from verification testing must be compiled, summarized, and maintained at ESII's Grand View facility for a minimum of five (5) years from the date the records or data are generated. (3-16-96)

ii. The records and data maintained by ESII must be furnished upon request to the Department or EPA. (3-16-96)

iii. Failure to submit requested records or data within ten (10) business days of receipt of a written request or failure to maintain the required records and data on site for the specified time, will be considered by the Department, at its discretion, sufficient basis to revoke the exclusion to the extent directed by the Department. (3-16-96)

iv. All records or data submitted to the Department must be accompanied by a signed copy of the following certification statement to attest to the truth and accuracy of the records or data submitted: "Under civil and/or criminal penalty of law for the making or submission of false or fraudulent statements or representations, I certify that the information contained in or accompanying this document is true, accurate, and complete. As to any identified sections of this document for which I cannot personally verify the truth and accuracy, I certify as the ESII official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete. In the event that any of this information is determined by the Department in its sole discretion to be false, inaccurate, or incomplete, and upon conveyance of this fact to ESII, I recognize and agree that this exclusion of waste will be void as if it never had effect or to the extent directed by the Department and that ESII will be liable for any actions taken in contravention of ESII's RCRA and CERCLA obligations premised upon ESII's reliance on the void exclusion." (3-16-96)

g. Facility Merger and Name Change. On May 4, 2001, the Department was notified of a stock transfer that resulted in ESII's facility merging with American Ecology. This created a name change from Envirosafe Services of Idaho, Inc. (ESII) to US Ecology Idaho, Inc. effective May 1, 2001. All references to Envirosafe Services of Idaho, Inc. or ESII now refer to US Ecology Idaho, Inc. (3-15-02)

006. STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE.

01. Incorporation by Reference. 40 CFR Part 262 and all Subparts, except for the language “for the Region in which the generator is located” in 40 CFR 262.42(a)(2) and 40 CFR 262.42(b), are herein incorporated by reference as provided in 40 CFR, revised as of July 1, 2009~~10~~. For purposes of 40 CFR 262.55, 262.56, and 262.57(b), “Administrator” shall be defined as the U.S. Environmental Protection Agency Region 10 Regional Administrator. Copies of advance notification, annual reports, and exception reports, required under those sections, shall also be provided to the Director. For purposes of 40 CFR 262.21, 262.51, 262.53, 262.54(e), 262.54(g)(1), 262.60, and 262.85(g), EPA shall be defined as the U.S. Environmental Protection Agency. For purposes of 40 CFR Part 262 Subparts E, F, H, and 40 CFR 262.41(a)(4), “United States or U.S.” shall be defined as the United States. ~~(3-29-10)~~()

02. Generator Emergency Notification. In addition to the emergency notification required by 40 CFR 265.56(d)(2), 262.34(d)(5)(iv)(C), (see 40 CFR 262.34(a)(4)), 263.30(c)(1), and 264.56(d)(2), the emergency coordinator must also immediately notify the State Communications Center by telephone, 1-800-632-8000, to file an identical report. (3-15-02)

007. STANDARDS APPLICABLE TO TRANSPORTERS OF HAZARDOUS WASTE.

40 CFR Part 263 and all Subparts are herein incorporated by reference as provided in 40 CFR, revised as of July 1, 2009~~10~~. For purposes of 40 CFR 263.20(g), 263.20(g)(1), 263.20(g)(4), 263.21(a)(4), and 263.22(d), “United States” shall be defined as the United States. ~~(3-29-10)~~()

008. STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL FACILITIES.

40 CFR Part 264 and all Subparts (excluding 40 CFR 264.1(f), 264.149, 264.150, 264.301(l), 264.1030(d), 264.1050(g), 264.1080(e), 264.1080(f) and 264.1080(g)) are herein incorporated by reference as provided in 40 CFR, revised as of July 1, 2009~~10~~. For purposes of 40 CFR Subsection 264.12(a), “Regional Administrator” shall be defined as the U.S. Environmental Protection Agency Region 10 Regional Administrator. For purposes of 40 CFR 264.71(a)(3) and 264.1082(c)(4)(ii), “EPA” shall be defined as the U.S. Environmental Protection Agency. ~~(3-29-10)~~()

009. INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL FACILITIES.

40 CFR Part 265, and all Subparts (excluding Subpart R, 40 CFR 265.1(c)(4), 265.149, 265.150, 265.1030(c), 265.1050(f), 265.1080(e), 265.1080(f), and 265.1080(g)) and except the language contained in 40 CFR 265.340(b)(2) as replaced with, “The following requirements continue to apply even when the owner or operator has demonstrated compliance with the MACT requirements of part 63, subpart EEE of this chapter: 40 CFR 265.351 (closure) and the applicable requirements of Subparts A through H, BB and CC of this part,” are herein incorporated by reference as provided in 40 CFR, revised as of July 1, 2009~~10~~. For purposes of 40 CFR Subsection 265.12(a), “Regional Administrator” shall be defined as the U.S. Environmental Protection Agency Region 10 Regional Administrator. For purposes of 40 CFR 265.71(a)(3) and 265.1083(c)(4)(ii), “EPA” shall be defined as the U.S. Environmental Protection Agency. ~~(3-29-10)~~()

010. STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES AND SPECIFIC TYPES OF HAZARDOUS WASTE FACILITIES.

40 CFR Part 266 and all Subparts are herein incorporated by reference as provided in 40 CFR, revised as of July 1, 20~~09~~10. (3-29-10)()

011. LAND DISPOSAL RESTRICTIONS.

40 CFR Part 268 and all Subparts are herein incorporated by reference as provided in 40 CFR, revised as of July 1, 20~~09~~10, except for 40 CFR 268.1(e)(3), 268.5, 268.6, 268.13, 268.42(b), and 268.44(a) through (g). The authority for implementing the provisions of these excluded sections remains with the EPA. However, the requirements of Sections 39-4403(17) and 39-4423, Idaho Code, shall be applied in all cases where these requirements are more stringent than the federal standards. If the Administrator of the EPA grants a case-by-case variance pursuant to 40 CFR 268.5, that variance will simultaneously create the same case-by-case variance to the equivalent requirement of these rules. For purposes of 40 CFR 268.(2)(j) "EPA" shall be defined as the U.S. Environmental Protection Agency. For purposes of 40 CFR 268.40(b), "Administrator" shall be defined as U.S. Environmental Protection Agency Administrator. In 40 CFR 268.7(a)(9)(iii), "D009" is excluded, (from lab packs as noted in 40 CFR Part 268 Appendix IV.) In 40 CFR 268.48(a), the entry for "2,4,6-Tribromophenol" is excluded. (3-29-10)()

012. HAZARDOUS WASTE PERMIT PROGRAM.

40 CFR Part 270 and all Subparts, except 40 CFR 270.12(a) and 40 CFR 270.14(b)(18), are herein incorporated by reference as provided in 40 CFR, revised as of July 1, 20~~09~~10. For purposes of 40 CFR 270.2, 270.5, 270.10(e)(2), 270.10(e)(3), 270.10(f)(2), 270.10(f)(3), 270.10(g), 270.11(a)(3), 270.32(a), 270.32(b)(2), 270.32(c), 270.51, 270.72(a)(5), and 270.72(b)(5), "EPA" and "Administrator" or "Regional Administrator" shall be defined as the U.S. Environmental Protection Agency and the U.S. Environmental Protection Agency Region 10 Regional Administrator respectively. (3-29-10)()

013. PROCEDURES FOR DECISION-MAKING (STATE PROCEDURES FOR RCRA OR HWMA PERMIT APPLICATIONS).

40 CFR Part 124, Subparts A, B and G are herein incorporated by reference as provided in 40 CFR, revised as of July 1, 20~~09~~10, except that 40 CFR 124.19, the fourth sentence of 40 CFR 124.31(a), the third sentence of 40 CFR 124.32(a), and the second sentence of 40 CFR 124.33(a) are expressly omitted from the incorporation by reference of each of those subsections. For purposes of 40 CFR 124.6(e), 124.10(b), and 124.10(c)(1)(ii) "EPA" and "Administrator" or "Regional Administrator" shall be defined as the U.S. Environmental Protection Agency and the U.S. Environmental Protection Agency Region 10 Regional Administrator, respectively. (3-29-10)()

014. ~~INTERIM STATUS SURFACE IMPOUNDMENTS~~ (RESERVED).

~~In accordance with Section 3005(j) of RCRA which is herein incorporated by reference, surface impoundments in existence on November 8, 1984, and qualifying for interim status shall not receive, store or treat hazardous waste after November 8, 1988, unless retrofitted to meet standards applicable to new impoundments or subject to an exemption. Copies of the federal statute herein incorporated by reference are available in the locations provided in Subsection 002.02. Standards applicable to new surface impoundments which are referenced in Section 3005(j) of RCRA as requirements of Section 3004(o) (42 U.S.C. 6924(o)) appear in federal regulations as 40 CFR Parts 264.220-232 and 265.220-231 and are incorporated as provided in~~

~~Sections 008 and 009.~~

~~(3-15-02)~~

015. STANDARDS FOR THE MANAGEMENT OF USED OIL.

01. Incorporation by Reference. 40 CFR Part 279 and all Subparts are herein incorporated by reference as provided in 40 CFR, revised as of July 1, 20~~09~~10. For purposes of 40 CFR 279.43(c)(3)(ii) “Director” shall be defined as the Director, U.S.DOT Office of Hazardous Materials Regulation. ~~(3-29-10)()~~

02. Used Oil as a Dust Suppressant. 40 CFR Part 279 contains a prohibition on the use of used oil as a dust suppressant at 279.82(a), however, States may petition EPA to allow the use of used oil as a dust suppressant. Members of the public may petition the State to make this application to EPA. This petition to the State must: (2-11-94)

a. Be submitted to the Idaho Department of Environmental Quality, 1410 North Hilton, Boise, Idaho 83706-1255; and (2-11-94)

b. Demonstrate how the requirements of 40 CFR 279.82(b) will be met. (2-11-94)

016. STANDARDS FOR UNIVERSAL WASTE MANAGEMENT.

40 CFR Part 273 and all Subparts are herein incorporated by reference as provided in 40 CFR, revised as of July 1, 20~~09~~10. For purposes of 40 CFR 273.32(a)(3), “EPA” shall be defined as the U.S. Environmental Protection Agency. ~~(3-29-10)()~~

017. CRITERIA FOR THE MANAGEMENT OF GRANULAR MINE TAILINGS (CHAT) IN ASPHALT CONCRETE AND PORTLAND CEMENT CONCRETE IN TRANSPORTATION CONSTRUCTION PROJECTS FUNDED IN WHOLE OR IN PART BY FEDERAL FUNDS.

40 CFR Part 278 and all Subparts are herein incorporated by reference as provided in 40 CFR, revised as of July 1, 20~~09~~10. ~~(3-29-10)()~~

018. STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE FACILITIES OPERATING UNDER A STANDARDIZED PERMIT.

40 CFR Part 267 and all Subparts are herein incorporated by reference as provided in 40 CFR, revised as of July 1, 20~~09~~10. ~~(3-29-10)()~~

IDAPA 58 - DEPARTMENT OF ENVIRONMENTAL QUALITY

58.01.08 - IDAHO RULES FOR PUBLIC DRINKING WATER SYSTEMS

DOCKET NO. 58-0108-1001

NOTICE OF RULEMAKING - ADOPTION OF PENDING RULE

EFFECTIVE DATE: This rule has been adopted by the Board of Environmental Quality (Board) and is now pending review by the 2011 Idaho State Legislature for final approval. The pending rule will become final and effective immediately upon the adjournment *sine die* of the First Regular Session of the Sixty-first Idaho Legislature unless prior to that date the rule is rejected in whole or in part by concurrent resolution in accordance with Idaho Code Sections 67-5224 and 67-5291.

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, and Chapter 21, Title 37, 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 4, 2010, Vol. 10-8, pages 155 through 220. After consideration of public comments, the rule has been revised at Sections 100, 300, 311, 320, 323, and 400. In addition, Sections 514, 531, 541, and 544 have been revised as a result of DEQ review. The remainder of the rule has been adopted as proposed. The Rulemaking and Public Comment Summary can be obtained at http://www.deq.idaho.gov/rules/drinking_water/58_0108_1001_pending.cfm or by contacting the undersigned.

IDAHO CODE 39-107D STATEMENT: This 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 when the pending rule will become effective: Not applicable.

ASSISTANCE ON TECHNICAL QUESTIONS: For assistance on technical questions concerning this rulemaking, contact Mike Piechowski at (208) 373-0274, mike.piechowski@deq.idaho.gov.

DATED this 7th day of October, 2010.

Paula J. Wilson
Hearing Coordinator
Department of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706-1255
(208)373-0418/Fax No. (208)373-0481
paula.wilson@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 proposed rulemaking. The action is authorized by Chapter 1, Title 39, Idaho Code, and Chapter 21, Title 37, 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 19, 2010. If no such written request is received, a public hearing will not be held.

DESCRIPTIVE SUMMARY: This rulemaking has been initiated to make revisions to the Idaho Rules for Public Drinking Water Systems for clarification purposes and for consistency within these and other DEQ rules.

The proposed rule clarifies definitions and facility design standards, reorganizes certain sections such as the filtration and disinfection process, and updates citations to documents incorporated by reference. In addition, the review of plans and specifications section has been revised for consistency with 2010 House Bill 451 (codified at Section 39-103(12), Idaho Code) and the current rule definition of “public drinking water system.” This rulemaking also includes corrections that are typographical and nonsubstantive in nature.

Drinking water system owners and operators, developers, consultants, engineers, cities, counties, industry, drinking water professional organizations, and the public at large 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.

After consideration of public comments, DEQ intends to present the final proposal to the Board of Environmental Quality at the October 2010 Board meeting for adoption as a pending rule. The rule is expected to be final and effective upon adjournment of the 2011 legislative session if adopted by the Board and approved by the Legislature.

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:

This proposed rule incorporates federal regulations by reference. Incorporation by reference is necessary to ensure that the state rules are consistent with federal regulations. An electronic copy of the federal regulations incorporated by reference can be obtained at <http://www.gpoaccess.gov/ecfr/index.html>. This proposed rule also updates the citation to the American Water Works Association (AWWA) Standards, which have been incorporated by reference into these rules since 2006. Information for obtaining the AWWA Standards is

included in the proposed rule.

NEGOTIATED RULEMAKING: Due to the nature of this rulemaking, negotiations were not held.

IDAHO CODE 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 Mike Piechowski at (208) 373-0274, mike.piechowski@deq.idaho.gov.

Anyone may submit written comments by mail, fax or e-mail at the address below regarding this proposed rule. DEQ will consider all written comments received by the undersigned on or before September 1, 2010.

DATED this 29th day of June, 2010.

THE FOLLOWING IS THE TEXT OF DOCKET NO. 58-0108-1001

002. INCORPORATION BY REFERENCE AND AVAILABILITY OF REFERENCED MATERIALS.

01. Incorporation by Reference. The following documents are incorporated by reference into these rules. (4-11-06)

a. 40 CFR Parts 141 and 143. 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 (4-11-06)

b. American Water Works Association (AWWA) Standards, effective ~~July 2006~~ December 2009, 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>.
(~~3-30-07~~)()

02. Availability of Specific Referenced Material. Copies of specific documents referenced within these rules are available at the following locations: (4-11-06)

- 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 <http://www.gpoaccess.gov/ecfr/index.html>. (4-11-06)()
- 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. (4-11-06)()
- c.** Recommended Standards for Water Works: a report of the Water Supply Committee of the Great Lakes -- Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, published by Health Education Services, P.O. Box 7126, Albany, New York 12224, ~~2003~~, Telephone (518) 439-7286. (4-6-05)()
- d.** 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. (5-3-03)
- 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. (12-10-92)
- f.** Rules of the Idaho Water Resources Board available at www.adm.idaho.gov/adminrules/rules/idapa37/37index.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. (3-30-07)
- 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. (4-6-05)
- h.** ANSI/NSF Standard 53-2002e -- 2003, Drinking Water Treatment Units -- Health Effects, available from the National Sanitation Foundation, 789 N. Dixboro Road, Ann Arbor, Michigan 48105, Telephone (734) 769-8010. (4-6-05)
- i.** ANSI/NSF Standard 55-2002 -- 2002, Ultraviolet Microbiological Water Treatment Systems, available from the National Sanitation Foundation, 789 N. Dixboro Road, Ann Arbor, Michigan 48105, Telephone (734) 769-8010. (4-6-05)
- j.** ANSI/NSF Standard 58-2003 -- 2004, Reverse Osmosis Drinking Water Treatment Systems, available from the National Sanitation Foundation, 789 N. Dixboro Road, Ann Arbor, Michigan 48105, Telephone (734) 769-8010. (4-6-05)
- k.** ANSI/NSF Standard 60-2000a -- 2000, Drinking Water Treatment Chemicals -- Health Effects, available from the National Sanitation Foundation, 789 N. Dixboro Road, Ann

Arbor, Michigan 48105, Telephone (734) 769-8010. (4-6-05)

l. ANSI/NSF Standard 61-2000a -- 2000, Drinking Water System Components -- Health Effects, available from the National Sanitation Foundation, 789 N. Dixboro Road, Ann Arbor, Michigan 48105, Telephone (734) 769-8010. (4-6-05)

m. American Water Works Association (AWWA) Standards, available from the AWWA, 6666 West Quincy Avenue, Denver, Colorado 80235, (800) 926-7337, www.awwa.org. (3-30-07)

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. (3-30-07)

o. Manual of Cross-Connection Control, 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/. (3-30-07)

p. Manual on Slow Sand Filtration (1991), published by AWWA Research Foundation 6666 West Quincy Avenue, Denver, CO 80235, (800)926-7337, www.awwa.org. (3-30-07)

q. 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. (3-30-07)

r. 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/ehp/dw/Programs/water_sys_design.htm. (3-30-07)

s. Water System Design Manual, DOH Pub #331-123 (Rev. 8/01), 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/ehp/dw/Programs/water_sys_design.htm. (3-30-07)

t. Submersible Motors: Application, Installation, Maintenance (Franklin Electric AIM manual), Franklin Electric, Bluffton, Indiana 46714, (800)348-2420, <http://www.franklin-electric.com/Manual/pdf/fullAIM.pdf>. (3-30-07)

u. 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://www.epa.gov/safewater/mdbp/implement.html>. (3-30-07)

v. 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 Quincy Avenue, Denver, CO 80235, 800-926-

7337, www.standardmethods.org. (3-30-07)

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). (3-30-07)

x. “Idaho Standards for Public Works Construction,” 2005 Edition, and subsequent revisions, Local Highway Technical Assistance Council, 3330 Grace Street, Boise, ID 83605, (208)344-0565. (4-11-06)

y. 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. (3-30-07)

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/safety_code/000.html. (3-30-07)

aa. 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. (4-2-08)

bb. 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. (4-2-08)

cc. Implementation Guidance for the Ground Water Rule, Idaho Department of Environmental Quality, 1410 North Hilton, Boise, Idaho 83706, www.deq.idaho.gov. (5-8-09)

dd. [AWWA Recommended Practice for Backflow Prevention and Cross-Connection Control \(M14\), available from the AWWA, 6666 West Quincy Avenue, Denver, Colorado 80235, Telephone \(800\) 926-7337.](#) ()

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. (4-11-06)

003. DEFINITIONS.

The definitions set forth in 40 CFR 141.2, revised as of July 1, 2006, are herein incorporated by reference except for the definition of the terms “action level,” “disinfection,” “noncommunity water system,” and “person.” (4-2-08)

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. (12-10-92)

02. Administrator. The Administrator of the United States Environmental Protection Agency. (4-5-00)

- 03. Annual Samples.** Samples that are required once per calendar year. (12-10-92)
- 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). (3-30-07)
- 05. 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. (5-3-03)
- 06. Available.** Based on system size, complexity, and source water quality, a properly licensed operator must be on site or able to be contacted as needed to initiate the appropriate action in a timely manner. (4-6-05)
- 07. 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. (5-8-09)
- 08. Backflow.** The reverse from normal flow direction in a plumbing system or water system caused by back pressure or back siphonage. (12-10-92)
- 09. 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. (4-2-08)
- 10. 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). (4-2-08)
- 11. Board.** The Idaho Board of Environmental Quality. (5-3-03)
- 12. Capacity.** The capabilities required of a public drinking water system in order to achieve and maintain compliance with these rules and the requirements of the federal Safe Drinking Water Act. It is divided into three (3) main elements: (4-5-00)
- a.** Technical capacity means the system 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 personnel to adequately operate and maintain the system and to otherwise implement technical knowledge. Training of operator(s) is required, as appropriate, for the system size and complexity. (4-6-05)
- b.** Financial capacity means the financial resources of the water system, including an appropriate budget; rate structure; cash reserves sufficient for current operation and maintenance, future needs and emergency situations; and adequate fiscal controls. (5-8-09)

- c.** Managerial capacity means that the management structure of the water system embodies the aspects of water system operations, including, but not limited to; (5-8-09)
- i. Short and long range planning; (4-5-00)
 - ii. Personnel management; (4-5-00)
 - iii. Fiduciary responsibility; (4-5-00)
 - iv. Emergency response; (4-5-00)
 - v. Customer responsiveness; (4-5-00)
 - vi. Source water protection; (4-5-00)
 - vii. Administrative functions such as billing and consumer awareness; and (4-5-00)
 - viii. Ability to meet the intent of the federal Safe Drinking Water Act. (4-5-00)

13. 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. (4-2-08)

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. (4-2-08)

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. (5-8-09)

16. 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: (5-8-09)

a. Dead Storage. Storage that is either not available for use in the system or can provide only substandard flows and pressures. (3-30-07)

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. (5-8-09)

c. Operational Storage. Operational storage supplies water when, under normal conditions, the sources are off. This component is the larger of; (3-30-07)

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 (3-30-07)

ii. The volume needed to compensate for the sensitivity of the water level sensors. (3-30-07)

d. 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. (3-30-07)

e. Fire Suppression Storage. The water needed to support fire flow in those systems that provide it. (3-30-07)

f. Standby Storage. Standby storage provides a measure of reliability or safety factor should 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. (5-8-09)

17. 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: (4-5-00)

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. (4-5-00)

b. Comprehensive Technical Assistance (CTA). The implementation phase that is carried out if the CPE results indicate improved performance potential. 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. (4-5-00)

18. Compositing of Samples. The mixing of up to five (5) samples by the laboratory. (4-5-00)

19. 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. (5-3-03)

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. (12-10-92)

21. Connection. Each structure, facility, or ~~single family residence~~ **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. (10-1-93)()

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. (4-2-08)

23. Consumer. Any person served by a public water system. (12-10-92)

24. 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 and characterize the risks (if any) from exposure to contaminants detected in the drinking water in an accurate and understandable manner. (4-5-00)

25. Contaminant. Any physical, chemical, biological, or radiological substance or matter in water. (12-10-92)

26. 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. (10-1-93)

27. Dead End Main. A distribution main of any diameter and length that does not loop back into the distribution system. (3-30-07)

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. (5-8-09)

29. Department. The Idaho Department of Environmental Quality. (12-10-92)

30. Director. The Director of the Department of Environmental Quality or his designee. (12-10-92)

31. Disinfection. Introduction of chlorine or other agent or process approved by the Department, in sufficient concentration or dosage, and for the time required to kill or inactivate pathogenic and indicator organisms. (3-30-07)

32. 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. (5-3-03)

33. 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. (5-8-09)

34. Drinking Water. Means “water for human consumption.” (3-30-07)

35. 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. (12-10-92)

36. 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). (4-2-08)

37. DWIMS. Idaho Department of Environmental Quality Drinking Water Information Management System. Replaced by SDWISS April 2001. (3-15-02)

38. 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 the definition Components of Finished Water Storage in these rules. (5-8-09)

39. 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. (5-3-03)

40. Enhanced Softening. The improved removal of disinfection byproduct precursors by precipitative softening. (4-5-00)

41. 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. (5-8-09)

42. 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 have a demand of three (3) equivalent dwelling units. (5-8-09)

43. Exemption. A temporary deferment of compliance with a maximum contaminant level or treatment technique requirement which may be granted only if the system demonstrates to the satisfaction of the Department that the system cannot comply due to compelling factors and the deferment does not cause an unreasonable risk to public health. (12-10-92)

44. Facility Plan. The facility plan for a public drinking water system 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. (3-30-07)

45. 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. (3-30-07)

46. Fee Assessment. A charge assessed on public drinking water systems based on a rate structure calculated by system size. (10-1-93)

47. 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. (4-5-00)

48. 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). (4-2-08)

49. Finished Water Storage Structures or Facilities. Finished water storage structures or facilities are defined as: (5-8-09)

a. Above-ground storage structure or facility. A finished water storage structure or facility with a bottom elevation above normal ground surface. (5-8-09)

b. Ground-level storage structure or facility. A finished water storage structure or facility with a bottom elevation at normal ground surface. (5-8-09)

c. Partially buried storage structure or facility. 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. (5-8-09)

d. Below-ground storage structure or facility. A finished water storage structure or facility with a bottom elevation and top elevation below normal ground surface. (5-8-09)

50. 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. (3-30-07)

51. 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. (5-8-09)

52. Fixture Protection. The practice of installing backflow prevention assemblies or devices to isolate one (1) or more cross connections within a customer's facility. (5-8-09)

53. 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. (4-2-08)

54. GAC10. Granular activated carbon filter beds with an empty bed contact time of ten (10) minutes based on average day demand and a carbon reactivation frequency of every one hundred eighty (180) days, except that the reactivation frequency for GAC10 used as a best available technology for compliance with MCLs established in the Stage 2 Disinfection Byproducts Requirements (40 CFR Part 141, Subpart V) shall be one hundred twenty (120) days. (5-8-09)

55. GAC20. Granular activated carbon filter beds with an empty-bed contact time of twenty (20) minutes based on average daily flow and a carbon reactivation frequency of every two hundred forty (240) days. (4-2-08)

56. Ground Water System. A public water system which is supplied exclusively by a ground water source or sources. (12-10-92)

57. Ground Water Under the Direct Influence of Surface Water. 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 must be determined for individual sources in accordance with criteria established by the State. The State determination of direct influence may be based on site-specific measurements of water quality, documentation of well construction characteristics and geology with field evaluation, or a combination of water quality and documentation. (5-8-09)

58. Haloacetic 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. (4-5-00)

59. Health Hazards. Any condition which creates, or may create, a 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. (5-3-03)

60. Inorganic. Generally refers to compounds that do not contain carbon and hydrogen. (12-10-92)

61. 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. ~~(5-8-09)~~()

62. Laboratory Certification Reciprocity. Acceptance of a laboratory certification made by another state. Laboratory reciprocity may be granted to laboratories outside of Idaho after application, proof of home state certification, and EPA performance evaluation results are submitted and reviewed. Reciprocity must be renewed after a time specified by the Idaho Laboratory Certification Officer to remain valid. (4-5-00)

63. 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. (4-2-08)

64. License. A physical document issued by the Idaho Bureau of Occupational 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. (4-6-05)

65. 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). (4-2-08)

66. Log. Logarithm to the base ten (10). (12-10-92)

67. 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. (4-11-06)

68. Material Modification. Those modifications of an existing public water system 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. (5-8-09)

69. Maximum Contaminant Level (MCL). The maximum permissible level of a

contaminant in water which is delivered to any user of a public water system. (3-30-07)

70. 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. (5-8-09)

71. Maximum Pumping Capacity. The pumping capacity with the largest source or pump out of service. (5-8-09)

72. 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 circumstances such as distribution line breaks, storm runoff events, source water contamination, or cross-connections. (4-5-00)

73. 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. (4-5-00)

74. Membrane Filtration. A pressure or vacuum driven separation process in which particulate matter larger than one (1) micrometer is rejected by an engineered barrier, primarily through a size-exclusion mechanism, and which has a measurable removal efficiency of a target organism that can be verified through the application of a direct integrity test. This definition includes the common membrane technologies of microfiltration, ultrafiltration, nanofiltration, and reverse osmosis. (4-2-08)

75. 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. (12-10-92)

76. 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 systems that are entirely new construction and previously unregulated systems that are expanding. (4-5-00)

77. 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. (5-8-09)

78. Non-Potable Mains. The pipelines that collect and convey non-potable discharges from or to multiple service connections. (4-11-06)

79. Non-Potable Services. The pipelines that convey non-potable discharges from individual facilities to a connection with the non-potable main. This term also refers to pipelines that convey non-potable water from a pressurized irrigation system, reclaimed wastewater system, and other non-potable systems to individual consumers. (4-11-06)

80. 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. (5-8-09)

81. Nuclear Facility. Factories, processing plants or other installations in which fissionable material is processed, nuclear reactors are operated, or spent (used) fuel material is processed, or stored. (12-10-92)

82. Operating Shift. That period of time during which water system operator decisions that affect public health are necessary for proper operation of the system. (4-5-00)

83. 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. (5-8-09)

84. 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, who provides, or intends to provide, drinking water to the customers, and who is ultimately responsible for the public water system operation. (5-8-09)

85. 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. (5-8-09)

86. 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. (12-10-92)

87. 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 algaecides. (12-10-92)

88. Plant. A physical facility where drinking water or wastewater is treated or processed. (3-30-07)

89. Plant Intake. The works or structures at the head of a conduit through which water is diverted from a source (e.g., river or lake) into the treatment plant. (4-2-08)

90. 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. (3-30-07)

91. Point of Use (POU) Treatment System. A collection of POU treatment devices. (3-30-07)

92. Potable Mains. Pipelines that deliver potable water to multiple service connections. (3-30-07)

93. Potable Services. Pipelines that convey potable water from a connection to the potable water main to individual consumers. (3-30-07)

94. Preliminary Engineering Report. The preliminary engineering report for a public drinking water system facility is a report that addresses specific portions of the system or facility for which modifications are being designed. Modifications may include, but are not limited to, significant changes to existing processes or facilities, system 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. However, the preliminary engineering report shall describe modifications to the facility plan that may be required as a result of the proposed project. (3-30-07)

95. Premises Isolation or Containment. The practice of separating the customer's structure, facility, or premises from the purveyor's system by means of a backflow prevention assembly installed on the service line before any distribution takes place. ~~(5-8-09)~~()

96. 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. (4-2-08)

97. Public Notice. The notification of public water system consumers of information pertaining to that water system including information regarding water quality or compliance status of the water system. (12-10-92)

98. 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, 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: (5-8-09)

a. 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. (5-8-09)

b. 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. (5-8-09)

c. 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. (5-8-09)

d. 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. (5-8-09)

99. Public Water System/Water System/System. Means “public drinking water system.” (4-5-00)

100. Pump House. An above-grade 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. (3-30-07)

101. 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. (5-8-09)

102. 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. (4-11-06)

103. 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. (3-30-07)

104. Repeat Compliance Period. Any subsequent compliance period after the initial compliance period. (12-10-92)

105. 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. (5-8-09)

106. 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. (4-6-05)

107. 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. (5-8-09)

108. Sampling Point. The location in a public water system from which a sample is drawn. (12-10-92)

109. Sanitary Defects. Any faulty structural condition which may allow the water supply to become contaminated. (12-10-92)

110. 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: (4-5-00)

- a. Source; (4-5-00)
- b. Treatment; (4-5-00)
- c. Distribution system; (4-5-00)
- d. Finished water storage; (4-5-00)
- e. Pumps, pump facilities, and controls; (4-5-00)
- f. Monitoring and reporting and data verification; (4-5-00)
- g. System management and operation; and (4-5-00)
- h. Operator compliance with state requirements. (4-5-00)

111. 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. See also the definition of DWIMS. (5-3-03)

112. 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.

(3-30-07)

113. Significant Deficiency. As identified during a sanitary survey, any defect in a system'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. (5-3-03)

114. 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 stations, or reservoirs; and continues to provide the pressure and quantity requirements of Subsection 552.01. ~~(5-8-09)~~()

115. 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. (4-6-05)

116. 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. (12-10-92)

117. Standby Storage. Standby storage provides a measure of reliability or safety factor should sources fail or when unusual conditions impose higher than anticipated demands. See also the definition of Components of Finished Water Storage in these rules. (5-8-09)

118. Substantially Modified. The Department shall consider a public water system to be substantially modified when, as the result of one (1) or more projects, there is a combined increase of twenty-five percent (25%) or more above the system's existing configuration in the population served or number of service connections, the total length of transmission and distribution water mains, and the peak or average water demand. (5-8-09)

119. Substitute Responsible Charge Operator. An operator of a public drinking water system who holds a valid license at a class equal to or greater than the drinking water 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. (4-6-05)

120. Surface Water System. A public water system 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. (4-5-00)

121. SUVA (Specific Ultraviolet Absorption). SUVA means Specific Ultraviolet Absorption at two hundred fifty-four (254) nanometers (nm), an indicator of the humic content of water. It is a calculated parameter obtained by dividing a sample's ultraviolet absorption at a wave

length of two hundred fifty-four (254) nm (UV254) (in m=1) by its concentration of dissolved organic carbon (DOC) (in mg/l). (3-30-07)

122. 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. (4-5-00)

123. 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. (4-2-08)

124. 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. (5-8-09)

125. Treatment Facility. Any place(s) where a public drinking water system or nontransient noncommunity water system alters the physical or chemical characteristics of the drinking water. Chlorination may be considered as a function of a distribution system. (4-5-00)

126. Turbidity. A measure of the interference of light passage through water, or visual depth restriction due to 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. (12-10-92)

127. Two-Stage Lime Softening. A process in which chemical addition and hardness precipitation occur in each of two (2) distinct unit clarification processes in series prior to filtration. (4-2-08)

128. Uncovered Finished Water Storage Facility. A tank, reservoir, or other facility that is directly open to the atmosphere and used to store water that will undergo no further treatment to reduce microbial pathogens except residual disinfection. (4-2-08)

129. 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. (12-10-92)

130. 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. (5-8-09)

131. Variance. A temporary deferment of compliance with a maximum contaminant level or treatment technique requirement which may be granted only when the system 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.

(12-10-92)

132. 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). (4-5-00)

133. Volatile Organic Chemicals (VOCs). VOCs are lightweight organic compounds that vaporize or evaporate easily. (10-1-93)

134. Vulnerability Assessment. A determination of the risk of future contamination of a public drinking water supply. (12-10-92)

135. Waiver. (12-10-92)

a. For the purposes of these rules, except Sections 500 through 552, “waiver” means the Department approval of a temporary reduction in sampling requirements for a particular contaminant. (3-30-07)

b. For purposes of Sections 500 through 552, “waiver” means a dismissal of any requirement of compliance. (3-30-07)

c. For the purposes of Section 010, “waiver” means the deferral of a fee assessment for a public drinking water system. (10-1-93)

136. Wastewater. ~~Unless otherwise specified, sewage, industrial waste, agricultural waste, and associated solids or combinations of these, whether treated or untreated, together with such water as is present.~~ 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. See IDAPA 58.01.16, “Wastewater Rules,” for additional information. (~~3-30-07~~)()

137. 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. (5-3-03)

138. Water Demand. The volume of water requested by system users to satisfy their needs. Water demand can be further categorized as: (5-8-09)

a. Average day demand. The volume of water used by a system on an average day based on a one (1) year period. (5-8-09)

b. 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. (5-8-09)

c. 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. (5-8-09)

139. Water Main. A pipe within a public water system which is under the control of the system 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. (5-8-09)

140. Watershed. The land area from which water flows into a stream or other body of water which drains the area. (3-30-07)

141. 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. (4-2-08)

(BREAK IN CONTINUITY OF SECTIONS)

100. MONITORING AND ANALYTICAL REQUIREMENTS.

01. Microbiological Contaminant Sampling and Analytical Requirements. (10-1-93)

a. 40 CFR 141.21, revised as of July 1, ~~2007~~ 2010, is herein incorporated by reference. ~~(5-8-09)~~()

b. The Department may reduce the total coliform monitoring frequency for community water systems serving twenty-five (25) to one thousand (1000) persons, as specified in 40 CFR 141.21(a)(2) and Subsection 100.01. The Department may allow community water systems serving twenty-five (25) to one thousand (1000) persons to reduce the total coliform monitoring frequency to once per quarter when; (12-10-92)

i. The system submits a written request to the Department in advance of the requirement; and (12-10-92)

ii. There has been no history of total coliform contamination in its current configuration; and (10-1-93)

iii. The system has been in compliance with the total coliform monitoring requirements for the last three (3) years; and (12-10-92)

iv. A sanitary survey has been conducted within the past five (5) years which indicates to the Department that there are no deficiencies which could affect microbial quality; and (12-10-92)

- v. The system uses only a ground water source that is protected. (12-10-92)
- c. The Department may reduce the total coliform monitoring frequency for noncommunity water systems serving less than one thousand (1000) persons as specified in 40 CFR 141.21(a)(3)(i) and Subsection 100.01 of this rule. The Department may allow noncommunity water systems serving less than one thousand (1000) persons to reduce the total coliform monitoring frequency to once per year when; (12-10-92)
 - i. The system submits a written request to the Department in advance of the requirement; and (12-10-92)
 - ii. No coliforms have been detected in the last three (3) years of monitoring; and (12-10-92)
 - iii. The system has been in compliance with the total coliform monitoring requirements for the last three (3) years; and (12-10-92)
 - iv. A sanitary survey has been conducted within the past five (5) years which indicates to the Department that there are no deficiencies which could affect microbial quality; and (12-10-92)
 - v. The system uses only a ground water source that is protected. (12-10-92)
- d. The Department may reduce the total coliform monitoring frequency for noncommunity water systems serving more than one thousand (1000) persons during any month the system serves one thousand (1000) persons or fewer as specified in 40 CFR 141.21(a)(3)(ii) and Subsection 100.01. The Department will allow noncommunity water systems serving more than one thousand (1000) persons to reduce the total coliform monitoring frequency for any month the system serves one thousand (1000) persons or fewer, down to a minimum of one (1) sample per year, provided; (10-1-93)
 - i. The system submits a written request to the Department in advance of the requirement; and (12-10-92)
 - ii. No coliforms have been detected in the last three (3) years of monitoring; and (12-10-92)
 - iii. The system has been in compliance with the total coliform monitoring requirements for the last three (3) years; and (12-10-92)
 - iv. A sanitary survey has been conducted within the past five (5) years which indicates that there are no deficiencies which could effect microbial quality; and (12-10-92)
 - v. The system uses only a ground water source that is protected. (12-10-92)
- e. A system must collect repeat samples within twenty-four (24) hours of notification of positive results as specified in 40 CFR 141.21(b) and Subsection 100.01. The Department may

- allow a system to delay collection of repeat samples if the system; (12-10-92)
- i. Identifies the cause of the contamination; (12-10-92)
 - ii. Is making progress towards correcting the problem; (12-10-92)
 - iii. Submits a written request to delay collecting repeat samples and a written statement admitting an acute MCL violation; (12-10-92)
 - iv. Follows public notification requirements specified under 40 CFR Part 141, Subpart Q, revised as of July 1, 2006, for Tier 1 MCL violations including notice for consumers to boil their water; (4-2-08)
 - v. Continues to collect the regularly scheduled number of routine samples; (12-10-92)
 - vi. Collects all repeat samples immediately following correction of the problem; and (12-10-92)
 - vii. Collects five (5) routine samples during the month following the end of the violation as required under 40 CFR 141.21 (b)(5), unless waived as allowed under that paragraph. (12-10-92)

02. Turbidity Sampling and Analytical Requirements. 40 CFR 141.22, revised as of July 1, 2001, is herein incorporated by reference. (3-15-02)

03. Inorganic Chemical Sampling and Analytical Requirements. 40 CFR 141.23, revised as of July 1, ~~2007~~ 2010, is herein incorporated by reference. ~~(5-8-09)~~()

04. Organic Chemicals Other Than Total Trihalomethanes, Sampling and Analytical Requirements. 40 CFR 141.24, revised as of July 1, ~~2007~~ 2010, is herein incorporated by reference. ~~(5-8-09)~~()

05. Analytical Methods for Radioactivity. 40 CFR 141.25, revised as of July 1, ~~2001~~ 2010, is herein incorporated by reference. ~~(3-15-02)~~()

06. Monitoring Frequency and Compliance Requirements for Radioactivity in Community Water Systems. 40CFR 141.26, revised as of July 1, 2001, is herein incorporated by reference. (3-15-02)

07. Monitoring Waivers ~~and Vulnerability Assessments.~~ 40 CFR 141.23(b) 141.23(c), 141.24(f), 141.24(h), revised as of July 1, 2009, are herein incorporated by reference. ~~(10-1-93)~~()

a. Waivers from sampling requirements in Subsections 100.03, 100.04, 200.01, 503.~~H~~03.k.i. and 503.~~I~~03.k.ii. may be available to all systems for all contaminants except nitrate, nitrite, ~~arsenic~~ and ~~trihalomethanes~~ 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. ~~(5-8-09)~~()

- b.** There are two (2) general types of monitoring waivers: (12-10-92)
 - i.** Waivers based exclusively upon previous analytical data (12-10-92)
 - ii.** Waivers based on a use or vulnerability assessment. (12-10-92)
- c.** Waivers are to be made by the Department on a contaminant specific basis and must be in writing. (12-10-92)
- 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. (12-10-92)
- e.** Water systems which do not receive waivers shall sample at the required initial and repeat monitoring frequencies. (12-10-92)
- 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. (10-1-93)

08. Initial Monitoring Schedule. In addition to the requirements specified in 40 CFR 141.23, revised as of July 1, 2004, 40 CFR 141.24, revised as of July 1, 2004, and 40 CFR 141.40, revised as of July 1, 2001, initial monitoring must be completed according to the following schedule unless otherwise specified by the Department: (4-6-05)

- a.** Public water systems serving more than one hundred (100) people must conduct initial monitoring before January 1, 1995 except that: (10-1-93)
 - 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. (10-1-93)
 - 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. (10-1-93)
 - iii.** Initial monitoring required under 40 CFR 141.23(c) must be completed before January 1, 1994 for all surface water sources serving community or nontransient noncommunity public water systems. (10-1-93)
- b.** Public water systems serving one hundred (100) or less people must conduct initial monitoring before January 1, 1996 except that: (10-1-93)
 - 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. (10-1-93)

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. (10-1-93)

iii. Initial monitoring required under 40 CFR 141.23(c) must be completed before January 1, 1994 for all surface water sources serving community or nontransient noncommunity public water systems. (10-1-93)

09. Alternate Analytical Techniques. 40 CFR 141.27 is herein incorporated by reference. (10-1-93)

10. Approved Laboratories. 40 CFR 141.28, revised as of July 1, 2007, is herein incorporated by reference. All analyses conducted pursuant to these rules, except those listed below, shall 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: (5-8-09)

- a. pH; (12-10-92)
- b. Turbidity (Nephelometric method only); (12-10-92)
- c. Daily analysis for fluoride; (12-10-92)
- d. Temperature; (5-8-09)
- e. Disinfectant residuals, except ozone, which shall be analyzed using the Indigo Method or an acceptable automated method pursuant to Subsection 300.05.c.; (5-8-09)
- f. Alkalinity; (5-8-09)
- g. Calcium; (5-8-09)
- h. Conductivity; (5-8-09)
- i. Silica; and (5-8-09)
- j. Orthophosphate. (5-8-09)

11. Consecutive Water System. 40 CFR 141.29 is herein incorporated by reference. (10-1-93)

12. Total Trihalomethane Sampling, Analytical and Other Requirements. 40 CFR Part 141.30, Subpart L, revised as of July 1, ~~2007~~ 2010, is herein incorporated by reference. ~~(5-8-09)~~()

(BREAK IN CONTINUITY OF SECTIONS)

300. FILTRATION AND DISINFECTION.

01. General Requirements. 40 CFR 141.70, revised as of July 1, 2002, 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. (4-6-05)

~~02. **Criteria for Avoiding Filtration.** 40 CFR 141.71, revised as of July 1, 2002, is herein incorporated by reference. (5-3-03)~~

02. Filtration. 40 CFR 141.73, revised as of July 1, 2002, is herein incorporated by reference. ()

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. ()

b. The Department will establish filtration removal credit on a system-by-system basis. Unless otherwise demonstrated to the satisfaction of the Department, the maximum log removal credit allowed for filtration is as follows:

Maximum Log Removal		
Filtration Type	Giardia	Viruses
<u>Conventional</u>	<u>2.5</u>	<u>2.0</u>
<u>Direct</u>	<u>2.0</u>	<u>1.0</u>
<u>Slow sand</u>	<u>2.0</u>	<u>2.0</u>
<u>Diatomaceous earth</u>	<u>2.0</u>	<u>1.0</u>
<u>Membrane</u>	<u>3.0</u>	<u>1.0</u>
<u>Alternate technology</u>	<u>2.0</u>	<u>0</u>

()

c. Filtration removal credit shall be granted for filtration treatment provided the system is: ()

i. Operated in accordance with the Operations Plan specified in Subsection 552.03.a.; and ()

ii. The system 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 a rate not to exceed one-tenth (0.1) gallons per minute per square foot; 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, revised as of July 1, 2002, is herein incorporated by reference. ()

034. **Disinfection.** 40 CFR 141.72 is herein incorporated by reference. (10-1-93)

a. In addition to the disinfection requirements in 40 CFR 141.72, each system with a surface water source or ground water source directly influenced by surface water shall maintain a minimum of at least two-tenths (0.2) parts per million of chlorine in the treated water after an actual contact time of at least thirty (30) minutes at peak hour demand before delivery to the first customer. (5-8-09)

b. The Department may allow a system 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 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. (12-10-92)

c. Each system which provides filtration treatment must provide disinfection treatment such that filtration plus disinfection provide at least ninety-nine and nine tenths percent (99.9%) inactivation/removal of Giardia lamblia cysts and ninety-nine and ninety-nine one hundredths percent (99.99%) inactivation/removal of viruses as specified in 40 CFR 141.72 and Section 300. However, in all cases the disinfection portion of the treatment train shall be designed to provide not less than five tenths (0.5) log Giardia inactivation, irrespective of the Giardia removal credit awarded to the filtration portion of the treatment train. (5-8-09)

~~i. 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 Subsection 300.03.c. (5-8-09)~~

~~ii. The Department will establish filtration removal credit on a system-by-system basis. Unless otherwise demonstrated to the satisfaction of the Department, the maximum log removal credit allowed for filtration is as follows:~~

<i>Maximum Log Removal</i>		
<i>Filtration Type</i>	<i>Giardia</i>	<i>Viruses</i>
<i>Conventional</i>	<i>2.5</i>	<i>2.0</i>
<i>Direct</i>	<i>2.0</i>	<i>1.0</i>
<i>Slow sand</i>	<i>2.0</i>	<i>2.0</i>
<i>Diatomaceous earth</i>	<i>2.0</i>	<i>1.0</i>
<i>Membrane</i>	<i>3.0</i>	<i>1.0</i>
<i>Alternate technology</i>	<i>2.0</i>	<i>0</i>

(5-8-09)

iii. ~~Filtration removal credit shall be granted for filtration treatment provided the system is;~~ (12-10-92)

(1) ~~Operated in accordance with the Operations Plan specified in Subsection 552.03.a.; and~~ (12-10-92)

(2) ~~The system is in compliance with the turbidity performance criteria specified under 40 CFR 141.73; and~~ (12-10-92)

(3) ~~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~~ (12-10-92)

(4) ~~Slow sand filters are operated at a rate not to exceed one-tenth (0.1) gallons per minute per square foot; and~~ (12-10-92)

(5) ~~Diatomaceous earth filters are operated at a rate not to exceed one and one-half (1.5) gallons per minute per square foot.~~ (12-10-92)

~~04. Filtration. 40 CFR 141.73, revised as of July 1, 2002, is herein incorporated by reference.~~ (5-3-03)

05. Analytical and Monitoring Requirements. 40 CFR 141.74, revised as of July 1, 1999 2010, is herein incorporated by reference. (4-5-00)()

a. Each public water system which provides filtration treatment shall monitor as follows: (12-10-92)

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). (12-10-92)

ii. At least once per day, the system shall monitor the following parameters to

determine the total inactivation ratio achieved through disinfection: (12-10-92)

(1) Temperature of the disinfected water at each residual disinfectant concentration sampling point; and (12-10-92)

(2) If using chlorine, the pH of the disinfected water at each chlorine residual sampling point. (12-10-92)

(3) The disinfectant 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. Disinfectant contact time, "T," for all other system components used for *Giardia lamblia* and virus inactivation shall be determined by tracer studies or equivalent methods. (5-8-09)

(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. (5-8-09)

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 300.03 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. (10-1-93)

iv. The total inactivation ratio shall be calculated as follows: (12-10-92)

(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: (12-10-92)

(a) One inactivation ratio (CT_{calc}/CT_{99.9}) is determined at/or before the first customer during peak hour demand; or (5-8-09)

(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: (5-8-09)

(i) Step 1: Determine (CT_{calc}/CT_{99.9}) for each sequence. (12-10-92)

(ii) Step 2: Add the (CT_{calc}/CT_{99.9}) values for all sequences. The result is the total inactivation ratio. (12-10-92)

(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 (CT_{calc}/CT_{99.9}) values from all sequences is the total inactivation ratio. (CT_{calc}/CT_{99.9}) must be determined by the methods described in 40 CFR 141.74(b)(4)(i)(B). (5-8-09)

v. Log removal credit for disinfection shall be determined by multiplying the total

inactivation ratio by three (3). (12-10-92)

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. (12-10-92)

b. Residual disinfectant concentrations for ozone must be measured using the Indigo Method, or automated methods may be used if approved as provided for in 40 CFR 141.74(a)(5) and Subsection 300.05. Automated methods for ozone measurement must be approved by the Department. (4-6-05)

c. As provided for in 40 CFR 141.74(b), the Department may specify interim monitoring requirements for 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 Departments; (12-10-92)

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

(12-10-92)

ii. Turbidity shall be measured at least once per day at the entry point to the distribution system. (12-10-92)

iii. The Department may, at its discretion, reduce the turbidity monitoring frequency for any noncommunity system which demonstrates to the satisfaction of the Department: (12-10-92)

(1) A free chlorine residual of two-tenths (0.2) part per million is maintained throughout the distribution system; (12-10-92)

(2) The water source is well protected; (12-10-92)

(3) The total coliform MCL is not exceeded; and (12-10-92)

- (4) No significant health risk is present. (12-10-92)

d. 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 manufacturers 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. (10-1-93)

e. 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 acceptable alternate monitoring plan to the Department in advance of the monitoring requirement. (10-1-93)

f. 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. (12-10-92)

06. Reporting and Recordkeeping. 40 CFR 141.75, revised as of July 1, 2001, is herein incorporated by reference. (3-15-02)

a. As provided in 40 CFR 141.75(a), revised as of July 1, 2001, and Section 300, the Department may establish interim reporting requirements for systems notified by the Department or U.S. Environmental Protection Agency that filtration treatment must be installed as specified in 40 CFR 141.75(a), revised as of July 1, 2001, and as referred to in Subsection 300.06. Until filtration treatment is installed, systems required to install filtration treatment shall report as follows: (3-15-02)

i. The purveyor shall 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: (12-10-92)

(1) The occurrence of a waterborne disease outbreak potentially attributable to that water system; (12-10-92)

(2) Any turbidity measurement which exceeds five (5) NTU; and (12-10-92)

(3) Any result indicating that the disinfectant residual concentration entering the distribution system is below two-tenths (0.2) mg/l free chlorine. (12-10-92)

ii. The purveyor shall report to the Department within ten (10) days after the end of each month the system serves water to the public the following monitoring information using a

Department-approved form: (12-10-92)

(1) Turbidity monitoring information; and (12-10-92)

(2) Disinfectant residual concentrations entering the distribution system. (12-10-92)

iii. Personnel qualified under Subsection 300.01 shall complete and sign the monthly report forms submitted to the Department as required in Subsection 300.06. (12-10-92)

b. In addition to the reporting requirements in 40 CFR 141.75(b), revised as of July 1, 2001, pertaining to systems with filtration treatment, each public water system which provides filtration treatment must report the level of *Giardia lamblia* and virus inactivation/removal achieved each day by filtration and disinfection. (5-8-09)

07. Recycle Provisions. 40 CFR 141.76, revised as of July 1, 2002, is herein incorporated by reference. (5-3-03)

a. The Department shall evaluate recycling records kept by water systems pursuant to 40 CFR 141.76 during sanitary surveys, comprehensive performance evaluations, or other inspections. (5-3-03)

b. The Department may require a system to modify recycling practices if it can be shown that these practices adversely affect the ability of the system to meet surface water treatment requirements. (5-3-03)

(BREAK IN CONTINUITY OF SECTIONS)

311. ENHANCED FILTRATION AND DISINFECTION FOR CRYPTOSPORIDIUM -- LONG TERM 2 ENHANCED SURFACE WATER TREATMENT RULE.

40 CFR Part 141, subpart W, revised as of July 1, ~~2006~~ 2010, is herein incorporated by reference. (4-2-08)()

01. Cryptosporidium Treatment Credit for Approved Watershed Control Program. The Department shall 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. (4-2-08)

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 assess significant changes in the watershed of a surface water system that have occurred since the system 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 consult with the water system 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: (4-2-08)

- a. New NPDES permits or changes in existing NPDES permits that involve increased loading of contaminants. (4-2-08)
- b. Changes in land use patterns. (4-2-08)
- c. Changes in agricultural cropping, chemical application, or irrigation practices. (4-2-08)
- d. Changes in other non-point discharge source activities (such as grazing, manure application, commercial or residential development). (4-2-08)
- e. Stream or riverbed modifications. (4-2-08)
- f. NPDES permit violations at wastewater treatment plants and confined animal feedlot operations. (4-2-08)
- g. Dramatic natural events such as floods, forest fires, earthquakes, and landslides that may transport or expose contaminants. (4-2-08)
- 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. (4-2-08)
- i. Status of the water system's emergency response plan. (4-2-08)
- j. Accidental or illegal waste discharges and spills. (4-2-08)

(BREAK IN CONTINUITY OF SECTIONS)

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. (4-5-00)

01. General Requirements. 40 CFR 141.130, revised as of July 1, 2006, is herein incorporated by reference. (4-2-08)

02. Analytical Requirements. 40 CFR 141.131, revised as of July 1, ~~2006~~ 2010, is

herein incorporated by reference. DPD colorimetric test kits may be used to measure residual disinfectant concentrations for chlorine, chloramines, and chlorine dioxide. ~~(4-2-08)~~()

03. Monitoring Requirements. 40 CFR 141.132, revised as of July 1, 2006, is herein incorporated by reference. (4-2-08)

04. Compliance Requirements. 40 CFR 141.133, revised as of July 1, 2006, is herein incorporated by reference. (4-2-08)

05. Treatment Techniques for Control of Disinfection Byproduct (DBP) Precursors. 40 CFR 141.135, revised as of July 1, 2006, is herein incorporated by reference. (4-2-08)

(BREAK IN CONTINUITY OF SECTIONS)

322. STAGE 2 DISINFECTION BYPRODUCTS REQUIREMENTS.

40 CFR Part 141, Subpart V, revised as of July 1, 2006~~9~~, 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. ~~(4-2-08)~~()

323. GROUND WATER RULE.

40 CFR 141, Subpart S, revised as of July 1, ~~2007~~ 2010, is herein incorporated by reference. “Implementation Guidance for the Ground Water 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 141, Subpart S. ~~(5-8-09)~~()

01. Monitoring and Compliance Requirements for Membranes. Ground water systems that use membrane filtration (or a combination of membrane filtration and disinfection) to achieve a four (4)-log inactivation/removal of viruses at a ground water source must comply with the following requirements in addition to those specified in 40 CFR 141, Subpart S. (5-8-09)

a. All membrane skids or modules must undergo direct integrity testing a minimum of once each week that the source is contributing water to the distribution system. More frequent direct integrity testing may be required by the Department. Membrane systems shall contain sufficient redundancy to allow for offline direct integrity testing of all skids at the required interval while retaining the capability to supply peak hour demand to the water system. No membrane system shall have fewer than two (2) skids or modules. (5-8-09)

i. The direct integrity test shall have a resolution capable of detecting a response at the absolute molecular weight cut-off or other parameter that describes the exclusion capability of the membrane, as provided by the manufacturer. (5-8-09)

ii. The direct integrity test shall have a sensitivity capable of verifying four (4)-log

virus removal (or a lesser Department approved log removal that achieves, in combination with disinfection, a total of four (4)-log virus treatment). (5-8-09)

b. Systems using membrane filtration shall submit a monthly operating report which includes the following information. (5-8-09)

i. Verification of direct integrity testing of each membrane skid or module and action taken in response to a failure of the direct integrity test. (5-8-09)

ii. Records of any monitoring conducted for the purpose of indirect integrity verification. (5-8-09)

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. (5-8-09)

02. Discontinuation of Treatment. Systems 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 be subject to the triggered source water monitoring requirements of 40 CFR 141, Subpart S. (5-8-09)

a. Demonstration that any known source of contamination has been removed. (5-8-09)

b. Demonstration that structural deficiencies of the well have been rehabilitated and no longer exist. (5-8-09)

c. Provide evidence that the well is drawing from a protected or confined aquifer. (5-8-09)

d. Submit results of one (1) year of monthly monitoring for a fecal indicator organism during which no positive results occurred. (5-8-09)

03. Chlorine Purging Prior to Triggered Source Sampling. 40 CFR 141.402(e), incorporated by reference into these rules at Section 323, requires that ground water source samples be collected at a location prior to any treatment. Pursuant to this requirement, systems that add chlorine to a source, either in the well bore or near enough to the wellhead that chlorinated water could backflow into the well, shall ensure that all chlorine residual has been purged prior to taking a triggered source water sample. This shall 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. (5-8-09)

(BREAK IN CONTINUITY OF SECTIONS)

400. SECONDARY MCLS.

- 01. Purpose.** 40 CFR 143.1, revised as of July 1, 2003, is herein incorporated by reference. (3-20-04)
- 02. Definitions.** 40 CFR 143.2, revised as of July 1, 2003, is herein incorporated by reference. (3-20-04)
- 03. Secondary Maximum Contaminant Levels.** 40 CFR 143.3, revised as of July 1, 2003, is herein incorporated by reference. (3-20-04)
- 04. Monitoring.** 40 CFR 143.4, revised as of July 1, ~~2003~~ 2010, is herein incorporated by reference. ~~(3-20-04)~~()

(BREAK IN CONTINUITY OF SECTIONS)

504. FACILITY AND DESIGN STANDARDS: REVIEW OF PLANS AND SPECIFICATIONS.

The facility and design standards set forth in these rules shall be applied in the review of plans and specifications for public water system 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 be used as guidance in the design and review of plans and specifications for public drinking water facilities. See also Section 013. (3-30-07)

01. Ownership. Documentation of the ownership and responsibility for operating the proposed system shall be made available 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 according to these rules. Documentation shall also include the name of the water system, the name, address, and phone number of the supplier of water, the system size, and the name, address, and phone number of the system operator. (3-30-07)

02. Connection to an Existing System. If the proposed project is to be connected to an existing public water system, 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. 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. This letter must be submitted prior to or concurrent with the submittal of plans and specifications as required in Subsection 504.03. (3-30-07)

03. Plans and Specifications Required. (3-30-07)

a. Prior to construction of new public drinking water systems, new drinking water systems designed to serve ~~ten~~ fifteen (15) or more service connections, or material modifications of existing public water systems, plans and specifications must be submitted to the Department for review and approval. Construction should commence as soon as practical after approval, and

If construction ~~does is~~ not ~~commence~~ ~~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. ~~(3-30-07)()~~

b. Plans and specifications for simple water main extensions shall 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 be transmitted to the Department at the time construction is authorized and shall 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 be sealed, signed, and dated by the professional engineer in responsible charge of their preparation, and the approval or transmittal letter must be sealed, signed, and dated by the QLPE that is approving the plans and specifications. (5-8-09)

i. A statement that the author of the transmittal letter is the QLPE representing the city, county, quasi- municipal corporation or regulated public entity. (5-8-09)

ii. A statement that the extension project complies with the current facility plan or preliminary engineering report, or a statement that the water system has adequate capacity. Please see Subsection 502.01.b. for further information. (5-8-09)

iii. A statement from the city, county, quasi-municipal corporation or regulated public entity or its authorized agent that the water system purveyor will serve the project. (5-8-09)

iv. A statement from the city, county, quasi-municipal corporation or regulated public entity or its authorized agent that the water system purveyor will own and operate the project after construction is complete. (5-8-09)

v. A statement by the QLPE that the plans and specifications are approved for construction. (5-8-09)

vi. A statement by the QLPE that the plans and specifications comply with the facility standards within these rules. (5-8-09)

vii. A statement recommending whether sanitary restrictions can be released or should remain in force. (5-8-09)

c. Subsections 504.03.c.i. through 504.03.c.vi. outline the projects which QLPEs may approve and which QLPEs may not approve. (5-8-09)

i. A QLPE may approve plans and specifications for simple water main extensions that are able to connect to an existing water system owned by a city, county, quasi-municipal corporation, or regulated public utility at the time the extension is approved for construction by the QLPE. (5-8-09)

ii. A QLPE may approve plans for simple water main extensions which will connect to an existing water system, but are unable to connect to the system at the time the extension is approved for construction by the QLPE, provided sanitary restrictions remain in force for the proposed extension. (5-8-09)

iii. A QLPE may not approve plans and specifications which include mechanical systems such as booster stations. (5-8-09)

iv. A QLPE may not approve plans and specifications for projects which the QLPE was the design engineer or otherwise involved in the design. (5-8-09)

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. (5-8-09)

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. (5-8-09)

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. (3-30-07)

e. New or updated operation and maintenance manual or manuals, as required in Subsection 501.12, shall be submitted to the Department for review and approval prior to start-up of the new or modified public water system. (3-30-07)

04. Criteria for Review. The Department shall 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 not substitute its judgment for that of the owner's design engineer concerning the manner of compliance with the rule. (3-30-07)

05. Schedule for Review. The Department shall 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. (3-30-07)

06. Engineer's Seal Required. Plans and specifications submitted to the Department shall 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: (3-30-07)

a. Well source, spring source, or infiltration gallery site evaluation reports, as specified in Subsections 510 and 514. (3-30-07)

b. Plans and specifications for well construction and results of field inspection and testing, as specified in Section 510. (3-30-07)

07. Contents of Plans and Specifications. Plans and specifications shall, where pertinent, provide the following: (3-30-07)

a. General layout, including: (3-30-07)

i. Suitable title. (3-30-07)

ii. Name of municipality or other entity or person responsible for the water supply. (3-30-07)

iii. Area or institution to be served. (3-30-07)

iv. Scale of drawings. (3-30-07)

v. North arrow. (3-30-07)

vi. Datum used. (3-30-07)

vii. General boundaries of municipality or area to be served. (3-30-07)

viii. Date, name, and address of the designing engineer. (3-30-07)

ix. Legible prints suitable for reproduction. (3-30-07)

x. Location and size of existing water mains, if applicable. (3-30-07)

xi. For systems undergoing material modification, location and nature of existing water works structures and appurtenances affecting the proposed improvements. (3-30-07)

b. Detailed plans, including: (3-30-07)

i. Stream crossings, providing profiles with elevations of the stream bed and the estimated normal and extreme high and, where appropriate, low water levels. (3-30-07)

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. (3-30-07)

iii. Topography and arrangement of present or planned wells or structures. (3-30-07)

- 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. (3-30-07)
- 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. (3-30-07)
- vi. Location of all known existing and potential sources of pollution within five hundred (500) feet of water sources or underground treated storage facilities. (3-30-07)
- vii. Size, length, and materials of proposed water mains. (3-30-07)
- 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. (3-30-07)
- ix. Schematic flow diagrams and hydraulic profiles showing the flow through various plant units. (3-30-07)
- x. Piping in sufficient detail to show flow through the plant including waste lines. (3-30-07)
- xi. Locations of all chemical storage areas, chemical feeding equipment, and points of chemical application. (3-30-07)
- 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. (3-30-07)
- xiii. Locations of sanitary or other facilities, such as lavatories, showers, toilets, and lockers, when applicable or required by the Department. (3-30-07)
- xiv. Locations, dimensions, and elevations of all proposed plant facilities. (3-30-07)
- xv. Locations of all sampling taps owned by the water system. (3-30-07)
- xvi. Adequate description of any significant features not otherwise covered by the specifications that may impact public safety or welfare. (3-30-07)
- c.** Complete, detailed technical specifications shall be supplied for the proposed project, including: (3-30-07)
 - i. A program for keeping existing water works facilities in operation during construction of additional facilities so as to minimize interruption of service. (3-30-07)
 - ii. Laboratory facilities and equipment. (3-30-07)
 - iii. Description of chemical feeding equipment. (3-30-07)

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 be disinfected in accordance with AWWA Standards, incorporated into these rules at Subsection 002.01. Plans or specifications shall outline the procedure and include the disinfectant dosage, contact time, and method of testing the results of this procedure. (3-30-07)

v. Materials or proprietary equipment for sanitary or other facilities, including any necessary backflow or back-siphonage protection. (3-30-07)

d. Complete design criteria, as set forth in these rules. (3-30-07)

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. (3-30-07)

08. Notification of Material Deviations. As set forth in Subsection 504.03, during construction or modification, the reviewing authority 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. (3-30-07)

09. Record Plans and Specifications Required. (5-8-09)

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. (3-30-07)

b. Record plans and specifications, or a statement submitted in lieu of record plans and specifications, must be sealed, signed, and dated by the professional engineer in responsible charge of their preparation. (5-8-09)

c. The Department will accept the seal of an Idaho licensed professional geologist on record plans and specifications, or a statement bearing the seal 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. (5-8-09)

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. (3-30-07)

11. Requirement to Have Approved Plans and Specifications and 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. (3-30-07)

12. Construction. Except as provided in Subsection 504.03.b., no construction shall commence until all of the necessary approvals have been received from the Department. The owner shall provide for the inspection of the construction of a public drinking water system 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. (3-30-07)

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 served by one (1) or more wells shall ensure that the following requirements are met: (3-30-07)

01. Site Approval. Prior to drilling, the site of a public water system well must be approved in writing by the Department. The Department shall require the supplier of water to submit a well site evaluation report that takes 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: (3-30-07)

- a.** An evaluation of the potability and quality of anticipated ground water. (5-3-03)
- 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. (5-3-03)
- c.** An estimate of hydrologic and geologic properties of each aquifer and confining layers. (5-3-03)
- 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. (3-30-07)
- 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. (5-3-03)
- f.** Description of potential sources of contamination within five hundred (500) feet of the well site. (5-3-03)

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. (5-8-09)

03. Construction Standards. In addition to meeting the requirements of these rules, all wells shall 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 comply with the drilling permit requirements of Section 42-235, Idaho Code. (5-3-03)

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. (5-8-09)

b. Public water system wells shall 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: (3-30-07)

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 (5-3-03)

ii. The best and most practical aquifer at a particular site is less than fifty-eight (58) feet deep; or; (5-3-03)

iii. The Department specifies a different annular seal depth based on local hydrologic conditions. (5-3-03)

iv. More stringent standards are required by applicable Rules of the Idaho Water Resources Board, referenced in Subsection 002.02. (3-30-07)

c. Specifications shall 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. (3-30-07)

d. Geological data shall 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. (3-30-07)

e. The owner of each well shall retain all records pertaining to each well until the well has been properly abandoned. (3-30-07)

- f. Wells with intake screens shall: (3-30-07)
- i. Be constructed of materials resistant to damage by chemical action of ground water or cleaning operations. (3-30-07)
 - ii. Have openings based on sieve analysis of formation or gravel pack materials. (5-8-09)
 - iii. Have sufficient length and diameter to provide adequate specific capacity and aperture entrance velocity not to exceed point three (0.3) feet per second, or as otherwise approved by the Department. (3-30-07)
 - 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 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. (3-30-07)
- g. Permanent well casing shall 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, whichever is greater. All casing identified in plans and specifications as temporary casing shall be removed prior to well completion. (5-8-09)
- 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 be used for one and one-half (1 ½) inch openings. Additives may be used to enhance effectiveness and are subject to approval by the reviewing authority and the Idaho Department of Water Resources on a case-by-case basis. (3-30-07)
 - ii. Bentonite grout shall 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 not be used above the water table. All bentonite grout shall be installed by positive displacement from the bottom up through a tremmie or float shoe. (3-30-07)
 - iii. Where a dry annular space is to be sealed, a minimum of two (2) inches on all sides of the casing shall 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 be tagged at appropriate intervals to verify placement. If a bridge occurs, a tremmie pipe shall be washed or jetted through the bridge to allow for pumping of grout. Bentonite chips shall be of sufficient size to accommodate proper placement for the existing subsurface conditions. (3-30-07)
 - 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 require an annulus of at least three (3) inches on all sides of the casing, or as approved by the reviewing authority and the Idaho Department of Water Resources. If a bridge occurs, a tremmie pipe shall be washed or jetted through the bridge to allow for pumping of grout. Bentonite chips shall be of sufficient size to accommodate proper

placement for the existing subsurface conditions. (3-30-07)

v. All chip bentonite seals installed through water shall 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 be washed or jetted through the bridge to allow for pumping of grout. Bentonite chips shall be of sufficient size to accommodate proper placement for the existing subsurface conditions. Chip bentonite seals installed through water shall be: (3-30-07)

(1) Installed in accordance with manufacturer's specifications; or (3-30-07)

(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 (3-30-07)

(3) Installed using coated pellets to retard hydration if approved by the reviewing authority and the Idaho Department of Water Resources. (3-30-07)

vi. Concrete may be approved on a case-by-case basis by the reviewing authority and the Idaho Department of Water Resources. Upon such approval, the approved method shall use a six (6) sack minus one-half (1/2) inch Portland cement concrete and shall be installed by positive displacement from the bottom up through a tremmie pipe. (3-30-07)

04. Disinfection. All tools, bits, pipe, and other materials to be inserted in the borehole shall 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. This applies to new well construction and repair of existing wells. (3-30-07)

05. ~~Information~~ Well Completion Report Required. Upon completion of a ~~groundwater source~~ well, and prior to its use as a drinking water source, the following information and data must be submitted by the water system 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 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:

~~(3-30-07)~~()

a. A copy of all well logs; (12-10-92)

b. Results of test pumping, as specified in Subsection 510.06; ~~(3-30-07)~~()

c. As constructed plans showing at least the following: (12-10-92)

i. Annular seal, including depth and sealant material used and method of application; (5-3-03)

ii. Casing perforations, results of sieve analysis used in designing screens installed in sand or gravel aquifers, gravel packs; and (5-3-03)

iii. Recommended ~~P~~ pump location; and ~~(12-10-92)~~()

iv. For community water systems, a permanent means for measuring water level. All equipment required for conducting water level measurements shall be purchased and made available to the water system operator at the time well construction is completed. Where pneumatic or electronic water level measuring equipment is used, it shall 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. (3-30-07)

d. Other information as may be specified by the Department. (12-10-92)

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. (5-8-09)

i. Community Systems. 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. (5-8-09)

ii. Nontransient Noncommunity Systems. 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. (5-8-09)

iii. Transient Noncommunity Systems. Results of a total coliform, nitrite, and nitrate analysis listed in Subsections 050.01, 100.01 and 100.03. (5-8-09)

06. Test Pumping. Upon completion of a ground water source, test pumping shall be conducted in accordance with the following procedures to meet the specified requirements: (12-10-92)

a. The well shall 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 be re-evaluated and submitted to the Department for approval. (3-30-07)

b. Upon completion of well development, the well shall 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 not be more than five (5) parts per million. Sand production shall be measured by a centrifugal sand sampler or other means acceptable to the Department. If sand production exceeds five (5) ppm, the well shall be screened gravel packed, or re-developed. (3-30-07)

c. The following data shall be provided: (5-3-03)

- i. Static water level in the well prior to test pumping; (5-3-03)
- 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; (5-3-03)
- iii. Water level in the well recorded at regular intervals during pumping; (5-3-03)
- iv. Profile of water level recovery from the pumping level projected to the original static water level. (5-3-03)
- v. Depth at which the test pump was positioned in the well; (5-3-03)
- vi. Test pump capacity and head characteristics; (5-3-03)
- vii. Sand production data. (5-3-03)
- viii. ~~Any available~~ Results of analysis based on the drawdown and recovery test pertaining to aquifer properties, **long term** sustained yield, and boundary conditions affecting drawdown. ~~(5-3-03)~~()

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 operations. (3-30-07)

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 is sufficient to meet the long-term water requirements of the project. (4-11-06)

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 source may be considered for use as a public water system 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 standards set forth in these rules. (5-8-09)

08. Observation Wells. If observation wells are used and are intended to remain in service after completion of the water supply well, the observation wells shall be constructed in accordance with the requirements for permanent wells and be protected at the upper terminal to preclude entrance of foreign materials. See Rules of the Idaho Water Resources Board referenced in Subsection 002.02. (3-30-07)

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. (3-30-07)

511. FACILITY AND DESIGN STANDARDS: WELL PUMPS, DISCHARGE PIPING, AND APPURTENANCES.

01. Sample Tap Required. A sample tap suitable for collecting bacteriological samples shall be provided 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 from contamination. (5-8-09)

02. Discharge Piping. The discharge line shall be equipped with the necessary valves and appurtenances to allow a well to be pumped to waste at the design capacity of the well via an approved air gap at a location prior to the first service connection, and shall meet the following requirements: (3-30-07)

- a. Be designed to minimize friction loss. (3-30-07)
- b. Have control valves and appurtenances located above the pump house floor when an above-ground discharge is provided. (3-30-07)
- c. Be protected against contamination. (3-30-07)
- d. Vertical turbine pumps shall 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. (3-30-07)
- e. Have all exposed piping, valves and appurtenances protected against physical damage and freezing. (3-30-07)
- f. Be properly anchored to prevent movement, and protected against surge or water hammer. (3-30-07)

03. Pressure Gauge Required. A pressure gauge shall be provided *at all installations* ~~(3-30-07)~~ on all discharge piping. ()

04. Flow Meter and Check Valve. Unless otherwise approved by the Department, an instantaneous and totalizing flow meter equipped with nonvolatile memory shall be installed on the discharge line of each well in accordance with the manufacturer's specifications. An accessible check valve, which is not located in the pump column, shall be installed in the discharge line of each well between the pump and the shut-off valve. Additional check valves shall be located in the pump column as necessary. (5-8-09)()

05. Well Vent. All wells shall be vented, unless it can be demonstrated that the drawdown under maximum pumping conditions will not exceed ten (10) feet. ~~with~~ The open end of the vent shall 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. Artesian wells equipped with pumps may need venting or an air valve as determined by the Department. (3-30-07)()

06. Casings and Sanitary Well Caps. The following requirements apply to well casings and sanitary caps: (3-30-07)

a. Casings shall extend a minimum of eighteen (18) inches above the final ground surface. ~~and, if~~ If the well is located within a pump house, casings shall extend twelve (12) inches above the pump house floor. ~~If local hydrological conditions require that~~ For a well ~~be~~ located in an area subject to flooding, the Department may require an extension of the casing ~~to extend~~ above the one hundred (100) year or highest known flood level, whichever is higher. (3-30-07)()

b. Wells shall be cased and provided with an sanitary approved cap in such a manner that surface water cannot enter the well. (3-30-07)()

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 be contained in a well house or otherwise protected from freezing. (3-30-07)()

08. Pitless Adapters and Units. Pitless adapters or pitless units: (3-30-07)

a. Shall be of the type marked approved by the National Sanitation Foundation or Pitless Adapter Division of the Water Systems Council. (12-10-92)

b. Shall be designed, constructed and installed to be watertight including the cap, cover, casing extension and other attachments. (12-10-92)

c. Shall be 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 be followed. (3-30-07)

d. Pitless adapters with a two (2) inch or smaller discharge line shall 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 shall be such that any settling that occurs will tighten the threads. The hole in the casing shall be cut with a saw

rather than a torch with an opening large enough to allow seating of gaskets. (3-30-07)

e. Shall be provided with a contamination-proof entrance connection for electrical cable. (3-30-07)

f. In the case of pitless adapters: (3-30-07)

i. Threaded adapters shall 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 be accepted. The orientation of swing joints shall be such that any settling that occurs will tighten the threads. (3-30-07)

ii. The only field welding permitted will be that needed to connect a pitless adapter to the casing. (3-30-07)

g. In the case of pitless units: (3-30-07)

i. Shall be shop-fabricated from the point of connection with the well casing to the unit cap or cover. (3-30-07)

ii. Shall be constructed of materials and weight at least equivalent to and compatible with the well casing. (3-30-07)

iii. Shall be threaded or welded to the well casing. Threaded units shall 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 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. (3-30-07)

iv. Shall terminate 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. (3-30-07)

v. Shall be provided with access to disinfect the well. (3-30-07)

vi. Shall have field connection to the lateral discharge from the pitless unit of threaded, flanged, or mechanical joint connection. (3-30-07)

h. After installation of a pitless adapter or unit and depending on ground water levels and other subsurface conditions, any disturbed well seal may require repair or replacement to meet original seal specifications as determined by the Department. ()

09. Wells Not Allowed in Pits. Wells shall 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. (3-30-07)

10. Discharge Pumps. Discharge pumps shall be subject to the following

- requirements: (3-30-07)
- a.** Line shaft pumps shall. (3-30-07)
 - 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. (3-30-07)
 - ii. Have the pump foundation and base designed to prevent water from coming into contact with the joint. (3-30-07)
 - iii. Use lubricants that meet ANSI/NSF Standard 61. (3-30-07)
 - b.** When a submersible pump is used: (3-30-07)
 - i. The top of the casing shall be effectively sealed against the entrance of water under all conditions of vibration or movement of conductors or cables. (3-30-07)
 - ii. The electrical cable shall be firmly attached to the drop pipe at twenty-one (21) foot intervals or less, or at each coupling or joint. (3-30-07)

512. FACILITY AND DESIGN STANDARDS: WELL LOT.

A well lot shall be provided for wells constructed after November 1, 1977. The well lot shall 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. (3-30-07)

01. Use of Chemicals on the Well Lot. No pesticides, herbicides, or fertilizers shall be applied to a well lot without prior approval from the Department. (3-30-07)

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 be stored on a well lot, except that: (3-30-07)

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. (5-3-03)

b. A propane or natural gas powered generator is preferable to reduce risk of fuel spillage. (5-3-03)

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 licensed water system operator shall be present during filling of the tank following a period of usage, or during periodic extraction and replacement of outdated fuel. (4-6-05)

d. Should the internal combustion engine be located within the pump house, the floor

of the pump house shall 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 be directly discharged outside the pump house. (3-30-07)

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. (4-6-05)

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. (5-8-09)

04. Parking Lots and Vehicle Storage. No public parking or vehicle storage shall be allowed on the well lot, except that operation/maintenance vehicles may be temporary parked on the well lot during the normal course of business. ()

(BREAK IN CONTINUITY OF SECTIONS)

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 *may shall* require a site evaluation report *as set forth for wells* 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 served by one (1) or more springs shall ensure that the following requirements are met: (3-30-07)()

01. Protection of the Spring. Springs shall be housed in a permanent structure and protected from contamination including the entry of surface water, animals, and dust. The spring box shall be equipped with a screened overflow. The inlet shall be screened *as determined by the Department* and located above the floor of the collection chamber. (3-30-07)()

02. Access to Spring Box. Each spring box access shall be elevated at least twenty-four (24) inches above the top of the box or the ground level, whichever is higher. The actual height above the top of the box 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. Each access shall be fitted with a solid water tight cover which overlaps a framed opening and extends down around the frame at least two (2) inches. The frame shall be at least four (4) inches high and shall have a locking device. (5-8-09)

03. Sample Tap Required. A sample tap suitable for collecting bacteriological samples shall be provided. 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 from contamination. (5-8-09)

04. Flow Measurement. A flow meter or other flow measuring device shall be provided. (3-30-07)

05. Protected Area. The entire area within a one hundred (100) foot radius of the spring box shall be owned by the supplier of water or controlled by a long term lease, fenced to prevent trespass of livestock and void of buildings, dwellings and sources of contamination. Surface water shall be diverted from this area. (3-30-07)

(BREAK IN CONTINUITY OF SECTIONS)

531. FACILITY DESIGN STANDARDS: DESIGN STANDARDS FOR CHEMICAL APPLICATION.

- 01. General Equipment Design.** General equipment design shall be such that: (3-30-07)
- a.** Feeders will be able to supply, at all times, the necessary amounts of chemicals at an accurate rate, throughout the range of feed. (3-30-07)
 - b.** Chemical-contact materials and surfaces are resistant to the aggressiveness of the chemical solution. (3-30-07)
 - c.** Corrosive chemicals are introduced in such a manner as to minimize potential for corrosion. (3-30-07)
 - 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 be clearly labeled to identify the chemical they contain. (3-30-07)
 - e.** All chemicals are conducted from the feeder to the point of application in separate conduits. (3-30-07)
 - f.** Chemical feeders are as near as practical to the feed point. (3-30-07)
 - g.** Chemical feeders and pumps shall 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 when the pump shall operate at no lower than ten percent (10%) of the rated maximum. (3-30-07)
 - h.** Spare parts shall be on hand for parts of feeders that are subject to frequent wear

and damage. (5-8-09)

i. Redundant chemical feeders with automatic switchover shall be provided when necessary to ensure adequate treatment. (5-8-09)

02. Facility Design. (3-30-07)

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 be provided and a separate feeder shall be used for each chemical applied. (3-30-07)

b. Chemical application control systems shall meet the following requirements: (3-30-07)

i. Feeders may be manually or automatically controlled, with automatic controls being designed so as to allow override by manual controls. (3-30-07)

ii. Chemical feeders shall be controlled by a flow sensing device so that injection of the chemicals will not continue when the flow of water stops. (3-30-07)

iii. Chemical feed rates shall be proportional to flow. (3-30-07)

iv. A means to measure water flow must be provided in order to determine chemical feed rates. (3-30-07)

v. Provisions shall be made for measuring the quantities of chemicals used. (3-30-07)

vi. Weighing scales shall be provided for weighing cylinders at all plants utilizing chlorine gas, fluoride solution feed. (3-30-07)

vii. Weighing scales shall be capable of providing reasonable precision in relation to average daily dose. (5-8-09)

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. (3-30-07)

c. Dry chemical feeders shall 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. (3-30-07)

d. Positive displacement type solution feed pumps must be capable of operating at the required maximum head conditions found at the point of injection. (3-30-07)

e. Liquid chemical feeders shall 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. (3-30-07)

- f.** Cross connection control must be provided to assure that the following requirements are satisfied. (3-30-07)
- i.** The service water lines discharging to solution tanks shall be properly protected from backflow. (5-8-09)
- 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. (3-30-07)
- g.** Chemical feed equipment shall be readily accessible for servicing, repair, and observation of operation. (3-30-07)
- h.** In-plant water supply for chemical mixing shall be: (3-30-07)
- i.** Ample in quantity and adequate in pressure. (3-30-07)
- ii.** Provided with means for measurement when preparing specific solution concentrations by dilution. (3-30-07)
- iii.** Properly treated for hardness, when necessary. (3-30-07)
- iv.** Properly protected against backflow. (3-30-07)
- v.** Obtained from a location sufficiently downstream of any chemical feed point to assure adequate mixing. (3-30-07)
- i.** Chemical storage facilities shall satisfy the following requirements: (3-30-07)
- i.** Storage tanks and pipelines for liquid chemicals shall 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. (3-30-07)
- ii.** Chemicals shall be stored in covered or unopened shipping containers, unless the chemical is transferred into an approved storage unit. (3-30-07)
- j.** Bulk liquid storage tanks shall comply with the following requirements: (5-8-09)
- i.** A means which is consistent with the nature of the chemical solution shall be provided in a solution tank to maintain a uniform strength of solution. Continuous agitation shall be provided to maintain slurries in suspension. (3-30-07)
- ii.** Means shall be provided to measure the liquid level in the tank. (3-30-07)
- iii.** Bulk liquid storage tanks shall be kept covered. Bulk liquid storage tanks with access openings shall have such openings curbed and fitted with overhanging covers. (5-8-09)

iv. Subsurface locations for bulk liquid storage tanks shall be free from sources of possible contamination, and assure positive drainage for ground waters, accumulated water, chemical spills and overflows. (5-8-09)

v. Bulk liquid storage tanks shall be vented, but shall not vent through vents common with day tanks. Acid storage tanks must be vented to the outside atmosphere, but not through vents in common with day tanks. (5-8-09)

vi. Each bulk liquid storage tank shall be provided with a valved drain, protected against backflow. (5-8-09)

vii. Bulk liquid storage tanks shall have an overflow that is turned downward with the end screened with a twenty-four (24) mesh or similar non-corrodible screen, ~~has~~ *have* a free fall discharge, and ~~is~~ *be* located where noticeable. (5-8-09)()

viii. Bulk liquid storage tanks shall be provided with secondary containment so that chemicals from equipment failure, spillage, or accidental drainage shall be fully contained. 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 provide a secondary containment volume sufficient to hold the volume of the largest storage tank. Piping shall be designed to minimize or contain chemical spills in the event of pipe ruptures. (5-8-09)

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. (5-8-09)

k. Day tanks are subject to the requirements in Subsections 531.02.k.i. through 531.02.k.iv. For the purposes of Section 531, day tanks are defined as liquid chemical tanks holding no more than a thirty (30) hour chemical supply. (5-8-09)

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. (5-8-09)

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. (5-8-09)

iii. Where feasible, secondary containment shall be provided so that chemicals from equipment failure, spillage, or accidental drainage of day tanks shall be fully contained. A common receiving basin may be provided for each group of compatible chemicals. The common receiving basin shall provide a secondary containment volume sufficient to hold the volume of the largest storage tank. If secondary containment is not feasible, day tanks shall be located and protective curbing provided so that chemicals from equipment failure, spillage, or accidental drainage of day tanks shall 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. (5-8-09)

iv. Day tanks and the tank refilling line entry points shall be clearly labeled with the name of the chemical contained. (5-8-09)

l. Provisions shall be made for measuring quantities of chemicals used to prepare feed solutions. (3-30-07)

m. Vents from feeders, storage facilities and equipment exhaust shall discharge to the outside atmosphere above grade and remote from air intakes. (3-30-07)

03. Chemicals. Chemical shipping containers shall be fully labeled to include chemical name, purity and concentration, supplier name and address, and evidence of ANSI/NSF certification where applicable. (3-30-07)

04. Safety Requirements for Chemical Facilities. (3-30-07)

a. The following requirements apply to chlorine gas feed and storage rooms: (3-30-07)

i. Each storage room shall be enclosed and separated from other operating areas. They shall 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. (3-30-07)

ii. Each room shall be provided with a shatter resistant inspection window installed in an interior wall. (3-30-07)

iii. Each room shall 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. (3-30-07)

iv. The ventilating fan shall 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 air inlets to any rooms or structures. Air inlets shall be through louvers near the ceiling. (3-30-07)

v. Louvers for chlorine room air intake and exhaust shall facilitate airtight closure. (3-30-07)

vi. Separate switches for the fan and lights shall be located outside of the chlorine room and at the inspection window. Outside switches shall be protected from vandalism. A signal light indicating fan operation shall be provided at each entrance when the fan can be controlled from more than one (1) point. (3-30-07)

vii. Vents from feeders and storage shall discharge to the outside atmosphere, above

grade. (3-30-07)

viii. Where provided, floor drains shall discharge to the outside of the building and shall not be connected to other internal or external drainage systems. (3-30-07)

ix. Chlorinator rooms shall be heated to sixty degrees Fahrenheit (60°F) and be protected from excessive heat. Cylinders and gas lines shall be protected from temperatures above that of the feed equipment. (3-30-07)

x. Pressurized chlorine feed lines shall not carry chlorine gas beyond the chlorinator room. (3-30-07)

xi. Critical isolation valves shall be conspicuously marked and access kept unobstructed. (3-30-07)

xii. All chlorine rooms, buildings, and areas shall be posted with a prominent danger sign warning of the presence of chlorine. (3-30-07)

xiii. Full and empty cylinders of chlorine gas shall be isolated from operating areas and stored in definitely assigned places away from elevators, stairs, or gangways. They shall be restrained in position to prevent being knocked over or damaged by passing or falling objects. In addition, they shall be stored in rooms separate from ammonia storage, out of direct sunlight, and at least twenty (20) feet from highly combustible materials. Cylinders shall not be kept in unventilated enclosures such as lockers and cupboards. (3-30-07)

b. Where acids and caustics are used, they shall be kept in closed corrosion-resistant shipping containers or storage units. Acids and caustics shall not be handled in open vessels, but shall be pumped in undiluted form from original containers through suitable hose to the point of treatment or to a covered day tank. (3-30-07)

c. Sodium chlorite for chlorine dioxide generation. Proposals for the storage and use of sodium chlorite shall be approved by the Department prior to the preparation of final plans and specifications. Provisions shall be made for proper storage and handling of sodium chlorite to eliminate any danger of fire or explosion associated with its oxidizing nature. (3-30-07)

i. Chlorite (sodium chlorite) shall be stored by itself in a separate room. It must be stored away from organic materials. The storage structure shall 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. (3-30-07)

ii. Care shall be taken to prevent spillage. An emergency plan of operation shall be available for the clean up of any spillage. Storage drums shall be thoroughly flushed prior to recycling or disposal. (3-30-07)

d. Where ammonium hydroxide is used, an exhaust fan shall be installed to withdraw air from high points in the room and makeup air shall be allowed to enter at a low point. The feed pump, regulators, and lines shall 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. (3-30-07)

e. Where anhydrous ammonia is used, the storage and feed systems (including heaters where required) shall be enclosed and separated from other work areas and constructed of corrosion resistant materials. (3-30-07)

i. Pressurized ammonia feed lines shall be restricted to the ammonia room. (3-30-07)

ii. An emergency air exhaust system, as described in Subsection 531.04.a., but with an elevated intake, shall be provided in the ammonia storage room. (3-30-07)

iii. Leak detection systems shall be fitted in all areas through which ammonia is piped. (3-30-07)

iv. Special vacuum breaker/regulator provisions must be made to avoid potentially violent results of backflow of water into cylinders or storage tanks. (3-30-07)

v. Consideration shall 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. (3-30-07)

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. (3-30-07)

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. (3-30-07)

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. (3-30-07)

c. Protective equipment. (3-30-07)

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. (3-30-07)

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. (5-8-09)

iii. For chemicals other than strong acids and alkalis, an appropriate eye washing device or station shall be provided. (5-8-09)

iv. Other protective equipment shall be provided as necessary. (3-30-07)

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. (5-8-09)

a. Sodium chlorite for chlorine dioxide generation. Positive displacement feeders shall be provided. Tubing for conveying sodium chlorite or chlorine dioxide solutions shall 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 be provided. Feed lines shall be installed in a manner to prevent formation of gas pockets and shall terminate at a point of positive pressure. Check valves shall be provided to prevent the backflow of chlorine into the sodium chlorite line. (3-30-07)

b. Hypochlorite facilities shall meet the following requirements: (5-8-09)

i. Hypochlorite shall be stored in the original shipping containers or in hypochlorite compatible containers. Storage containers or tanks shall be sited out of the sunlight in a cool and ventilated area. (5-8-09)

ii. Stored hypochlorite shall be pumped undiluted to the point of addition. Where dilution is unavoidable, deionized or softened water shall be used. (3-30-07)

iii. Storage areas, tanks, and pipe work shall be designed to avoid the possibility of uncontrolled discharges and a sufficient amount of appropriately selected spill absorbent shall be stored on-site. (3-30-07)

iv. Hypochlorite feeders shall be positive displacement pumps with compatible materials for wetted surfaces. (5-8-09)

v. To avoid air locking in smaller installations, small diameter suction lines shall be used with foot valves and degassing pump heads. In larger installations flooded suction shall 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 be fitted. (3-30-07)

vi. Injectors shall be made removable for regular cleaning where hard water is to be treated. (3-30-07)

c. When ammonium sulfate is used, the tank and dosing equipment contact surfaces shall be made of corrosion resistant non-metallic materials. Provision shall be made for removal of the agitator after dissolving the solid. The tank shall be fitted with a lid and vented outdoors. Injection of the solution should take place in the center of treated water flow at a location where there is high velocity movement. (3-30-07)

d. When aqua ammonia (ammonium hydroxide) is used, the feed pumps and storage shall be enclosed and separated from other operating areas. The aqua ammonia room shall be equipped as required for chlorinator rooms with the following changes: (3-30-07)

i. A corrosion resistant, closed, unpressurized tank shall be used for bulk storage, vented through an inert liquid trap to a high point outside and an incompatible connector, or lockout provisions shall be made to prevent accidental addition of other chemicals to the storage tank. (3-30-07)

ii. The storage tank shall 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. (5-8-09)

iii. The aqua ammonia shall 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. (3-30-07)

iv. The point of delivery to the main water stream shall be placed in a region of turbulent water flow. (3-30-07)

v. Provisions shall be made for easy access for removal of calcium scale deposits from the injector. (3-30-07)

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, cost of plant, cost of chemicals and plant location. Applicability of the process chosen shall be demonstrated. (3-30-07)

01. Lime or Lime-Soda Process. Rapid mix, flocculation, and sedimentation processes shall meet the requirements of Section 520. In addition the following requirements must be met: (3-30-07)

a. When split treatment is used, an accurate means of measuring and splitting the flow must be provided. (3-30-07)

b. Rapid mix basins must provide not more than thirty (30) seconds detention time with adequate velocity gradients to keep the lime particles dispersed. (3-30-07)

c. Equipment for stabilization of water softened by the lime or lime-soda process is required, see Section 537. (3-30-07)

d. Mechanical sludge removal equipment shall be provided in the sedimentation basin. (3-30-07)

- e. Provisions must be included for proper disposal of softening sludges; see Section 540. (3-30-07)
- f. The plant processes must be manually started following shut-down. (3-30-07)
- 02. Cation Exchange Process.** (3-30-07)
- 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. (3-30-07)
- 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 be used unless manual regeneration is justified and is approved by the Department. A manual override shall be provided on all automatic controls. (3-30-07)
- c. Rate-of-flow controllers or the equivalent shall be used to control the hydraulic loading of cation exchange units. (3-30-07)
- d. The bottoms, strainer systems and support for the exchange resin shall conform to the criteria provided for rapid rate gravity filters in Section 521. (3-30-07)
- e. Cross Connection Control. Backwash, rinse and air relief discharge pipes shall be installed in such a manner as to prevent any possibility of back-siphonage. (3-30-07)
- 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. (3-30-07)
- g. When the applied water contains a chlorine residual, the cation exchange resin shall be a type that is not damaged by residual chlorine. (3-30-07)
- h. Smooth-nose sampling taps must be provided for the collection of representative samples. The taps shall 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 be at least twenty (20) feet downstream from the point of blending. Petcocks are not acceptable as sampling taps. (3-30-07)
- i. Brine and salt storage tanks shall meet the following requirements: (3-30-07)
- i. Salt dissolving or brine tanks and wet salt storage tanks must be covered and must be corrosion-resistant. (3-30-07)
- ii. The make-up water inlet must be protected from back-siphonage. (3-30-07)
- 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. (3-30-07)

iv. Overflows, where provided, must be protected with ~~corrosion resistant~~ **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. ~~(3-30-07)~~()

v. The salt shall be supported on graduated layers of gravel placed over a brine collection system. (3-30-07)

vi. Alternative designs which are conducive to frequent cleaning of the wet salt storage tank may be considered. (3-30-07)

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 be provided to obtain the proper dilution. (3-30-07)

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. (3-30-07)

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. (3-30-07)

l. Bagged salt and dry bulk salt storage shall be enclosed and separated from other operating areas in order to prevent damage to equipment. (3-30-07)

(BREAK IN CONTINUITY OF SECTIONS)

534. FACILITY AND DESIGN STANDARDS: AERATION PROCESSES.

Public water systems 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 owner or the design engineer shall 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 at http://www.deq.idaho.gov/air/prog_issues/toxics/overview.cfm#tap. (3-30-07)

01. Natural Draft Aeration. Design shall provide: (3-30-07)

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. (3-30-07)

b. For distribution of water uniformly over the top tray. (3-30-07)

c. Discharge through a series of three (3) or more trays with separation of trays not

less than twelve (12) inches. (3-30-07)

d. Loading at a rate of one to five (1-5) gallons per minute for each square foot of total tray area. (3-30-07)

e. Trays with slotted, heavy wire (1/2 inch openings) mesh or perforated bottoms. (3-30-07)

f. Construction of durable material resistant to aggressiveness of the water and dissolved gases. (3-30-07)

g. Protection from insects by twenty-four (24) mesh or similar non-corrodible screen. ~~(3-30-07)~~()

02. Forced or Induced Draft Aeration. Devices shall be designed to: (3-30-07)

a. Include a blower with a weatherproof motor in a tight housing and screened enclosure. (3-30-07)

b. Ensure adequate counter current of air through the enclosed aerator column. (3-30-07)

c. Exhaust air directly to the outside atmosphere. (3-30-07)

d. Include a down-turned and twenty-four (24) mesh or similar non-corrodible screened air outlet and inlet. ~~(3-30-07)~~()

e. Be such that air introduced in the column shall be as free from obnoxious fumes, dust, and dirt as possible. (3-30-07)

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. (3-30-07)

g. Provide loading at a rate of one to five (1-5) gallons per minute for each square foot of total tray area. (3-30-07)

h. Ensure that the water outlet is adequately sealed to prevent unwarranted loss of air. (3-30-07)

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. (3-30-07)

j. Provide distribution of water uniformly over the top tray. (3-30-07)

k. Be of durable material resistant to the aggressiveness of the water and dissolved gases. (3-30-07)

03. Spray Aeration. Design shall provide: (3-30-07)

- a. A hydraulic head of between five (5) and twenty-five (25) feet. (3-30-07)
- b. Nozzles, with the size, number, and spacing of the nozzles being dependent on the flowrate, space, and the amount of head available. (3-30-07)
- c. Nozzle diameters in the range of one (1) to one and one-half (1.5) inches to minimize clogging. (3-30-07)
- 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. ~~(3-30-07)~~()

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 shall 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. ~~(3-30-07)~~()

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 be based on the results of pilot studies and be approved by the Department. (3-30-07)

- a. Process design criteria. (3-30-07)
 - 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 be provided to the Department for review. The pilot study shall evaluate a variety of loading rates and air to water ratios at the peak contaminant concentration. Special consideration shall 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 pilot testing. (3-30-07)
 - ii. The tower shall be designed to reduce contaminants to below the maximum contaminant level and to the lowest practical level. (3-30-07)
 - iii. The type and size of the packing used in the full scale unit shall be the same as that used in the pilot study. (3-30-07)
 - iv. The maximum air to water ratio for which credit will be given is 80:1. (3-30-07)
 - v. The design shall consider potential fouling problems from calcium carbonate and iron precipitation and from bacterial growth. It may be necessary to provide pretreatment. Disinfection capability shall be provided prior to and after packed tower aeration. (3-30-07)
 - vi. The effects of temperature shall be considered. (3-30-07)

- vii. Redundant packed tower aeration capacity at the design flowrate shall be provided. (3-30-07)
- 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 be provided with adequate support to prevent damage from wind. Packing materials shall be resistant to the aggressiveness of the water, dissolved gases and cleaning materials and shall be suitable for contact with potable water. (3-30-07)
- c.** Water flow system. (3-30-07)
- i. Water shall be distributed uniformly at the top of the tower using spray nozzles or orifice-type distributor trays that prevent short circuiting. (3-30-07)
- ii. A mist eliminator shall be provided above the water distributor system. (3-30-07)
- iii. A side wiper redistribution ring shall be provided at least every ten (10) feet in order to prevent water channeling along the tower wall and short circuiting. (3-30-07)
- iv. Sample taps shall be provided in the influent and effluent piping. The sample taps shall satisfy the requirements of Subsection 501.09. (5-8-09)
- v. The effluent sump, if provided, shall have easy access for cleaning purposes and be equipped with a drain valve. The drain shall not be connected directly to any storm or sanitary sewer. (3-30-07)
- vi. The design shall prevent freezing of the influent riser and effluent piping when the unit is not operating. (3-30-07)
- vii. The water flow to each tower shall be metered. (3-30-07)
- viii. An overflow line shall be provided which discharges twelve (12) to fourteen (14) inches above a splash pad or drainage inlet. Proper drainage shall be provided to prevent flooding of the area. (3-30-07)
- ix. Means shall be provided to prevent flooding of the air blower. (3-30-07)
- d.** Air flow system. (3-30-07)
- i. The air inlet to the blower and the tower discharge vent shall be down-turned and protected with a non-corrodible twenty-four (24) mesh screen to prevent contamination from extraneous matter. (3-30-07)
- ii. The air inlet shall be in a protected location. (3-30-07)
- iii. An air flow meter shall be provided on the influent air line or an alternative method to determine the air flow shall be provided. (3-30-07)

- 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. (3-30-07)
- v. A backup motor for the air blower must be readily available. (3-30-07)
- e. Other features that shall be provided: (3-30-07)
 - 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. (3-30-07)
 - ii. A method of cleaning the packing material when iron, manganese, or calcium carbonate fouling may occur. (3-30-07)
 - iii. Tower effluent collection and pumping wells constructed to clearwell standards. (3-30-07)
 - iv. Provisions for extending the tower height without major reconstruction. (3-30-07)
 - v. No bypass shall be provided unless specifically approved by the Department. (3-30-07)
 - vi. Disinfection and adequate contact time after the water has passed through the tower and prior to the distribution system. (3-30-07)
 - vii. Adequate packing support to allow free flow of water and to prevent deformation with deep packing heights. (3-30-07)
 - viii. Operation of the blower and disinfectant feeder equipment during power failures. (3-30-07)
 - ix. Adequate foundation to support the tower and lateral support to prevent overturning due to wind loading. (3-30-07)
 - x. Fencing and locking gate to prevent vandalism. (3-30-07)
 - xi. An access ladder with safety cage for inspection of the aerator including the exhaust port and de-mister. (3-30-07)
 - xii. Electrical interconnection between blower, disinfectant feeder and supply pump. (3-30-07)

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. (3-30-07)

07. Protection of Aerators. All aerators except those discharging to lime softening or clarification plants shall be protected from contamination by birds, insects, wind borne debris, rainfall and water draining off the exterior of the aerator. (3-30-07)

08. Disinfection. Ground water supplies exposed to the atmosphere by aeration must receive disinfection as the minimum additional treatment. (3-30-07)

(BREAK IN CONTINUITY OF SECTIONS)

541. FACILITY AND DESIGN STANDARDS - PUMPING FACILITIES.

Pumping facilities shall be designed to maintain the sanitary quality of pumped water. (3-30-07)

01. Pump Houses. 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: (3-30-07)

a. Pump houses shall 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. (3-30-07)

b. Pump houses shall be protected from flooding and shall be adequately drained. The ground surface shall be graded so as to lead surface drainage away from the pump house. The floor surface shall be at least six (6) inches above the final ground surface. (3-30-07)

c. Pump houses shall be of durable construction, fire and weather resistant, and with outward-opening doors. All underground structures shall be waterproofed. (3-30-07)

d. Provisions shall 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. (3-30-07)

e. Ventilation shall conform to existing local and/or state codes. Adequate ventilation shall 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. (3-30-07)

f. Pump houses shall be provided with a locking door or access to prohibit unauthorized entrance and shall be protected to prevent vandalism and entrance by animals. Plans and specifications for pump houses must provide enough detail to enable the reviewing engineer to determine that the facility is secure, safe, accessible, and that it conforms to electrical and plumbing codes. (3-30-07)

g. Pump houses shall be kept clean and in good repair and shall not be used to store toxic or hazardous materials other than those materials required for treatment processes.

(3-30-07)

h. A suitable outlet shall be provided for drainage from pump glands without discharging onto the floor. (3-30-07)

i. Floor drains shall not be connected to sewers, storm drains, chlorination room drains, or any other source of contamination. Sumps for pump house floor drains shall not be closer than thirty (30) feet from any well. (3-30-07)

j. Adequate space shall be provided for the installation of potential additional units and for the safe and efficient servicing of all equipment. (5-8-09)

k. Suction basins shall 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. (3-30-07)

l. Pump houses shall 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 be provided. Openings in floors, roofs or wherever else shall be provided as needed for removal of heavy or bulky equipment. (3-30-07)

m. All remote controlled stations shall be electrically operated and controlled and shall have signaling apparatus of proven performance. Signaling apparatus shall report automatically when the station is out of service. (3-30-07)

n. Any threaded hose bib installed in the pump house must be equipped with an appropriate backflow prevention device. (3-30-07)

02. Pumping Units. At least two (2) pumping units shall be provided for raw water and surface source pumps. Pumps using seals containing mercury shall not be used in public drinking water system facilities. With any pump out of service, the remaining pump or pumps shall be capable of providing the peak hour demand of the system 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 meet the following requirements: (5-8-09)

a. The pumps shall have ample capacity to supply the maximum demand against the required pressure without dangerous overloading. (3-30-07)

b. The pumps shall be driven by prime movers able to meet the maximum horsepower condition of the pumps. (3-30-07)

c. The pumps shall be provided with readily available spare parts and tools. (3-30-07)

d. The pumps shall be served by control equipment that has proper heater and overload protection for air temperature encountered. (3-30-07)

e. Suction lift shall be avoided if possible. When suction lift is used, it shall be within the limits allowed by the manufacturer of the pumps, and provision shall be made for priming the pumps. (3-30-07)

f. Prime water must not be of lesser sanitary quality than that of the water being pumped. Means shall 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 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. Vacuum priming may be used. (~~3-30-07~~)()

03. Appurtenances. The following appurtenances shall be provided for all water pumps ~~with the exception of well pumps.~~ The Additional requirements ~~for~~ specific to well pumps are provided in Section 511. (~~3-30-07~~)()

a. Pumps shall be adequately protected against freezing and valved to permit satisfactory operation, maintenance, and repair of the equipment. If foot valves are necessary, they shall 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 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 be designed to minimize hydraulic transients. (~~5-8-09~~)()

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. Each pump shall have an individual suction line or the suction lines shall be manifolded such that they will ensure similar hydraulic and operating conditions. (3-30-07)

c. Each pump station shall have a standard pressure gauge on its discharge line and suction line. (3-30-07)

d. Water seals shall 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: (3-30-07)

i. Be provided with either an approved reduced pressure principle backflow preventer or a break tank open to atmospheric pressure, (3-30-07)

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. (3-30-07)

e. Pumps, their prime movers, and accessories shall 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 be made for alternation. Provision shall be made to prevent energizing the motor in the event of a backspin cycle. Equipment shall 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. (3-30-07)

04. Booster Pumps. In addition to other applicable requirements in Section 541, booster pumps must comply with the following: (3-30-07)

a. In-line booster pumps shall 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. (3-30-07)

b. Booster pumps with a suction line directly connected to any storage reservoirs shall be protected by an automatic cutoff to prevent pump damage and avoid excessive reservoir drawdown. (3-30-07)

c. Each booster pumping station shall 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. (5-8-09)

542. FACILITY AND DESIGN STANDARDS - DISTRIBUTION SYSTEM.

01. Protection from Contamination. The distribution system shall be protected from contamination and be designed to prevent contamination by steam condensate or cooling water from engine jackets or other heat exchange devices. (3-30-07)

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: (3-30-07)

a. Installed pipe shall be pressure tested and leakage tested in accordance with the applicable AWWA Standards, incorporated by reference into these rules at Subsection 002.01. (3-30-07)

b. New, cleaned, and repaired water mains shall be disinfected in accordance with AWWA Standard C651, incorporated by reference into these rules at Subsection 002.01. The specifications shall include detailed procedures for the adequate flushing, disinfection, and microbiological testing of all water mains. (3-30-07)

c. In areas where aggressive soil conditions are suspected or known to exist, analyses shall be performed to determine the actual aggressiveness of the soil. If soils are found to be aggressive, action shall 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. (3-30-07)

d. The Department must approve any interconnection between potable water supplies, taking into account differences in water quality between the two systems. (3-30-07)

e. A continuous and uniform bedding shall be provided in the trench for all buried

pipe. Backfill material shall 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 be removed for a depth of at least six (6) inches below the bottom of the pipe. (3-30-07)

f. Water mains shall be covered with sufficient earth or other insulation to prevent freezing. (3-30-07)

g. All tees, bends, plugs and hydrants shall be provided with reaction blocking, tie rods or joints designed to prevent movement. (3-30-07)

03. Pressure Relief Valves. All pumps connected directly to the distribution system shall 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. (3-30-07)

04. Flow Meter Required. Unless otherwise approved by the Department, Aall source pumps and booster pumps connected directly to the distribution system shall have an instantaneous and totalizing flow meter, equipped with nonvolatile memory, installed in accordance with manufacture's specifications, ~~unless deemed unnecessary by the Department in a particular application. The Department may require larger water systems to provide a means of automatically recording the total water pumped.~~ (3-30-07)()

05. Pipe and Jointing Materials. Pipe and jointing materials comply with the standards set forth in Subsection 501.01. Pipe shall be manufactured of materials resistant internally and externally to corrosion and not imparting tastes, odors, color, or any contaminant into the system. Where distribution systems are installed in areas of ground water contaminated by organic compounds: (3-30-07)

a. Pipe and joint materials which do not allow permeation of the organic compounds shall be used; and (4-11-06)

b. Non-permeable materials shall be used for all portions of the system including pipe, joint materials, hydrant leads, and service connections. (4-11-06)

06. Size of Water Mains. When fire hydrants are provided, they shall not be connected to water mains smaller than six (6) inches in diameter, and fire hydrants shall not be installed unless fireflow volumes are available. If fire flow is not provided, water mains shall be no less than three (3) inches in diameter. Any departure from this minimum standard shall be supported by hydraulic analysis and detailed projections of water use. (3-30-07)

07. Separation of Potable and Non-Potable Pipelines. The relation between potable and non-potable pipelines shall be as described in Subsections 542.07.a. through 542.07.c. 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 542.07.b. shall apply to all potable services constructed or reconstructed after April 15, 2007 and where the Department or the QLPE is the reviewing authority. (5-8-09)

- a.** Parallel installation requirements. (5-8-09)
- i. Potable mains in relation to non-potable mains. (5-8-09)
- (1) Greater than ten (10) feet separation: no additional requirements based on separation distance. (5-8-09)
- (2) Ten (10) feet to six (6) feet separation: separate trenches, with potable main above non-potable main, and non-potable main constructed with potable water class pipe. (5-8-09)
- (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 and non-potable main to be constructed of potable water class pipe. (4-11-06)
- (4) Non-potable mains are prohibited from being located in the same trench as potable mains. (3-30-07)
- (5) Pressure ~~sewage~~ **wastewater** mains **or other pressurized mains or lines containing non-potable fluids** shall be no closer horizontally than ten (10) feet from potable mains. ~~(3-30-07)~~()
- ii. New potable services in relation to non-potable services, new potable services in relation to non-potable mains, and new non-potable services in relation to potable mains. (5-8-09)
- (1) Greater than six (6) feet separation: no additional requirements based on separation distance. (5-8-09)
- (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. (5-8-09)
- (3) New potable services are prohibited from being located in the same trench as non-potable mains or non-potable services. (5-8-09)
- b.** Requirements for potable water mains or services crossing non-potable water mains or services. For the purposes of this section, the term “pipeline” applies to both mains and services. (5-8-09)
- i. If there is eighteen (18) inches or more vertical separation with the potable water pipeline above the non-potable pipeline, then the ~~non~~-potable pipeline joints must be as far as possible from the non-potable water pipeline. ~~(5-8-09)~~()
- 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. ~~(5-8-09)~~()
- iii. Less than eighteen (18) inches vertical separation: (5-8-09)

(1) Potable pipeline joint to be as far as possible from the non-potable pipeline; and either: (5-8-09)

(a) Non-potable pipeline 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 (5-8-09)

(b) Sleeve non-potable or potable pipeline 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. (5-8-09)

(2) If potable pipeline is below non-potable pipeline, the non-potable pipeline must also be supported through the crossing to prevent settling. (5-8-09)

iv. Pressure ~~sewage~~ **wastewater** mains or other pressurized mains or lines containing non-potable fluids shall be no closer vertically than eighteen (18) inches from potable mains. (5-8-09)()

c. 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. (5-8-09)

08. Separation from Subsurface Wastewater Systems and Other Sources of Contamination. A minimum horizontal distance of twenty-five (25) feet shall 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 at www.deq.idaho.gov/water/assist_business/engineers/checklists/guidance_separation_distances.pdf. (3-30-07)

09. Dead End Mains. All dead end water mains shall 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. (3-30-07)

a. Dead ends shall be minimized by making appropriate tie-ins whenever practical in order to provide increased reliability of service and reduce head loss. (4-11-06)

b. No water main flushing device shall be directly connected to any sewer. (4-11-06)

c. Stub outs for future main connections shall 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 shall 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. (3-30-07)

11. Separation from Structures. Water mains shall be separated by at least five (5) feet from buildings, industrial facilities, and other permanent structures. (3-30-07)

12. Meter Vault Required. All new public water systems shall include a meter vault at each service connection. A lockable shut-off valve shall be installed in the meter vault. This requirement shall also apply to extensions of the distribution system of existing public water systems. (3-30-07)

13. Minimum Pressure at Building Sites. Any public water system constructed or undergoing material modification where topographical relief may affect water pressure at the customers' premises shall 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.ii., plus a static compensation from the elevation of the main to the elevation of each building site. (5-8-09)

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. (5-3-03)

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 pressure (or twenty-six point five (26.5) psi for two (2) story buildings). (5-3-03)

14. Isolation Valves. A sufficient number of valves shall be provided on water mains to minimize inconvenience and sanitary hazards during repairs. (3-30-07)

15. Air Valves. At high points in water mains where air can accumulate, provisions shall 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. (5-8-09)

a. The open end of an air valve shall 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. (5-8-09)()

b. Discharge piping from air *relief* valves or combination air release/vacuum relief valves shall not connect directly to any storm drain, storm sewer, or sanitary sewer. (5-8-09)()

16. Backflow Protection. Automatic air relief valves shall be equipped with a means of backflow protection. (3-30-07)

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 be constructed as follows: (5-8-09)

a. Above water crossings: the pipe shall be adequately supported and anchored, protected from damage and freezing, and shall be accessible for repair or replacement. (4-11-06)

b. Under water crossings: 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 be provided: (4-11-06)

i. The pipe shall be of special construction, having flexible, restrained, or welded water-tight joints; and (4-11-06)

ii. Valves shall be provided at both ends of water crossings so that the section can be isolated for testing or repair; the valves shall be easily accessible and not subject to flooding; and (4-11-06)

iii. Permanent taps or other provisions to allow insertion of a small meter to determine leakage and obtain water samples shall be made on each side of the valve closest to the supply source. (4-11-06)

543. FACILITY AND DESIGN STANDARDS - CROSS CONNECTION CONTROL.

There shall 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 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. (5-8-09)()

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." ~~In addition all double check valve backflow prevention assemblies and reduced pressure principle backflow prevention assemblies used shall meet American Water Works Association (AWWA) Standards C-510 or C-511, incorporated by reference into these rules at Subsection 002.01, or an equivalent standard approved by the Department.~~ (5-8-09)()

02. Atmospheric Vacuum Breakers. All atmospheric vacuum breakers used shall be marked approved either by the International Association of Plumbing and Mechanical Officials

(IAPMO) or by the American Society of Sanitation Engineers (ASSE). (5-8-09)

03. ~~Resilient Seated Shutoff Valves~~ Replacement Parts and Components. All replacement parts and components, including resilient seated shutoff valves, shall meet original specifications or otherwise be approved by the USC Foundation as replacement parts or components for use ~~d when~~ on double check valve backflow prevention assemblies, reduced pressure principle backflow prevention assemblies, and pressure vacuum breakers ~~are installed~~.
(3-30-07)()

04. Assembly Selection. Appropriate and adequate backflow prevention assemblies types for various facilities, fixtures, equipment, and uses of water ~~must~~ should be selected either from the Pacific Northwest Cross Connection Control Manual, the Uniform Plumbing Code, the Environmental Protection Agency's AWWA Recommended Practice for Backflow Prevention and Cross Connection Control Manual (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. (5-8-09)()

544. FACILITY AND DESIGN STANDARDS: GENERAL DESIGN OF FINISHED WATER STORAGE.

The materials and designs used for finished water storage structures shall provide stability and durability as well as protect the quality of the stored water. Finished water storage structures shall be designed to maintain water circulation and prevent water stagnation. Steel structures and facilities such as steel tanks, standpipes, reservoirs, and elevated tanks shall 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. (5-8-09)

01. Sizing. Storage facilities shall 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. (3-30-07)

02. Location. Storage facilities shall 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. (5-8-09)

a. If the bottom elevation of a storage reservoir must be below normal ground surface, it shall be placed above the seasonal high ground water table. (3-30-07)

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. (5-8-09)

c. 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. (3-30-07)

d. The top of a partially buried storage structure shall not be less than two (2) feet above normal ground surface. (3-30-07)

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. (5-8-09)

03. Protection from Contamination. All finished water storage structures shall have suitable watertight roofs which exclude birds, animals, insects, and excessive dust. The installation of appurtenances, such as antennas, shall be done in a manner that ensures no damage to the tank, coatings or water quality, or corrects any damage that occurred. (3-30-07)

04. Protection from Trespassers. Fencing, locks on access manholes, and other necessary precautions shall be provided to prevent trespassing, vandalism, and sabotage. (3-30-07)

05. Drains. No drain on a water storage structure may have a direct connection to a sewer or storm drain. The design shall allow draining the storage facility for cleaning or maintenance without causing loss of pressure in the distribution system. (3-30-07)

06. Overflow. Overflow pipes of any storage structure or facility shall 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 be of sufficient diameter to permit waste of water in excess of the filling rate. The overflow shall 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. (5-8-09)

a. When an internal overflow pipe is used on above-ground tanks, it shall be located in the access tube. (5-8-09)

b. The overflow for ground-level, partially buried, or below-ground storage structures or facilities shall have a vertical section of pipe at least two (2) pipe diameters in length and either: (5-8-09)

i. 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 (5-8-09)

ii. Be an equivalent system acceptable to the Department. (5-8-09)

07. Access. Finished water storage structures shall be designed with reasonably convenient access to the interior for cleaning and maintenance. At least two (2) manholes shall 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.

~~(3-30-07)~~()

a. The following access requirements apply to above-ground and ground-level storage structures. Each access manhole shall 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. (5-8-09)

b. The following access requirements apply to, partially buried or below-ground storage structures. Each access manhole shall 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. (5-8-09)

c. Each manhole shall be fitted with a solid water tight cover which overlaps a framed opening and extends down around the frame at least two (2) inches or otherwise prevents the entrance of contaminants. The frame shall should be at least four (4) inches high. Each cover shall be hinged on one side, and shall have a locking device. ~~(3-30-07)~~()

08. Vents. Finished water storage structures shall be vented. The overflow pipe shall not be considered a vent. Open construction between the sidewall and roof is not permissible. Vents shall: (3-30-07)

a. Prevent the entrance of surface water and rainwater and extend twelve (12) inches above the roof. (3-30-07)

b. Exclude birds and animals. (3-30-07)

c. Exclude insects and dust, as much as this function can be made compatible with effective venting. (3-30-07)

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. The screen shall be installed within the pipe at a location least susceptible to vandalism. (5-8-09)

e. On above-ground tanks and standpipes, open downward, and be fitted with twenty-four (24) mesh or similar non-corrodible screen. ~~(5-8-09)~~()

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 be given to the sealing of roof structures which are not integral to the tank body. (3-30-07)

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 be connected to standard wall castings which were poured in place during the forming of the concrete. (3-30-07)

b. Openings in the roof of a storage structure designed to accommodate control apparatus or pump columns shall be curbed and sleeved with proper additional shielding to prevent contamination from surface or floor drainage. (3-30-07)

c. The roof of the storage structure shall be sloped to facilitate drainage. Downspout pipes shall not enter or pass through the reservoir. Parapets, or similar construction which would tend to hold water and snow on the roof, will not be approved unless adequate waterproofing and drainage are provided. (3-30-07)

d. Reservoirs with pre-cast concrete roof structures must be made watertight with the use of a waterproof membrane or similar product. (3-30-07)

10. Construction Materials. Materials used in storage facility construction shall 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. (3-30-07)

11. Protection from Freezing. Finished water storage structures and their appurtenances, especially the riser pipes, overflows, and vents, shall be designed to prevent freezing which will interfere with proper functioning. (3-30-07)

12. Internal Catwalk. Every catwalk over finished water in a storage structure shall have a solid floor with sealed raised edges, designed to prevent contamination from shoe scrapings and dirt. (3-30-07)

13. Silt Stops. Removable silt stops shall be provided to prevent sediment from entering the reservoir discharge pipe. (3-30-07)

14. Grading. The area surrounding a ground-level, partially buried, or below-ground structures shall be graded in a manner that will prevent surface water from standing within fifty (50) feet of it. (5-8-09)

15. Coatings and Cathodic Protection. Proper protection shall be given to metal surfaces by paints or other protective coatings, by cathodic protective devices, or by both. (3-30-07)

16. Disinfection. Storage facilities shall 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 indicate microbiologically satisfactory water before the facility is placed into operation. (3-30-07)

17. Abandonment. All unused subsurface storage tanks shall be removed and backfilled, or abandoned by extracting residual fluids and filling the structure with sand or fine gravel. (3-30-07)

545. FACILITY AND DESIGN STANDARDS: TREATMENT PLANT STORAGE FACILITIES.

The design standards of Section 544 shall apply to treatment plant storage. (3-30-07)

01. Filter Wash Water. Filter wash water tanks shall 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. (3-30-07)

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 be provided. A minimum of two (2) clearwell compartments shall 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. (3-30-07)()

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. (3-30-07)

04. Other Treatment Plant Storage Tanks. Unless otherwise allowed by the reviewing authority, other treatment plant storage tanks/basins such as detention basins, backwash reclaim tanks, receiving basins, and pump wet-wells for finished water shall be designed as finished water storage structures. In addition, these tanks/basins shall be designed to allow for cleaning or maintenance through temporary tanks, standby pumping capabilities, or other means approved by the Department. (3-30-07)()

546. FACILITY AND DESIGN STANDARDS: DISTRIBUTION SYSTEM STORAGE FACILITIES.

01. Design. The applicable design standards of Section 544 shall be followed for distribution system storage. (3-30-07)

02. Isolation. Finished water storage structures which provide pressure directly to the distribution system shall 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, the water system owner shall 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. (5-8-09)()

03. Drain. Drains shall 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, 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. (5-8-09)

04. Level Controls. Adequate controls shall be provided to maintain levels in distribution system storage structures. Level indicating devices shall be provided at a central location. (3-30-07)

(BREAK IN CONTINUITY OF SECTIONS)

548. FACILITY AND DESIGN STANDARDS: DISINFECTION OF FACILITIES PRIOR TO USE.

Any supplier of water for a public water system shall ensure that new construction or modifications to an existing system shall be 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. Disposal of chlorinated water from disinfection activities shall be coordinated with the DEQ Regional Office. (3-30-07)()

549. -- 551. (RESERVED).

552. FACILITY AND DESIGN STANDARDS: OPERATING CRITERIA FOR PUBLIC WATER SYSTEMS.

01. Quantity and Pressure Requirements. Design requirements regarding pressure analysis are found in Section 542.13. (5-8-09)

a. Minimum Capacity. The capacity of a public drinking water system shall be at least eight hundred (800) gallons per day per residence. (5-8-09)

i. The minimum capacity of eight hundred (800) gallons per day shall be the design maximum day demand rate exclusive of irrigation and fire flow requirements. (5-8-09)

ii. The minimum capacity of eight hundred (800) gallons per day is only acceptable if the public drinking water system has equalization storage of finished water in sufficient quantity to compensate for the difference between a water system's maximum pumping capacity and peak hour demand. (5-8-09)

iii. The design capacity of a public drinking water system for material modifications may be less than eight hundred (800) gallons per day per residence if the water system owner provides information that demonstrates to the Department's satisfaction the maximum day demand for the system, exclusive of irrigation and fire flows, is less than eight hundred (800) gallons per day per residence. (5-8-09)

b. Pressure. ~~If the Department receives a complaint from a customer or customers of a public drinking water system regarding inadequate or excessive pressure, the Department may, after initial investigation by the water system or the Department, require the public water system to conduct a local pressure monitoring study to diagnose and correct pressure problems.~~ All public water systems shall meet the following requirements: (3-30-07)()

i. Any public water system shall 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.

~~(3-30-07)~~()

ii. When pressures within the system are known to have fallen below twenty (20) psi, the water system must provide public notice and disinfect the system. ()

iii. If an initial investigation by the water system fails to discover the causes of inadequate or excessive pressure, the Department may require a public drinking water system to conduct a local pressure monitoring study to diagnose and correct pressure problems. Compliance with these requirements by water systems 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 be determined by measurements within the consumer's premises, or at another representative location acceptable to the Department. ()

iv. 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 be submitted to the Department in accordance with these rules. ()

~~iv~~. The following public water systems or service areas of public water systems shall 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. (5-8-09)

(1) Any public water system constructed or substantially modified after July 1, 1985. (5-8-09)

(2) Any new service areas. (5-8-09)

(3) Any public water system that is undergoing material modification where it is feasible to meet the pressure requirements as part of the material modification. (5-8-09)

~~iv~~. Any public water system shall keep static pressure within the distribution system below one hundred (100) psi and should ordinarily keep static pressure below eighty (80) psi. Pressures above one hundred (100) psi shall be controlled by pressure reducing devices installed in the distribution main. 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 operation. If system 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 owner shall 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.

~~(5-8-09)~~()

~~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, including assurance by the water system that the individual booster pump will cause no adverse effects on system operation.

(4-11-06)

~~v.~~ *When pressures within the system are known to have fallen below twenty (20) psi, the water system must provide public notice and disinfect the system.*

~~(5-3-03)~~

~~vi.~~ *Compliance with these requirements by water systems 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 be determined by measurements within the consumer's premises, or at another representative location acceptable to the Department.*

~~(5-8-09)~~

c. Fire Flows. Any public water system designed to provide fire flows shall 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.

(5-3-03)

d. Irrigation Flows.

(12-1-92)

i. Any public water system constructed after November 1, 1977, shall be capable of providing water for uncontrolled, simultaneous foreseeable irrigation demand, which shall include all acreage that the system is designed to irrigate.

(5-3-03)

(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.

(5-3-03)

(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.

(5-3-03)

ii. The requirement of Subsection 552.01.d.i. may be modified by the Department if:

(5-3-03)

(1) A separate irrigation system is provided; or

(12-10-92)

(2) The supplier of water can regulate the rate of irrigation through its police powers, and the water system is designed to accommodate a regulated rate of irrigation flow. The Department may require the water system to submit a legal opinion addressing the enforceability of such police powers.

(5-3-03)

iii. If a separate non-potable irrigation system is provided for the consumers, all mains, hydrants and appurtenances shall 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. (5-3-03)

02. Ground Water. (12-10-92)

a. Public water systems constructed after July 1, 1985, and supplied by ground water, shall treat water within the system by disinfection if the ground water source is not protected from contamination. (12-10-92)

b. The Department may, in its discretion, require disinfection for any existing public water system supplied by ground water if the system consistently exceeds the MCL for coliform, and if the system does not appear adequately protected from contamination. Adequate protection will be determined based upon at least the following factors: (12-10-92)

i. Location of possible sources of contamination; (12-10-92)

ii. Size of the well lot; (12-10-92)

iii. Depth of the source of water; (12-10-92)

iv. Bacteriological quality of the aquifer; (12-10-92)

v. Geological characteristics of the area; and (12-10-92)

vi. Adequacy of development of the source. (12-10-92)

03. Operating Criteria. The operating criteria for systems supplied by surface water or ground water under the direct influence of surface water shall be as follows: (12-10-92)

a. Each system must develop and follow a water treatment operations plan acceptable to the Department, by July 31, 1993, or within six (6) months of installation of filtration treatment, whichever is later. For a maximum of twelve (12) months, this may be a draft operations plan based on pilot studies or other criteria acceptable to the Department. After twelve (12) months the plan shall be finalized based on full scale operation. (12-10-92)

b. The purveyor shall ensure that treatment facilities are operated in accordance with good engineering practices such as those found in the Recommended Standards for Water Works, A Report of the Water Supply Committee of the Great Lakes - Upper Mississippi River Board of Public Health and Environmental Managers as set forth in Subsection 002.02.c., or other equal standard designated by the Department. (4-6-05)

c. New treatment facilities shall be operated in accordance with Subsection 552.03.b., and the system shall 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. (3-30-07)

04. Chlorination. Systems that regularly add chlorine to their water are subject to the provisions of Section 320. Systems using surface water or ground water under the direct influence of surface water, are subject to the disinfection requirements of Sections 300 and 518. (3-30-07)

a. Systems using only ground water that add chlorine for the purpose of disinfection, as defined in Section 003, are subject to the following requirements: (4-6-05)

i. Chlorinator capacity shall be such that the system is able to demonstrate that it is routinely achieving four (4) logs (ninety-nine point ninety-nine percent) (99.99%) inactivation of viruses. The required contact time will be specified by the Department. This condition must be attainable even when the peak hour demand coincides with anticipated maximum chlorine demands. (5-8-09)

ii. A detectable chlorine residual shall be maintained throughout the distribution system. (4-6-05)

iii. Automatic proportioning chlorinators are required where the rate of flow is not reasonably constant. (12-10-92)

iv. Analysis for free chlorine residual shall be conducted at a location at or prior to the first service connection at least daily and records of these analyses shall 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 be submitted to the Department no later than the tenth day of the following month. The frequency of measuring free chlorine residuals shall be sufficient to detect variations in chlorine demand or changes in water flow. (5-8-09)

v. A separate and ventilated room for gas chlorination equipment shall be provided. (12-10-92)

vi. The Department may, in its discretion, require a treatment rate higher than that specified in Subsection 552.04.a.i. (3-30-07)

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. (5-8-09)

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. (5-8-09)

b. Systems using only ground water that add chlorine 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: (4-6-05)

i. Automatic proportioning chlorinators are required where the rate of flow is not reasonably constant. (4-6-05)

ii. Analysis for free chlorine residual shall be made at a frequency that is sufficient to detect variations in chlorine demand or changes in water flow. (4-6-05)

c. Systems 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 maintains a chlorine residual in the distribution system. (3-30-07)

05. Fluoridation. (12-1-92)

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 be specifically approved by the Department. (3-30-07)

b. Fluoride compounds shall be stored in covered or unopened shipping containers. (3-30-07)

c. Provisions shall be made to minimize the quantity of fluoride dust. Empty bags, drums, or barrels shall be disposed of in a manner that will minimize exposure to fluoride dusts. (3-30-07)

d. Daily records of flow and amounts of fluoride added shall be kept. An analysis for fluoride in finished water shall be made at least weekly. Records of these analyses shall be kept by the supplier of water for five (5) years. (12-10-92)

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 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 implement a cross connection control program to prevent the entrance to the system of materials known to be toxic or hazardous. The water purveyor is responsible to enforce the system's cross connection control program. The program will at a minimum include: (5-8-09)()

a. An inspection program to locate cross connections and determine required suitable protection. For new connections, suitable protection must be installed prior to providing water service. (5-8-09)

b. Required installation and operation of adequate backflow prevention assemblies. Appropriate and adequate backflow prevention assemblies types for various facilities, fixtures, equipment, and uses of water must should be selected from either the Pacific Northwest Cross Connection Control Manual, the Uniform Plumbing Code, the Environmental Protection Agency's AWWA Recommended Practice for Backflow Prevention and Cross Connection Control Manual (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. (5-8-09)()

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 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. ~~(3-30-07)~~()

d. Discontinuance of service to any structure, facility, or premises where suitable backflow protection has not been provided for a cross connection. ~~(3-30-07)~~()

07. Cross Connection Control Program - Non-Community Water Systems. All suppliers of water for non-community water systems shall 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 be inspected and tested annually for functionality by an Idaho licensed tester, as specified in Subsection 552.06.c. (5-8-09)

(BREAK IN CONTINUITY OF SECTIONS)

900. TABLES.

01. Table 1 -- Minimum Distances From a Public Water System Well.

Minimum Distances from a Public Water System Well	
Gravity sewer <u>wastewater</u> line	50 feet
Any potential source of contamination	50 feet
Pressure sewer <u>wastewater</u> line	100 feet
<u>Class A Municipal Reclaimed Wastewater Pressure distribution line</u>	<u>50</u>
Individual home septic tank	100 feet
Individual home disposal field	100 feet
Individual home seepage pit	100 feet
Privies	100 feet
Livestock	50 feet
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

Minimum Distances from a Public Water System Well	
Reclamation and reuse of municipal and industrial wastewater sites	See IDAPA 58.01.17
Biosolids application site	1,000 feet

(5-8-09)()

02. Table 2 - Well Casing Standards for Public Water System Wells.

STEEL PIPE					
				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	
26	26.000	25.000	0.500	136.17	
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

(3-30-07)

IDAPA 58 - DEPARTMENT OF ENVIRONMENTAL QUALITY

58.01.17 - RULES FOR THE RECLAMATION AND REUSE OF MUNICIPAL AND INDUSTRIAL WASTEWATER

DOCKET NO. 58-0117-1001

NOTICE OF RULEMAKING - ADOPTION OF PENDING RULE

EFFECTIVE DATE: This rule has been adopted by the Board of Environmental Quality (Board) and is now pending review by the 2011 Idaho State Legislature for final approval. The pending rule will become final and effective immediately upon the adjournment sine die of the First Regular Session of the Sixty-first Idaho Legislature unless prior to that date the rule is rejected in whole or in part by concurrent resolution in accordance with Idaho Code Sections 67-5224 and 67-5291.

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 1, 2010, Vol. 10-9, pages 470 through 511](#). After consideration of public comments, the rule has been adopted as initially proposed. The Rulemaking and Public Comment Summary can be obtained at http://www.deq.idaho.gov/rules/waste_water/58_0117_1001_pending.cfm or by contacting the undersigned.

IDAHO CODE SECTION 39-107D STATEMENT: Section 39-107D, Idaho Code, provides that DEQ must meet certain requirements when it formulates and recommends rules which are broader in scope or more stringent than federal law or regulations, or which propose to regulate an activity not regulated by the federal government. There is no federal law or regulation that is comparable to the Rules for the Reclamation and Reuse of Municipal and Industrial Wastewater. Therefore, the changes to these rules are not broader in scope or more stringent than federal law or regulations.

This rulemaking does revise rules and standards necessary to protect human health and the environment. The following is a summary of additional information required by Sections 39-107D(3) and (4), Idaho Code. Information relating to Section 39-107D(2) has also been provided.

Section 39-107D(2)(a), Idaho Code. To the degree that a department action is based on science, the department shall utilize the best available peer reviewed science and supporting studies conducted in accordance with sound objective scientific practices.

The rule changes were initiated for clarification purposes rather than for scientific reasons. By clarifying the language in the Rules for the Reclamation and Reuse of Municipal and Industrial Wastewater, DEQ is facilitating more efficient implementation of the rule, thereby reducing the economic burden on the regulated community. Improved rules also allow the public to better understand the requirements imposed on the regulated community to protect human health and the environment. Specifically, the changes to the rule improve upon the administrative process to determine the permit conditions for municipal and industrial wastewater reuse facilities. The administrative improvements in the rule are not based on science. DEQ has, however, relied upon

its experience dealing with reuse activities in drafting the changes to the rule.

Section 39-107D(2)(b), Idaho Code. To the degree that a department action is based on science, the department shall utilize data collected by accepted methods or best available methods if the reliability of the method and the nature of the decision justifies use of the data.

This provision is not applicable because the rule changes are for the purpose of clarifying existing rule language. Please see explanation above.

Section 39-107D(3), Idaho Code. Any proposed rule subject to this section which proposes a standard necessary to protect human health and the environment shall also include in the rulemaking record requirements under chapter 52, title 67, Idaho Code, the following additional information:

(a) Identification of each population or receptor addressed by an estimate of public health effects or environmental effects;

(b) Identification of the expected risk or central estimate of risk for the specific population or receptor;

(c) Identification of each appropriate upper bound or lower bound estimate of risk;

(d) Identification of each significant uncertainty identified in the process of the assessment of public health effects or environmental effects and any studies that would assist in resolving the uncertainty; and

(e) Identification of studies known to the department that support, are directly relevant to, or fail to support any estimate of public health effects or environmental effects and the methodology used to reconcile inconsistencies in the data.

The changes to the rule improve upon the administrative process to determine the permit conditions for municipal and industrial wastewater reuse facilities in order to protect human health and the environment. The rule changes in this rulemaking are not based upon any analysis of risk to specific populations or receptors, but rather improve upon the permitting process necessary to minimize risk to human health and the environment posed by permitted reuse facilities. Therefore, DEQ has no additional information relevant to this rulemaking pursuant to Section 39-107D(3).

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 when the pending rule will become effective: Not applicable.

ASSISTANCE ON TECHNICAL QUESTIONS: For assistance on technical questions concerning this rulemaking, contact Olga Cuzmanov at olga.cuzmanov@deq.idaho.gov, (208)373-0449.

Dated this 12th day of November, 2010.

Paula J. Wilson
Hearing Coordinator
Department of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706-1255
(208)373-0418/Fax No. (208)373-0481
paula.wilson@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 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 15, 2010. If no such written request is received, a public hearing will not be held.

DESCRIPTIVE SUMMARY: This rulemaking is necessary because DEQ has determined that Class A and Class B reclaimed wastewater are highly treated effluents and existing nomenclature and requirements may be too strict. Also, this rulemaking will add language to allow for time extension of reuse permits under certain conditions in order to reduce permit processing times. Other anticipated revisions will clarify current rule language, reduce redundancy with other rules, and increase efficiency.

The proposed rule includes the following:

- 1. Revise name of rule chapter to “Recycled Water Rules”;**
- 2. Revise and add definitions;**
- 3. Revise and renumber Section 401, Plan and Specification Review (moved to Section 606);**
- 4. Revise Sections 600 and 601 to address frequency of total coliform sampling, recycled water uses, pipe identification and signage, distribution pipelines requirements, nutrient removal requirements, reliability and redundancy requirements;**
- 5. Revise and renumber Section 602, Demonstration of Technical, Financial, and Managerial Capacity of Municipal Reuse Facility (moved to Section 612);**
- 6. Revise language for permit modifications and provide examples of minor and major modifications;**
- 7. Add language for rapid infiltration systems and subsurface design, construction and**

- discharge requirements;
8. Add language for industrial recycled water permit requirements and permit content;
 9. Add language to establish the mechanism for a reuse permit transfer and for temporary cessation or closure of operations; and
 10. Add language to allow for continuation of expiring reuse permits under certain conditions and set the duration of a reuse permit for a fixed term of not more than ten (10) years.

This proposed rule also includes other revisions identified during the negotiated rulemaking process as necessary for maintaining consistency within this rule chapter and with other DEQ rule chapters.

Idaho Association of Commerce & Industry, Idaho Council on Industry & the Environment, Idaho Association of Cities, consulting engineers, existing and potential permittees, and the development community 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. Please note, however, that while portions of Section 600 and entire Section 601 have been struck out, the majority of the struck out rule text has been revised, reorganized and inserted as underlined rule text into new sections of the proposed rule.

After consideration of public comments, DEQ intends to present the final proposal to the Board of Environmental Quality at the November 2010 Board meeting for adoption as a pending rule. The rule is expected to be final and effective upon the adjournment of the 2011 legislative session if adopted by the Board and approved by the Legislature.

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:

This proposed rule incorporates the American Water Works Association (AWWA) Standards by reference. Incorporation by reference is necessary because publication of the AWWA Standards in the rule would be unduly cumbersome and expensive. Information for obtaining the AWWA Standards is included in the proposed rule.

NEGOTIATED RULEMAKING: The text of the proposed rule has been drafted based on discussions held and concerns raised during negotiations conducted pursuant to Idaho Code Section 67-5220 and IDAPA 58.01.23.810-815.

On April 7, 2010, the Notice of Negotiated Rulemaking was published in the [Idaho Administrative Bulletin, Vol. 10-4](#), pages 28 and 29, and a preliminary draft negotiated rule was made available for public review. Meetings were held on April 27, May 27, and June 22, 2010. Several members of the public participated in this negotiated rulemaking process by attending the meetings and by submitting written comments. A record of the negotiated rule drafts, written comments received, and documents distributed during the negotiated rulemaking process is available at http://www.deq.idaho.gov/rules/waste_water/58_0117_1001_proposed.cfm.

IDAHO CODE SECTION 39-107D STATEMENT: Section 39-107D, Idaho Code, provides that DEQ must meet certain requirements when it formulates and recommends rules which are broader in scope or more stringent than federal law or regulations, or which propose to regulate an activity not regulated by the federal government. There is no federal law or regulation that is comparable to the Rules for the Reclamation and Reuse of Municipal and Industrial Wastewater. Therefore, the proposed changes to these rules are not broader in scope or more stringent than federal law or regulations.

This rulemaking does revise rules and standards necessary to protect human health and the environment. The following is a summary of additional information required by Sections 39-107D(3) and (4), Idaho Code. Information relating to Section 39-107D(2) has also been provided.

Section 39-107D(2)(a), Idaho Code. To the degree that a department action is based on science, the department shall utilize the best available peer reviewed science and supporting studies conducted in accordance with sound objective scientific practices.

The proposed rule changes were initiated for clarification purposes rather than for scientific reasons. By clarifying the language in the Rules for the Reclamation and Reuse of Municipal and Industrial Wastewater, DEQ is facilitating more efficient implementation of the rule, thereby reducing the economic burden on the regulated community. Improved rules also allow the public to better understand the requirements imposed on the regulated community to protect human health and the environment. Specifically, the changes to the rule improve upon the administrative process to determine the permit conditions for municipal and industrial wastewater reuse facilities. The administrative improvements in the rule are not based on science. DEQ has, however, relied upon its experience dealing with reuse activities in drafting the proposed changes to the rule.

Section 39-107D(2)(b), Idaho Code. To the degree that a department action is based on science, the department shall utilize data collected by accepted methods or best available methods if the reliability of the method and the nature of the decision justifies use of the data.

This provision is not applicable because the proposed rule changes are for the purpose of clarifying existing rule language. Please see explanation above.

Section 39-107D(3), Idaho Code. Any proposed rule subject to this section which proposes a standard necessary to protect human health and the environment shall also include in the rulemaking record requirements under chapter 52, title 67, Idaho Code, the following additional information:

- 1. Identification of each population or receptor addressed by an estimate of public health effects or environmental effects;**
- 2. Identification of the expected risk or central estimate of risk for the specific population or receptor;**
- 3. Identification of each appropriate upper bound or lower bound estimate of risk;**
- 4. Identification of each significant uncertainty identified in the process of the assessment of public health effects or environmental effects and any studies that would assist in resolving the uncertainty; and**

5. Identification of studies known to the department that support, are directly relevant to, or fail to support any estimate of public health effects or environmental effects and the methodology used to reconcile inconsistencies in the data.

The proposed changes to the rule improve upon the administrative process to determine the permit conditions for municipal and industrial wastewater reuse facilities in order to protect human health and the environment. The rule changes proposed in this rulemaking are not based upon any analysis of risk to specific populations or receptors, but rather improve upon the permitting process necessary to minimize risk to human health and the environment posed by permitted reuse facilities. Therefore, DEQ has no additional information relevant to this rulemaking pursuant to Section 39-107D(3).

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 questions concerning the negotiated rulemaking, contact Olga Cuzmanov at olga.cuzmanov@deq.idaho.gov, (208)373-0449.

Anyone may submit written comments by mail, fax or e-mail at the address below regarding this proposed rule. DEQ will consider all written comments received by the undersigned on or before September 29, 2010.

Dated this 30th day of July, 2010.

THE FOLLOWING IS THE TEXT OF DOCKET NO. 58-0117-1001

000. LEGAL AUTHORITY.

Pursuant to Title 39, Chapter 1, Idaho Code, the Director of the Department of Environmental Quality is authorized to adopt or formulate and recommend to the Board of Environmental Quality, and the Board of Environmental Quality is authorized to adopt rules, regulations and standards necessary and feasible to protect the environment and the health of citizens of the State including provisions for the issuance of pollution source permits, authorized by Section 39-115, Idaho Code, and review of plans and specifications for wastewater treatment facilities, authorized by Section 39-118, Idaho Code. (4-1-88)()

001. TITLE AND SCOPE.

01. Title. These rules are to be known and cited as Idaho Department of Environmental Quality Rules, IDAPA 58.01.17, "~~Rules for the Reclamation and Reuse of Municipal and Industrial Wastewater~~ Recycled Water Rules." (4-11-06)()

02. Scope. These rules establish the procedures and requirements for the issuance and maintenance of pollution source permits for ~~reclamation and~~ reuse facilities, ~~including permits for the treatment of municipal wastewaters for other reuse purposes as defined in Subsection 600.07, Direct Use of Municipal Reclaimed Wastewater~~ also referred to in these rules as “reuse permits.” (4-11-06)()

002. WRITTEN INTERPRETATIONS.

Any written statements pertaining to the interpretation of these rules shall be available for review at the Idaho Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255. (4-6-05)

003. INCORPORATION BY REFERENCE.

American Water Works Association (AWWA) Standards, effective December 2009, are incorporated by reference into these rules. This document is available for review at the Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255, (208)373-0502, or can be purchased from the AWWA, 6666 West Quincy Avenue, Denver, Colorado 80235, Telephone (800) 926-7337, <http://apps.awwa.org/ebusmain/OnlineStore.aspx>. ()

~~**01. General.** Unless expressly provided otherwise, any reference in these rules to any document identified in Subsection 003.02 shall constitute the full adoption by reference.~~ (4-6-05)

~~**02. Documents Incorporated by Reference.** The following documents are incorporated by reference into these rules:~~ (4-6-05)

~~**a.** IDAPA 58.01.08, “Idaho Rules for Public Drinking Water Systems,” Section 542, as codified in the 2007 Idaho Administrative Code.~~ (3-30-07)

~~**b.** IDAPA 58.01.08, “Idaho Rules for Public Drinking Water Systems,” Section 543, as codified in the 2007 Idaho Administrative Code.~~ (3-30-07)

~~**03. Availability of Documents Incorporated by Reference.** Copies of the documents incorporated by reference are available at the following locations.~~ (4-6-05)

~~**a.** Idaho Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255, www.deq.idaho.gov.~~ (4-11-06)

~~**b.** Idaho Administrative Rules website, <http://www.state.id.us/adm/adminrules/agyindex.htm>.~~ (4-6-05)

(BREAK IN CONTINUITY OF SECTIONS)

008. REFERENCED MATERIALS.

01. Idaho Guidance for ~~the Reclamation and Reuse of Municipal and Industrial Wastewater~~ Recycled Water. This document, and subsequent revisions of this document,

provides assistance in applying and interpreting these rules relating to ~~the~~ permitting and operations of ~~reclamation and~~ reuse facilities. Copies of the document are available at the Idaho Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255, http://www.deq.idaho.gov/water/permits_forms/permitting/guidance.cfm. (3-30-07)()

02. ~~Idaho Wastewater Rules, IDAPA 58.01.16. The Idaho Wastewater Rules are available at <http://adm.idaho.gov/adminrules/rules/idapa58/0116.pdf>~~ **Administrative Rules of the Department of Environmental Quality.** The following administrative rules of the Department of Environmental Quality are referenced in these rules and are available at <http://adm.idaho.gov/adminrules/rules/idapa58/58index.htm>. (3-30-07)()

a. IDAPA 58.01.02, "Water Quality Standards." ()

b. IDAPA 58.01.03, "Individual/Subsurface Sewage Disposal Rules." ()

c. IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems." ()

d. IDAPA 58.01.11, "Ground Water Quality Rule." ()

e. IDAPA 58.01.16, "Wastewater Rules." ()

03. **Treatment Technology Report for Recycled Water.** The State of California ~~Department of Health Services~~ Treatment Technology Report for Recycled Water, <http://www.dhs.ca.gov/ps/dwem/publications/waterrecycling/treatmenttechnology.pdf> <http://www.cdph.ca.gov/healthinfo/environmentalhealth/water/pages/waterrecycling.aspx>. (3-30-07)()

04. **Recommended Standards for Wastewater Facilities.** Recommended Standards for Wastewater Facilities - Great Lakes-Upper Mississippi River Board of State Sanitary Engineers, <http://10statesstandards.com/wastewaterstandards.html>. ()

05. **AWWA Manual M24.** AWWA Manual M24, Chapter 4 for Dual Water Systems. This document is available for review at the Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255, (208)373-0502, or can be purchased from the AWWA, 6666 West Quincy Avenue, Denver, Colorado 80235, Telephone (800) 926-7337, <http://apps.awwa.org/EbusMain/Default.aspx?TabId=55&ProductID=6713>. ()

06. **Idaho Standards for Public Works Construction.** This document is available for a fee through the Local Highway Technical Assistance Council (LHTAC) at LHTAC, 3330 Grace Street, Boise, ID, 83703, (208) 344-0565. ()

009. -- 099. (RESERVED).

100. APPLICABILITY.

01. **Applicability to ~~Reclamation and~~ Reuse Facilities.** All ~~reclamation and~~ **non-excluded** reuse facilities are subject to the ~~permit~~ requirements of these rules. (4-11-06)()

02. **Excluded Facilities.** ()

a. Land application of wastewater from livestock truck washing facilities, feedlots, dairies and mining are excluded from permit requirements under these rules ~~but are subject to Idaho Department of Environmental Quality Rules, IDAPA 58.01.16, "Wastewater Rules."~~ ()

b. The permit requirements set forth in these rules shall not apply to the incidental use of recycled water for landscape irrigation at a municipal wastewater treatment plant if: ()

i. There is no other recycled water use that would subject the municipal wastewater treatment plant to these rules; ()

ii. The municipal wastewater treatment plant has been issued an NPDES permit and the quality of the effluent meets that required by an NPDES permit; and ()

iii. Public access to the area of landscape irrigation is restricted. ()

c. The Director may exclude other facilities if covered adequately by other law. (4-11-06)()

03. Reuse Policy. It is the policy of the Department to promote, where appropriate, the practice of reuse of both municipal and industrial ~~reclaimed wastewater~~ recycled water through the continued creation and implementation of rules and guidance that give permittees various opportunities for new forms of reuse. (4-11-06)()

101. -- 199. (RESERVED).

200. DEFINITIONS.

For the purpose of these rules, the following definitions apply unless another meaning is clearly indicated by context: (4-1-88)

01. Applicant. The person applying for a ~~reclamation and~~ reuse permit. (4-11-06)()

02. Applicable Requirements. Any state, local or federal statutes, regulations or ordinances to which the facility is subject. (4-1-88)

03. Beneficial Use. Any of the various uses which may be made of the water of Idaho, including, but not limited to, domestic water supplies, industrial water supplies, agricultural water supplies, navigation, recreation in and on the water, wildlife habitat, and aesthetics. The beneficial use is dependent upon actual use, the ability of the water to support a non-existing use either now or in the future, and its likelihood of being used in a given manner. The use of water for the purpose of wastewater dilution or as a receiving water for a waste treatment facility effluent is not a beneficial use. ()

04. Biochemical Oxygen Demand (BOD). The measure of the amount of oxygen necessary to satisfy the biochemical oxidation requirements of the 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. ()

- ~~035.~~ **Board.** The Idaho *State* Board of Environmental Quality. ~~(12-31-91)()~~
- ~~046.~~ **Buffer Distances.** ~~(4-11-06)~~
- ~~a.~~ *The **A specified** distances between ~~the an~~ actual point of reuse of ~~reclaimed wastewater recycled water~~ and ~~other-uses a land feature or resource use specified in these rules,~~ such as wells, adjoining property, inhabited dwellings, ~~and or~~ other features. ~~Buffer distances are set to:~~* ~~(4-11-06)()~~
- ~~i.~~ *Protect public health by limiting exposure to wastewater and conditions associated with reuse facilities;* ~~(4-11-06)~~
- ~~ii.~~ *Protect waters of the state, including surface water, ground water and drinking water supplies; and* ~~(4-11-06)~~
- ~~iii.~~ *Help ensure that wastewater is restricted to the reuse facilities.* ~~(4-11-06)~~
- ~~b.~~ *In determining buffer distances, the Department will consider, as applicable, the degree of treatment or pretreatment of wastewater; the method of irrigation; physical or vegetative barriers; studies of the content of the wastewater, such as pathogen studies; best management practices; environmental conditions, such as wind speed and direction; and other information relevant to protecting public health and the environment. Further information regarding buffer distances is set forth in The Idaho Guidance for The Reclamation and Reuse of Municipal and Industrial Wastewater.* ~~(4-11-06)~~
- ~~05.~~ **Class A Capacity.** *The capabilities required of a Class A effluent treatment and distribution system in order to achieve and maintain compliance with these rules.* ~~(4-6-05)~~
- ~~06.~~ **Class A Effluent Distribution System.** *The distribution system for Class A effluent as described in these rules. The distribution system does not include any of the collection or treatment portions of the wastewater facility and is not subject to operator licensing requirements of IDAPA 58.01.16, "Wastewater Rules."* ~~(4-11-06)~~
- 07. Department.** The Idaho Department of Environmental Quality. (4-1-88)
- 08. Director.** The Director of the Department of Environmental Quality or the Director's designee. (4-1-88)
- ~~09.~~ **Idaho Guidance for the Reclamation and Reuse of Municipal and Industrial Wastewater.** *This document, and subsequent revisions of this document, provides assistance in applying and interpreting these rules relating to for permitting and operating reclamation and reuse facilities. Copies of the document are available at the Idaho Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255 and www.deq.idaho.gov. **Ground Water Recharge.** The process of adding recycled water to the zone of saturation.* ~~(4-11-06)()~~
- 10. Industrial Wastewater.** *Wastewater that is the by-product of any industrial processes including, but not limited to, food processing or food washing **All** wastewater, **treated or***

untreated, that is not defined as municipal wastewater. (4-11-06)()

11. Land Application. ~~The application of municipal or industrial wastewater to land for the purpose of land treatment.~~ A process or activity involving application of recycled water to the land surface. Land application includes, but is not limited to, spray irrigation, ridge and furrow, overland flow, subsurface absorption, and discharge to a rapid infiltration system. (4-11-06)()

~~**12. Land Treatment.** The use of land, soil, and crops for treatment of municipal or industrial wastewater.~~ (4-11-06)

12. Landscape Impoundment. Any lake, pond, or other water holding feature constructed or managed to store recycled water where swimming, wading, boating, fishing, and other water-based recreational activities are prohibited. A landscape impoundment is created for storage and may incidentally serve a landscaping or aesthetic purpose. ()

13. Modal Contact Time. The amount of time elapsed between the time that a tracer, such as salt or dye, is injected into the influent at the entrance to a chamber and the time that the highest concentration of the tracer is observed in the effluent from the chamber. (3-30-07)

14. Municipal Wastewater. Wastewater that contains sewage and associated solids, whether treated or untreated. Municipal wastewater may contain industrial wastewater. Municipal wastewater is also known as domestic wastewater. (4-1-88)()

~~**15. New Activity.** Any significant change in operation or construction of the wastewater treatment system which may impact the waters of the state.~~ (4-1-88)

165. Non-Contact Cooling Water. Water used to reduce temperature which does not come into direct contact with any raw material, intermediate product, waste product (other than heat) or finished product, the land application of which does not have the potential to negatively impact ground water. (4-1-88)()

16. Non-Potable Mains. The pipelines that collect and/or convey non-potable discharges from or to multiple service connections. Examples would include sewage collection and interceptor mains, storm sewers, non-potable irrigation mains, and recycled water mains. ()

17. Non-Potable Services. The pipelines that convey non-potable discharges from individual facilities to a connection with the non-potable main. This term also refers to pipelines that convey non-potable water from a pressurized irrigation system, recycled water system, and other non-potable systems to individual consumers. ()

18. Non-Potable Water. Water not suitable for drinking by humans. ()

179. NTU (Nephelometric Turbidity Unit). A measure of turbidity based on a comparison of the intensity of the light scattered by the sample under defined conditions with the intensity of the light scattered by a standard reference suspension under the same conditions. (3-30-07)

20. Operation and Maintenance Manual. A manual that describes in detail the operation, maintenance, and management of a reuse facility. Operation and maintenance manual is also known as plan of operation. ()

21. Peak Day Flow. The largest volume of flow to be received during a one (1) day period expressed as a volume per unit time. ()

22. Peak Hour Flow. The largest volume of flow to be received during a one (1) hour period expressed as a volume per unit time. ()

~~18~~**23. Permit.** Written authorization by the Director to modify, operate, construct, or discharge to a ~~reclamation and~~ reuse facility. (4-11-06)()

~~19~~**24. Permittee.** The person to whom the ~~reclamation and~~ reuse permit is issued. (4-11-06)()

205. 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 ~~agency,~~ or federal agency, department or instrumentality, special district, or interstate body or any legal entity, which is recognized by law as the subject of rights and duties. (4-1-88)()

26. Plan of Operation. A manual that describes in detail the operation, maintenance, and management of a reuse facility. Plan of operation is also known as operation and maintenance manual. ()

~~21~~**27. Point of Compliance.** That point in the ~~reclamation and~~ reuse facility where the ~~reclaimed wastewater~~ recycled water must meet the requirements of the permit. ~~There may be A permit may require~~ more than one (1) point of compliance within the facility depending on the constituents to be monitored. (4-11-06)()

28. Potable Water. Water suitable for drinking by humans. ()

~~22~~**29. Primary Effluent.** ~~Raw w~~Wastewater that has been mechanically treated by screening, degritting, sedimentation and/or skimming processes to remove substantially all floatable and settleable solids. (4-1-88)()

230. Processed Food Crop. Any crop intended for human consumption that has been changed from its original form and further disinfection occurs. (4-1-88)

~~24~~**31. Rapid Infiltration System.** ~~A wastewater treatment method by which wastewater is applied to land in an amount of twenty (20) to six hundred (600) feet per year for percolation through the soil. Vegetation is not generally utilized by this method.~~ Rapid infiltration systems, also known as soil aquifer treatment systems, are highly permeable infiltration basins that are operated using periods of wetting and drying cycles at set frequencies to provide for both anaerobic and aerobic treatment of the wastewater through the vadose zone. (4-1-88)()

~~25~~**32. Raw Food Crop.** Any crop intended for human consumption which is to be used in its original form. (4-1-88)

~~26. Reclaimed Wastewater.~~ For the purpose of these rules, the term ~~reclaimed wastewater shall mean wastewater that is used in accordance with these rules.~~ (4-11-06)

33. Recycled Water. Water that has been treated by a wastewater treatment system and is used in accordance with these rules. ()

~~27~~**34. Restricted Public Access.** Preventing public entry within the area or point of reuse of a facility and the buffer distance around the area by site location or physical structures such as fencing. *A lesser buffer distance may be accepted if aerosol drift is reduced.* (4-11-06)()

~~28. Reclamation.~~ The treatment of municipal or industrial wastewater that allows it to be reused for beneficial uses. Reclamation also includes land treatment for wastewater that utilizes soil or crops for partial treatment. (4-11-06)

~~29~~**35. Reuse.** The use of ~~reclaimed wastewater~~ recycled water for ~~beneficial uses including, but not limited to, land treatment,~~ irrigation, ~~aquifer~~ ground water recharge, ~~use in surface water features,~~ landscape impoundments, toilet flushing in commercial buildings, dust control, and other uses. (4-11-06)()

~~30~~**36. Reclamation and Reuse Facility or Facility.** Any structure or system designed or used for ~~reclamation or~~ reuse of municipal or industrial wastewater including, but not limited to, industrial and municipal wastewater treatment facilities, pumping and storage facilities, pipeline and distribution facilities, and the property to which the ~~reclaimed wastewater~~ recycled water is applied. This does not include industrial in-plant processes and reuse of process waters within the plant. (4-11-06)()

~~31~~**37. Sewage.** The water-carried human wastes from residences, buildings, industrial establishments and other places, together with such ground water infiltration and surface water as may be present. (4-1-88)()

~~32~~**38. Sludge.** The semi-liquid mass produced and removed by wastewater treatment ~~of water or wastewater~~ process. This does not include grit, garbage, and large solids. (4-1-88)()

~~33. Time Distribution of Flows.~~ A measurement of the volume of wastewater distributed over a specified area during a specified time period. Typical unit of measure is inches per acre per week. (4-1-88)

39. Subsurface Distribution System. Any system with a point of discharge beneath the earth's surface. ()

~~34~~**40. Turbidity.** A measure of the interference of light passage through water, or visual depth restriction due to 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.

(3-30-07)

~~3541. Wastewater. Unless otherwise specified, industrial waste, municipal waste, agricultural waste, and associated solids or combinations of these, whether treated or untreated, together with such water as is present but not including sludge, or non-contact cooling water. 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.~~ (4-1-88)()

~~42. Water Pollution. Any alteration of the physical, thermal, chemical, biological, or radioactive properties of any waters of the state, or the discharge of any pollutant into the waters of the state, which 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.~~ ()

~~3643. Waters and Waters of the State. All the accumulations of water, surface and underground, natural and artificial, public and private, or parts thereof which are wholly or partially within, which flow through or border upon the state.~~ (4-1-88)

201. -- 299. (RESERVED).

300. PERMIT REQUIREMENTS AND APPLICATION.

~~01. Permit Required. No person shall construct, modify, operate, or continue to operate a reclamation and reuse facility without a valid permit issued by the Director as provided in these rules.~~ (4-11-06)()

~~02. Dischargers. No person shall discharge to a reclamation and reuse facility without a valid permit issued by the Director as provided in these rules.~~ (4-11-06)

~~032. Pre-Application Conference. Prospective applicants are encouraged to meet with the Department prior to submission of an application to discuss the application procedure and anticipated application requirements.~~ (4-1-88)()

~~04. Application Required. Every person requiring a permit under these rules shall submit a permit application to the Department:~~ (4-1-88)

~~a. At least one hundred eighty (180) days prior to the day on which a new activity is to begin; or~~ (4-11-06)

~~b. At least one hundred eighty (180) days prior to the expiration of any permit issued pursuant to these rules.~~ (4-11-06)

~~053. Application Contents. Application shall be made on a form prescribed by the Director and available from the Department. Except as provided in Subsection 300.054.t, the an application for a reuse permit shall include, but not be limited to, the following information:~~

~~(3-30-07)~~()

- a. Name, location, and mailing address of the facility; (4-1-88)
- b. Name, mailing address, and phone number of the facility owner and signature of the owner or authorized agent; (4-1-88)
- c. The nature of the entity owning the facility (federal, state, private, or public entity); (4-1-88)
- d. A list of local, state, and federal permits, licenses and approvals related to the activity which have been applied for and which have been received and the dates of application or approval; (4-1-88)
- e. A topographic map of the facility site identifying and showing the location and extent of: (4-1-88)
 - i. Wastewater inlets, outlets, and storage structures and facilities, including the land application area; ~~(4-1-88)~~()
 - ii. Wells, springs, wetlands, and surface waters; (4-1-88)
 - iii. Twenty-five (25), fifty (50), and one hundred (100) year flood plains, as available through the Federal Insurance Administration of the Federal Emergency Management Agency; (4-1-88)
 - iv. Service roads; (4-1-88)
 - v. Natural or man-made features necessary for treatment; (4-1-88)
 - vi. Buildings and structures; and (4-1-88)
 - vii. Process chemicals and residue storage facilities. (4-1-88)
- f. A topographic map which may be separate from or combined with the facility site map, extending one quarter (1/4) mile beyond the outer limits of the facility site. The map shall identify and show the location and extent of the following: (4-1-88)
 - i. Wells, springs, wetlands, and surface waters; (4-6-05)
 - ii. Public and private drinking water supply sources and source water assessment areas (public water system protection area information); (4-6-05)
 - iii. Public roads; and (4-1-88)
 - iv. Dwellings and private and public gathering places. (4-1-88)
- g. If the facility site or any portion thereof is leased or rented, a copy of that lease or

rental agreement; (4-1-88)

- h. The volume of wastewaters to be treated ~~and the time distribution of flows;~~ (4-1-88)()
- i. The physical, chemical, and biological characteristics of the ~~wastewater~~ **recycled water to be used;** (4-1-88)()
- j. The climatic, hydrogeologic, and soil characteristics of the facility site; (4-1-88)()
- k. Description of treatment process and alternatives for disposal of unanticipated excess recycled water that does not meet class specifications;** ()
- l. Site management plans, including a cropping plan where applicable;** ()
- m. A statement and supporting documentation demonstrating that the proposed activity shall comply with IDAPA 58.01.11, "Ground Water Quality Rule"; and** ()

~~kn.~~ **Any** ~~Other~~ information **the Department** may ~~also be~~ required. The Idaho Guidance for ~~Reclamation and Reuse of Municipal and Industrial Wastewater~~ **Recycled Water** is intended to provide assistance to permit applicants in obtaining a ~~reclamation and~~ reuse permit and may be considered in determining the need for other information. (4-11-06)()

~~04.~~ **Permit Application Content Exceptions.** ~~Under certain circumstances for permit reissuances, some information required in renewals may not require one (1) or more of the items listed in Subsections 300.053.a. through k. may not be necessary for evaluation and will not be required.~~ Application content requirements **for permit renewals** will be clarified at the pre-application conference. (3-30-07)()

~~065.~~ **Existing Reclamation and Reuse Facility Operation and Maintenance Manual or Plan of Operations.** ~~Any existing reclamation and reuse facility shall be required to have a plan of operation which describes in detail the operation, maintenance, and management of the wastewater treatment system. A facility's operation and maintenance manual must contain all system components relating to the reuse facility in order to comply with IDAPA 58.01.16 "Wastewater Rules," Section 425. Manuals and manual amendments are subject to the review and approval provision therein. In addition to the content required by IDAPA 58.01.16.425, manuals for reuse facilities shall include, if applicable: operation and management responsibility, permits and standards, general plant description, operation and control of unit operations, land application site maps, wastewater characterization, cropping plan, hydraulic loading rate, constituent loading rates, compliance activities, seepage rate testing, site management plans, monitoring, site operations and maintenance, solids handling and processing, laboratory testing, general maintenance, records and reports, store room and inventory, personnel, an emergency operating plan, and any other information required by the Department.~~ (4-11-06)()

~~07.~~ **New Reclamation and Reuse Facility Plan of Operation.** ~~Any new proposed reclamation and reuse facility shall be required to have a detailed plan of operation at the fifty percent (50%) completion point of construction. In addition, after one (1) year of operation the~~

~~plan must be updated to reflect actual operating procedures. A general outline of the plan of operation must be provided with the permit application which will satisfy the intent of these rules.~~
(4-11-06)

301. -- 399. (RESERVED).

400. APPLICATION PROCESSING PROCEDURE.

01. Submittal Date. In order to allow for adequate processing of permit applications in accordance with these rules, permit applications for new facilities should be submitted at least one hundred eighty (180) days prior to the applicant's expected commencement of reuse activities. Existing facilities applying for permit renewals shall submit a permit application at least one hundred eighty (180) days prior to expiration of the existing permit. ()

02. Complete Application. If the application is determined to be complete the Director shall provide written notice to the applicant within thirty (30) days after receipt of the application which shall specify: (4-11-06)

- a. The effective date of application, which ~~will~~ shall be the date of the notice; and (4-1-88)()
- b. A projected schedule for processing the permit which lists the tentative dates for:
 - i. Publication of the preliminary permit decision or application denial; and (4-1-88)
 - ii. The date of issuance of a final permit. (4-1-88)

03. Incomplete Application. If the application is determined to be incomplete the Director shall provide written notice to the applicant within thirty (30) days after receipt of the application which specifies deficiencies and specifies additional required information. The Director shall not process an application until it is determined to be complete in accordance with these rules. (4-11-06)

04. Preliminary Decision/Application Denial. Within thirty (30) days of the effective date of the application the Director shall issue a preliminary decision to prepare a draft permit, or issue a decision denying the application. The applicant shall be notified in writing of the Director's preliminary decision or application denial. Notification shall include a staff analysis of the application and a draft permit if appropriate. (4-1-88)

05. Contents of the Staff Analysis. The staff analysis shall briefly state the principal facts and the significant questions considered in preparing the draft permit conditions or the intent to deny, and a summary of the basis for the draft conditions or denial with references to applicable requirements and supporting materials. (4-1-88)

06. Information or Consultation Before Issuance of Draft Permit or Application Denial. After the application is determined to be complete, additional information or consultation between the applicant and the Department may be needed to clarify, modify, or supplement the

application. This action may be initiated by the Director or the applicant. (4-11-06)

067. Issuance and Contents of the Draft Permit. (4-11-06)

a. Issuance and Contents of the Draft Permit. The Director shall issue a draft permit to the applicant within sixty (60) days of issuing a preliminary decision to prepare a draft permit. The draft permit shall be in the same form as a final permit and shall specify conditions of operation and management which will be required for the issuance of the permit. Permit conditions shall protect the environment and the public health from the hazard potential of an existing or proposed wastewater treatment system. (4-11-06)

b. Public Comments. The Department shall provide notice to the public of its issuance of a draft permit. The public may provide written comments for a period of time and in a manner specified in the Department's notice. The Department may, in its discretion, provide an opportunity for the public to provide oral comments.; (4-11-06)

078. Issuance of the Final Permit. The Director shall issue a final permit decision in writing to the applicant within sixty (60) days from the issuance of the draft permit, except the Director may issue the decision at a later date in response to a written request to extend the public comment period. (4-11-06)

089. Effective Date of Final Permit. The final permit shall become effective upon date of issue unless a later effective date is specified in the permit. (4-1-88)

10. Continuation of Expiring Permits. ()

a. A timely and sufficient application for permit renewal shall administratively extend the terms and conditions of an expired permit pursuant to Section 67-5254, Idaho Code. An application shall be considered timely and sufficient under these rules so long as the Department has determined the application is complete under Subsection 400.02 and the application's effective date under Subsection 400.02.a. is prior to the expiration of the current permit. ()

b. A permittee shall perform the closure requirements in a permit, the closure requirements of these rules, and complete all closure plan activities notwithstanding the expiration of the permit. ()

~~401. PLAN AND SPECIFICATION REVIEW.~~

~~The current edition of the "Recommended Standards for Wastewater Facilities—Great Lakes-Upper Mississippi River Board of State Sanitary Engineers," "Idaho Standards for Public Works Construction," and other Department guidance shall be used as guides for the development of plans and specifications for all waste treatment facilities. The Department may review the project plans and specifications and the permit application materials concurrently. Plans and specifications may require modification prior to a final permit being issued. The Department does not require review of industrial in-plant processes, only those processes that treat or distribute wastewater.~~ (4-11-06)

~~01. Requirement for Single Point of Contact Responsible for Entire Wastewater~~

~~**Project.** The Applicant (Permittee) shall designate a single point of contact who is responsible for all submissions to the Department related to the reclamation and reuse facilities. This single point of contact shall be identified in the permit application. (4-11-06)~~

~~**02. Requirement for Preparation of Plans and Specifications.** All plans and specifications for the construction of new sewage systems, sewage treatment plants or systems, other waste treatment or disposal facilities or modification or expansion to same shall be submitted to and approved by the Director before construction can begin in accordance with Chapter 1, Title 39, Idaho Code, and IDAPA 58.01.16, "Wastewater Rules." (4-11-06)~~

~~**03. Requirement for Professional Engineer's Seal.** All plans and specifications for the construction of new sewage systems, sewage treatment plants or systems, other waste treatment or disposal facilities or modification or expansion to same, wherein the public welfare or the safeguarding of life, health, or property is involved, shall bear the seal, signature and date of a registered professional engineer licensed in the state of Idaho in accordance Chapter 12, Title 54, Idaho Code. (4-6-05)~~

4021. -- 499. (RESERVED).

500. STANDARD PERMIT CONDITIONS.

The following conditions shall apply to and be included in all permits. (4-1-88)

01. Compliance Required. The permittee shall comply with all conditions of the permit. (4-1-88)

02. Renewal Responsibilities. If the permittee intends to continue operation of the permitted facility after the expiration of an existing permit, the permittee shall apply for a new permit in accordance with these rules. (4-1-88)

03. Operation of Facilities. The permittee shall at all times properly maintain and operate all structures, systems, and equipment for treatment, control and monitoring, which are installed or used by the permittee to achieve compliance with the permit or these rules. (4-1-88)

04. Provide Information. The permittee shall furnish to the Director within a reasonable time, any information including copies of records, which may be requested by the Director to determine whether cause exists for modifying, revoking, re-issuing, or terminating the permit, or to determine compliance with the permit or these rules. (4-1-88)

05. Entry and Access. The permittee shall allow the Director, consistent with Title 39, Chapter 1, Idaho Code, to:

- a.** Enter the permitted facility. (4-1-88)
- b.** Inspect any records that must be kept under the conditions of the permit. (4-1-88)
- c.** Inspect any facility, equipment, practice, or operation permitted or required by the permit. (4-1-88)

d. Sample or monitor for the purpose of assuring permit compliance, any substance or any parameter at the facility. (4-1-88)

06. Reporting. The permittee shall report to the Director under the circumstances and in the manner specified in this section: (4-1-88)

a. In writing at least thirty (30) days before any planned physical alteration or addition to the permitted facility or activity if that alteration or addition would result in any significant change in information that was submitted during the permit application process. When the alteration or addition results in a need for a major modification, such alteration or addition shall not be made prior to Department approval issued in accordance with these rules. (~~4-1-88~~)()

b. In writing thirty (30) days before any anticipated change which would result in noncompliance with any permit condition or these rules. (4-1-88)

c. Orally within twenty-four (24) hours from the time the permittee became aware of any noncompliance which may endanger the public health or the environment at telephone numbers provided in the permit by the Director. (4-1-88)

d. In writing as soon as possible but within five (5) days of the date the permittee knows or should know of any noncompliance unless extended by the Department. This report shall contain: (4-1-88)

i. A description of the noncompliance and its cause; (4-1-88)

ii. The period of noncompliance including to the extent possible, times and dates and, if the noncompliance has not been corrected, the anticipated length of time it is expected to continue; and (~~4-1-88~~)()

iii. Steps taken or planned, including timelines, to reduce or eliminate the continuance or reoccurrence of the noncompliance. (~~4-1-88~~)()

e. In writing as soon as possible after the permittee becomes aware of relevant facts not submitted or incorrect information submitted, in a permit application or any report to the Director. Those facts or the correct information shall be included as a part of this report. (4-1-88)

07. Minimize Impacts. The permittee shall take all necessary actions to eliminate and correct any adverse impact on the public health or the environment resulting from permit noncompliance. (4-1-88)

08. Compliance with "Ground Water Quality Rule." Permits issued pursuant to these rules shall require compliance with IDAPA 58.01.11, "Ground Water Quality Rule." ()

501. -- 599. (RESERVED).

600. SPECIFIC PERMIT CONDITIONS.

01. Basis for Specific Permit Conditions. Conditions necessary for the protection of the environment and the public health may differ from facility to facility because of varying environmental conditions and wastewater compositions. The Director may establish, on a case-by-case basis, specific permit conditions. Specific conditions shall be established in consideration of characteristics specific to a facility and inherent hazards of those characteristics. Such characteristics include, but are not limited to: (4-1-88)

- a. Chemical, biological, physical, and volumetric characteristics of the wastewater; (4-1-88)
- b. Geological and climatic nature of the facility site; (4-1-88)
- c. Size of the site and its proximity to population centers and to ground and surface water; (4-1-88)
- d. Legal considerations relative to land use and water rights; (4-1-88)
- e. Techniques used in wastewater distribution and the disposition of that vegetation exposed to wastewaters; (4-1-88)
- f. Abilities of the soils and vegetative covers to treat the wastewater without undue hazard to the environment or to the public health; and (4-1-88)
- g. The need for monitoring and record keeping to determine if the facility is being operated in conformance with its design and if its design is adequate to protect the environment and the public health. (4-1-88)

02. Duration of Permit. The permit shall be effective for a fixed term of not more than ~~five~~ ten (~~5~~10) years. (~~4-1-88~~)()

03. Limitations to Operation. Conditions of the permit may specify or limit: (4-1-88)

- a. Wastewater composition; (4-1-88)
- b. Method, manner, and frequency of wastewater treatment; (4-1-88)
- c. Wastewater pretreatment requirements; (4-1-88)
- d. Physical, chemical, and biological characteristics of a land treatment facility; and (4-11-06)
- e. Any other condition the Director finds necessary to protect public health or environment. (4-1-88)

04. Compliance Schedules. The Director may establish a compliance schedule for existing facilities as part of the permit conditions including: (4-1-88)

- a. Specific steps or actions to be taken by the permittee to achieve compliance with

applicable requirements or final permit conditions; (4-1-88)

b. Dates by which those steps or actions are to be taken; and (4-1-88)

c. In any case where the period of time for compliance exceeds one (1) year the schedule may also establish interim requirements and the dates for their achievements. (4-1-88)

05. Monitoring Requirements. Any facility may be subject to monitoring requirements including, but not limited to: (4-1-88)

a. The installation, use, and maintenance of monitoring equipment; (4-1-88)

b. Monitoring or sampling methodology, frequency, and locations; (4-1-88)

c. Monitored substances or parameters; (4-1-88)

d. Testing and analytical procedures; and (4-1-88)

e. Reporting requirements including both frequency and form. (4-1-88)

~~06. **Rapid Infiltration Systems.** The following minimum treatment requirements are established for land application of wastewater using rapid infiltration methods and systems. (4-11-06)~~

~~a. Suspended solids content of wastewater which includes organic and inorganic particulate matter shall not exceed a thirty (30) day average concentration of one hundred (100) mg/L. (4-1-88)~~

~~b. Nitrogen (total as N) content of wastewater shall not exceed a thirty (30) day average concentration of twenty (20) mg/L. (4-1-88)~~

~~07. **Direct Use of Municipal Reclaimed Wastewater.** Treatment requirements for reuse facilities applicable to direct use of municipal reclaimed wastewater include, but are not limited to, the following. The applicable treatment requirements, buffer zones, access restrictions, disinfection requirements, uses, and other requirements are further described in the Classification Table in Subsection 600.08. (3-30-07)~~

~~a. Class A effluent is municipal reclaimed wastewater that may be used under particular circumstances for irrigation, including residential irrigation at individual homes; ground water recharge using surface spreading, seepage ponds, or other unlined surface water features; ground water recharge using subsurface distribution; fire suppression from dedicated, marked hydrants and only by trained fire personnel, and not to be used in building sprinkler systems; dust suppression at construction sites; toilet flushing at industrial and commercial sites where only trained maintenance personnel have access to the plumbing for repair; or other uses acceptable to the Department. Class A effluent shall be oxidized, coagulated, clarified, and filtered, or treated by an equivalent process and adequately disinfected. Filtration approval requirements, nutrient removal requirements, turbidity limits requirements, monitoring requirements, reliability and redundancy requirements, and distribution system requirements also~~

~~apply. Class A treatment systems are required to be pilot tested or otherwise approved by the Department per Subsection 601.04 of these rules. Class A effluent shall be considered adequately disinfected if, at the point of compliance, the median number of total coliform organisms does not exceed two and two tenths (2.2) per one hundred (100) milliliters, and does not exceed twenty-three (23) per one hundred (100) milliliters in any confirmed sample, as determined from the bacteriological results of the last seven (7) days for which analyses have been completed. For ground water recharge using surface spreading, seepage ponds, and other unlined surface water features, IDAPA 58.01.11, "Ground Water Quality Rule," requirements apply. For Class A effluent, analysis shall be based on daily sampling during periods of use. The point of compliance for Class A effluent for total coliform shall be at any point in the system following final treatment and disinfection contact time. It is recommended but not required that the effluent also be disinfected following storage. Class A effluent for residential irrigation shall be applied only during periods of non-use.~~ (3-30-07)

~~**b.** Class B effluent is municipal reclaimed wastewater that may contact any edible portion of raw food crops; may be used to irrigate golf courses, parks, playgrounds, schoolyards and other areas where children are likely to have access or exposure; or may be used for toilet flushing at industrial and commercial sites where only trained maintenance personnel have access to the plumbing for repair. Class B effluent shall be oxidized, coagulated, clarified, and filtered, or treated by an equivalent process and adequately disinfected. New Class B treatment systems are required to be pilot tested and approved by the Department prior to start up. Class B effluent shall meet the following turbidity limits. The daily arithmetic mean of all daily measurements of turbidity shall not exceed two (2) NTU, and turbidity shall not exceed five (5) NTU at any time. Turbidity shall be measured continuously. The turbidity standard shall be met prior to disinfection. For those systems that have in-line turbidimeters that are operating full-time, no additional monitoring for total suspended solids (TSS) is required. Class B effluent shall be considered adequately disinfected if, at the point of compliance, the median number of total coliform organisms does not exceed two and two tenths (2.2) per one hundred (100) milliliters, and does not exceed twenty-three (23) per one hundred (100) milliliters in any confirmed sample, as determined from the bacteriological results of the last seven (7) days for which analyses have been completed. For Class B effluent, analysis shall be based on daily sampling during periods of application. The point of compliance for Class B effluent for total coliform shall be at any point in the system following final treatment and disinfection contact time. It is recommended but not required that the effluent also be disinfected following storage. Residual chlorine at the point of compliance shall be not less than one (1) mg/L free chlorine after a contact time of thirty (30) minutes at peak flow. If an alternative disinfection process is used, it must be demonstrated to the satisfaction of the Department that the alternative process is comparable to that achieved by chlorination with one (1) mg/L free chlorine after thirty (30) minutes contact time. Class B effluent shall be applied only during periods of non-use by the public.~~ (3-30-07)

~~**c.** Class C effluent is municipal reclaimed wastewater that may only contact the inedible portion of raw food crops; may be used to irrigate orchards and vineyards during the fruiting season, if no fruit harvested for raw use comes in contact with the irrigation water or ground or will only contact the inedible portion of raw food crops; may be used to irrigate cemeteries, vegetation on sides and medians of highways, and other areas where individuals have access or exposure; or may be used for toilet flushing at industrial and commercial sites where only trained maintenance personnel have access to the plumbing for repair. Class C effluent shall be oxidized and adequately disinfected. Class C effluent shall be considered adequately~~

~~disinfected if, at the point of compliance, the median number of total coliform organisms does not exceed twenty three (23) per one hundred (100) milliliters, and does not exceed two hundred thirty (230) per one hundred (100) milliliters in any confirmed sample as determined from the bacteriological results of the last five (5) days for which analyses have been completed. For Class C effluent, analysis shall be based on weekly sampling during periods of application. The point of compliance for Class C effluent for total coliform shall be at any point in the system following final treatment and disinfection contact time. Class C effluent shall be applied only during periods of non-use by the public.~~ (3-30-07)

~~**d.** Class D effluent is municipal reclaimed wastewater that is used to irrigate fodder, seed, or processed food crops and is oxidized and adequately disinfected. Class D effluent shall be considered adequately disinfected if, at some location in the treatment process, the median number of total coliform organisms does not exceed two hundred thirty (230) per one hundred (100) milliliters, not to exceed two thousand three hundred (2300) per one hundred (100) milliliters in any confirmed sample, as determined from the bacteriological results of the last three (3) days for which analyses have been completed. For Class D effluent, analysis shall be based on monthly sampling during periods of application. The point of compliance for Class D effluent for total coliform shall be at any point in the system following final treatment and disinfection contact time. Animals shall not be grazed on land where Class D municipal wastewater is applied, and animals shall not be fed harvested vegetation irrigated in this manner within two (2) weeks of application.~~ (4-11-06)

~~**e.** Class E effluent is municipal reclaimed wastewater that is used to irrigate forested sites where public access is restricted and the municipal wastewater shall be of at least primary effluent quality. Animals shall not be grazed on land where Class E municipal wastewater is applied, and animals shall not be fed harvested vegetation irrigated in this manner within four (4) weeks of application.~~ (4-11-06)

~~**08. Direct Use of Municipal Reclaimed Wastewater — Classification Table.** The following table provides a brief summary of the requirements for direct use of municipal reclaimed wastewater outlined in Subsection 600.07. If there are discrepancies between Subsections 600.07 and 600.08, the requirements of Subsection 600.07 prevail.~~

<i>Classification Table</i>					
<i>Classification</i>	<i>Class-A</i>	<i>Class-B</i>	<i>Class-C</i>	<i>Class-D</i>	<i>Class-E</i>
<i>Treatment</i>	<i>This is a partial list – see Section 601 for more detail: Oxidized, clarified, and coagulated, with filtration approval requirements or treated by an equivalent process, plus nutrient removal requirements, turbidity limits requirements, adequately disinfected and tested.</i>	<i>Oxidized, coagulated, clarified, and filtered, or treated by an equivalent process, turbidity limits requirements, and adequately disinfected and tested.</i>	<i>Oxidized and adequately disinfected</i>	<i>Oxidized and adequately disinfected</i>	<i>At least primary effluent quality</i>
<i>Disinfection</i>	<i>Total coliform organisms does not exceed two and two tenths (2.2) per one hundred (100) milliliters</i>	<i>Total coliform organisms does not exceed two and two tenths (2.2) per one hundred (100) milliliters</i>	<i>Total coliform organisms does not exceed twenty three (23) per one hundred (100) milliliters</i>	<i>Total coliform organisms does not exceed two hundred thirty (230) per one hundred (100) milliliters</i>	<i>Total coliform organisms up to “too numerous to count”</i>

<i>Classification Table</i>					
<i>Classification</i>	<i>Class-A</i>	<i>Class-B</i>	<i>Class-C</i>	<i>Class-D</i>	<i>Class-E</i>
<i>Uses</i>	<i>May be used for residential irrigation at individual homes; ground water recharge using surface spreading; seepage ponds or other unlined surface water features; ground water recharge using subsurface distribution; fire suppression from dedicated, marked hydrants; dust suppression at construction sites; toilet flushing at industrial and commercial sites; or Class B, C, D, or E uses. Other requirements apply for ground water uses. See Subsection 600.07.a.</i>	<i>May contact any edible portion of raw food crops; may be used to irrigate golf courses, parks, playgrounds, schoolyards; may be used for toilet flushing at industrial and commercial sites; or Class C, D, or E uses. See Subsection 600.07.b.</i>	<i>May be used to irrigate orchards and vineyards during the fruiting season, if no fruit harvested for raw use comes in contact with the irrigation water or ground, or will only contact the unedible portion of raw food crops; may be used to irrigate cemeteries or roadside vegetation; may be used for toilet flushing at industrial and commercial sites; or Class D or E uses. See Subsection 600.07.c.</i>	<i>May be used to irrigate fodder, seed, or processed food crops; or Class E uses. See Subsection 600.07.d.</i>	<i>May be used to irrigate forested sites. See Subsection 600.07.e.</i>
<i>Access-Restriction</i>	<i>Irrigated during periods of non-use.</i>	<i>Irrigated during periods of non-use by the public.</i>	<i>Irrigated during periods of non-use by the public.</i>	<i>Public access restricted.</i>	<i>Public access restricted.</i>
<i>Signing and Posting</i>	<i>See Subsection 601.02</i>	<i>Site specific— See Idaho Guidance for The Reclamation and Reuse of Municipal and Industrial Wastewater</i>	<i>Site specific— See Idaho Guidance for The Reclamation and Reuse of Municipal and Industrial Wastewater</i>	<i>Site specific— See Idaho Guidance for The Reclamation and Reuse of Municipal and Industrial Wastewater</i>	<i>Site specific— See Idaho Guidance for The Reclamation and Reuse of Municipal and Industrial Wastewater</i>

Classification Table					
Classification	Class-A	Class-B	Class-C	Class-D	Class-E
Buffer Distances	No effluent is allowed to be applied to surface waters in those circumstances when an NPDES Permit is required. One hundred (100) foot minimum to drinking water wells.	Site specific-- See Idaho Guidance for The Reclamation and Reuse of Municipal and Industrial Wastewater. No effluent is allowed to be applied to surface waters in those circumstances when an NPDES Permit is required.	Site specific-- See Idaho Guidance for The Reclamation and Reuse of Municipal and Industrial Wastewater. No effluent is allowed to be applied to surface waters in those circumstances when an NPDES Permit is required.	Site specific-- See Idaho Guidance for The Reclamation and Reuse of Municipal and Industrial Wastewater. No effluent is allowed to be applied to surface waters in those circumstances when an NPDES Permit is required.	1000 ft. to inhabited dwellings and areas accessible to the public. No effluent is allowed to be applied to surface waters in those circumstances when an NPDES Permit is required.
Grazing	Grazing allowed only with approved grazing management plan.	Grazing allowed only with approved grazing management plan.	Grazing allowed only with approved grazing management plan.	Grazing not allowed.	Grazing not allowed.

(3-30-07)

~~601. CLASS A EFFLUENT MUNICIPAL RECLAIMED WASTEWATER--ADDITIONAL REQUIREMENTS.~~

~~**01. Engineering Report.** Engineering reports and application materials for new Class A effluent municipal reclaimed wastewater systems or major upgrades to Class A effluent municipal reclaimed wastewater systems shall be submitted to the Department with the application and must be approved by the Department prior to permit issuance. The engineering report shall include, but not be limited to, the following items as applicable: purpose; approach; development of alternatives; technical, financial, managerial, and legal issues; emergency response and security; operation and maintenance; consideration of alternatives for disposal of unanticipated excess effluent that does not meet Class specifications; pilot testing; client use issues; potential markets for reclaimed wastewater; potential sources of wastewater; public involvement and perception; targeted markets for reclaimed wastewater; allocation of reclaimed wastewater; preliminary investigations; staff development; treatment system upgrades to meet Class A requirements; distribution system development and schedule; new development infrastructure; reservoir or booster capacity; water balance calculations; costs; applicable regulations; and potential funding sources. This engineering report shall be stamped, dated and signed in accordance with Idaho Board of Registration of Professional Engineers and~~

Professional Land Surveyors, IDAPA 10.01.02, "Rules of Professional Responsibility." (3-30-07)

~~02. Distribution System Requirements. Class A distribution systems and the continued distribution systems of all of its customers shall have specific requirements including, but not limited to: (4-6-05)~~

~~a. Any person or agency that is planning to construct all or part of the distribution system must obtain a plan and specification approval from the Department prior to beginning construction. Where Class A effluent is to be provided by pressure pipeline, the following applicable standards shall be used as guidance: the current edition of "Recommended Standards for Wastewater Facilities — Great Lakes Upper Mississippi River Board of State Sanitary Engineers," the "AWWA Manual M24" Chapter 4 for dual water systems, and the current edition of "Idaho Standards for Public Works Construction." The above guidance documents shall be used for all new systems constructed after April 1, 2005. Requirements for irrigation systems proposed for conversion from use of non-Class A effluent water to use with Class A effluent will be considered on a case-by-case basis considering protection of public health and the environment. (4-6-05)~~

~~b. Distribution Lines. (4-6-05)~~

~~i. Minimum Separation. (4-6-05)~~

~~(1) Horizontal Separation. Class A effluent distribution mains parallel to potable (culinary) water mains shall be installed in accordance with IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems," Subsection 542.07. Class A effluent distribution mains parallel to sanitary sewer mains shall be installed at least five (5) feet horizontally from the sanitary sewer main if the sanitary sewer main is located above the Class A effluent main, and three (3) feet horizontally from the sanitary sewer main if the sanitary sewer main is located below the Class A effluent main. (3-30-07)~~

~~(2) Vertical Separation. At crossings of Class A effluent distribution mains with potable water mains and sanitary sewer mains, the order of the mains from lowest in elevation to highest should be: sanitary sewer main, Class A effluent main, and potable water main. A minimum of eighteen (18) inches vertical separation between each of these utilities shall be provided as measured from outside of pipe to outside of pipe. The crossings shall be arranged so that the Class A effluent main joints will be equidistant and as far as possible from the potable water main joints and the sanitary sewer main joints. If the Class A effluent water main must cross above the potable water main, the vertical separation shall be a minimum eighteen (18) inches, the Class A effluent main shall be supported to prevent settling, and the Class A effluent main shall be encased in a continuous pipe sleeve to a distance on each side of the crossing equal to ten (10) feet. If the Class A effluent main must cross below the sanitary sewer main, the vertical separation shall be a minimum eighteen (18) inches and the Class A effluent main shall be encased in a continuous pipe sleeve to a distance on each side of the crossing equal to ten (10) feet. (3-30-07)~~

~~(3) Special Provisions. Where the horizontal and/or vertical separation as required above cannot be maintained, special construction requirements shall be provided in accordance with requirements in IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems," Section~~

~~542, for protection of potable water mains. (3-30-07)~~

~~ii. Class A Effluent Pipe Identification. (4-6-05)~~

~~(1) General. All new buried pipe, including service lines, valves, and other appurtenances, shall be colored purple, Pantone 512 or equivalent. If fading or discoloration of the purple pipe is experienced during construction, identification tape or locating wire along the pipe is required. Label piping every ten (10) feet "Caution: Reclaimed Wastewater—Do Not Drink" in both Spanish and English lettering. (3-30-07)~~

~~(2) Identification Tape. If identification tape is installed along with the purple pipe, it shall be prepared with white or black printing on a purple field, color Pantone 512 or equivalent, having the words, "Caution: Reclaimed Wastewater—Do Not Drink" in both Spanish and English lettering. The overall width of the tape shall be at least three (3) inches. Identification tape shall be installed eighteen (18) inches above the transmission pipe longitudinally, shall be centered over the pipe, and shall run continuously along the length of the pipe. (3-30-07)~~

~~iii. Conversion of Existing Drinking Water or Irrigation Water Lines. Existing water lines that are being converted to use with Class A effluent or a combination of Class A effluent and irrigation water shall first be accurately located and comply with leak test standards in accordance with IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems," Section 542, and in coordination with the Department. The pipeline must be physically disconnected from any potable water lines and brought into compliance with current state cross connection rules and requirements (IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems," Section 543), and must meet minimum separation requirements set forth in these rules. If the existing lines meet approval of the water supplier and the Department based upon the requirements set forth in these rules, the lines shall be approved for Class A effluent distribution. If regulatory compliance of the system (accurate location, pressure testing, and verification of no cross connections) cannot be verified with record drawings, testing, televising, or otherwise, the lines shall be uncovered, inspected, and identified or otherwise verified to the Department's satisfaction prior to use. All accessible portions of the system must be retrofitted to meet the requirements of these rules. After conversion of the water or irrigation line to a Class A wastewater effluent line, the lines shall be marked as stated in Subsection 601.02.b.ii.(2) of these rules. (3-30-07)~~

~~iv. Valve Boxes and Other Surface Identification. All valves shall have locking valve covers that are non-interchangeable with potable water valve covers, and shall have an inscription cast on the top surface stating "Reclaimed Wastewater." Valve boxes shall meet the requirements of IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems," Section 542. All above ground pipes and pumps shall be consistently color coded (purple, Pantone 512) and marked to differentiate Class A effluent facilities from potable water facilities. (3-30-07)~~

~~v. Blow-off Assemblies. If either an in-line type or end-of-line type blow-off or drain assembly is installed in the system, a plan for proposed discharge or runoff locations shall be submitted to the Department for review and approval. (4-6-05)~~

~~e. Storage. If storage or impoundment of Class A effluent is provided, the following requirements apply: (4-6-05)~~

~~i. Fencing. No fencing is required by these rules, but may be required by local laws or ordinances. (4-6-05)~~

~~ii. Identification. All storage facilities shall be identified by signs prepared according to the requirements of Subsection 601.02.e.v. of these rules. Signs shall be posted on the surrounding fence at minimum five hundred (500) foot intervals and at the entrance of each facility. If there is no fence, signs shall be located at a minimum on each side of the facility or at minimum two hundred fifty (250) foot intervals or at all accessible points. (4-6-05)~~

~~iii. For systems supplying irrigation water for residential lawn irrigation, minimum storage requirements shall include sufficient volume for daily use patterns, precipitation events, etc., and an alternate disposal point during non-irrigation season. (4-6-05)~~

~~d. Pumping Facilities. (4-6-05)~~

~~i. Marking. All exposed and above ground piping, risers, fittings, pumps, valves, etc., shall be painted purple, Pantone 512. In addition, all piping shall be identified using an accepted means of labeling reading "Warning: Reclaimed Wastewater - Do Not Drink" in both Spanish and English lettering. In a fenced pump station area, signs shall be posted on the fence on all sides. (3-30-07)~~

~~ii. Seal Water. Any potable water used as seal water for reclaimed water pump seals shall be protected from backflow with a Department approved backflow prevention device or air gap. (4-6-05)~~

~~e. Other Requirements. (4-6-05)~~

~~i. Backflow Protection. In no case shall a direct connection be made between the potable and Class A effluent system. If it is necessary to put potable water into the Class A effluent distribution system, a Department approved reduced pressure principal device or air gap must be provided to protect the potable water system. (4-6-05)~~

~~ii. Drinking fountains, picnic tables, food establishments, and other public eating facilities shall be placed out of any spray irrigation area in which Class A effluent is used, or shall be otherwise protected from contact with the Class A effluent. Exterior drinking fountains, picnic tables, food establishments, and other public eating facilities shall be shown and called out on the construction plans. If no exterior drinking fountains, picnic tables, food establishments, or other public eating facilities are present in the design area, then it shall be specifically stated on the plans that none are to exist. (4-6-05)~~

~~iii. Equipment and Facilities. Any equipment or facilities such as tanks, temporary piping or valves, and portable pumps that have been or may be used with Class A effluent shall not be used with potable water or sewage. Any equipment or facilities such as tanks, temporary piping or valves, and portable pumps that have been or may be used with sewage shall not be used with Class A effluent or potable water. (4-6-05)~~

~~iv. Warning Labels. Warning labels shall be installed on designated facilities such as, but not limited to, controller panels and washdown or blow-off hydrants on water trucks, hose~~

~~bibs, and temporary construction services. The labels shall read, "Warning: Reclaimed Wastewater Do Not Drink" in both Spanish and English lettering. (3-30-07)~~

~~v. Warning signs. Where reclaimed water is stored or impounded, or used for irrigation in public areas, warning signs shall be installed and contain, at a minimum, one (1) inch purple letters (Pantone 512 or equivalent) on a white or other high contrast background notifying the public that the water is unsafe to drink. Signs may also have a purple background with white or other high contrast lettering. Warning signs and labels shall read, "Warning: Reclaimed Wastewater Do Not Drink" in both Spanish and English lettering. (3-30-07)~~

~~**03. Other Permits Addressed as Necessary.** The following other permits may be necessary for a particular facility but are not regulated under these rules: (4-6-05)~~

~~**a.** NPDES permits from the Environmental Protection Agency for surface water discharge. (4-6-05)~~

~~**b.** Injection well permits from Idaho Department of Water Resources. (4-6-05)~~

~~**04. Filtration Technology.** (3-30-07)~~

~~**a. Filtration Technology Acceptance Requirements.** All Class A effluent projects in Idaho must have written acceptance from the Department for their proposed filtration technology prior to submitting plans and specifications for approval. Except as provided in Subsections 601.04.b.i and 601.04.b.ii., the following approaches are methods by which this written acceptance may be obtained from the Department. Consultants and vendors shall submit written requests with accompanying product information to the Department's State Office Wastewater Program. (3-30-07)~~

~~i. Department acceptance based on previous similar projects in Idaho. (3-30-07)~~

~~ii. National approval by National Reuse Association, Water Environment Federation Research Foundation, NSF International, or other organization accepted by the Department. (3-30-07)~~

~~iii. The State of California Department of Health Services Treatment Technology Report for Recycled Water, <http://www.dhs.ca.gov/ps/ddwem/publications/waterrecycling/treatmenttechnology.pdf>. (3-30-07)~~

~~iv. Other methods accepted by the Department, including pilot testing. (3-30-07)~~

~~**b.** Filter Loading, Coagulation, and Acceptance Requirements. (3-30-07)~~

~~i. For mono, dual or mixed media gravity or pressure filtration systems, influent shall be coagulated, clarified and passed through an undisturbed bed of soils or filter media at a rate not to exceed five (5) gallons per minute per square foot. For traveling bridge automatic backwash filters, influent shall be coagulated, clarified and passed through an undisturbed bed of soils or filter media at a rate not to exceed two (2) gallons per minute per square foot. Coagulation may be waived if all of following are met: the filter effluent does not exceed two (2)~~

~~NTU, the filter influent is continuously measured, the filter influent turbidity does not exceed five (5) NTU, and automatically activated chemical addition or diversion facilities are provided in the event filter effluent turbidity exceeds five (5) NTU.~~ (3-30-07)

~~ii. Gravity or pressure filters as described in Subsection 601.04.b.i. are recognized as being acceptable filtration processes under these rules.~~ (3-30-07)

~~iii. Other granular media filters that have a continuous backwash feature, pulsed bed feature, or other feature that, in the determination of the Department, does not comply with Subsection 601.04.b.i.; membrane filters; or cloth filters must obtain acceptance in accordance with Subsection 601.04.a.~~ (3-30-07)

~~**05. Nutrient Removal Requirements.** Total nitrogen at the point of compliance shall not exceed ten (10) mg/L for ground water recharge systems, and thirty (30) mg/L for residential irrigation and other non-recharge systems, based on a monthly arithmetic mean as determined from weekly composite sampling. These limits may be much lower depending on the results of any applicable nutrient pathogen studies that may be required.~~ (4-11-06)

~~**06. Turbidity Requirements and Disinfection Requirements.**~~ (3-30-07)

~~**a.** One (1) in-line, continuously monitoring, recording turbidimeter is required for each treatment train after filtration and prior to disinfection.~~ (3-30-07)

~~**b.** Class A effluent shall meet the following turbidity limits. For systems utilizing sand or other granular media or cloth media, the daily arithmetic mean of all daily measurements of turbidity shall not exceed two (2) NTU, and turbidity shall not exceed five (5) NTU at any time. For systems utilizing membrane filtration, the daily arithmetic mean of all daily measurements of turbidity shall not exceed zero point two (0.2) NTU, and turbidity shall not exceed zero point five (0.5) NTU at any time.~~ (3-30-07)

~~**c.** Class A effluent shall be disinfected by either:~~ (3-30-07)

~~i. A chlorine disinfection process that provides a concentration/contact time (CT) of four hundred and fifty (450) milligram-minutes per liter (mg-min/L) measured at the end of the contact time with a modal contact time of not less than ninety (90) minutes based on peak day dry weather flow; or~~ (3-30-07)

~~ii. A disinfection process that, when combined with filtration, has been demonstrated to achieve 5-log inactivation of virus. Acceptance by the State of California Department of Health Services as published in their Treatment Technology Report for Recycled Water is one method to constitute such a demonstration.~~ (3-30-07)

~~**07. Reliability and Redundancy Requirements.**~~ (4-6-05)

~~**a.** Redundant Treatment Capabilities.~~ (3-30-07)

~~i. Class A treatment systems shall have redundant treatment capabilities able to treat peak day flow, Class A treatment systems shall also provide for;~~ (3-30-07)

- ~~(1) An alternative disposal option; or (3-30-07)~~
- ~~(2) Diversion to adequate lined storage capable of storing seven (7) days of effluent; or (3-30-07)~~
- ~~(3) Equivalent back-up system. (3-30-07)~~
- ~~ii. Each of these three (3) alternatives must be automatically activated if turbidity exceeds or chlorine residual drops below the instantaneous required value for more than five (5) minutes, or if the alternative filtration/ disinfection system is not achieving its required 5-log removal/inactivation of virus for more than five (5) minutes. Peak flow is defined for the purpose of Subsection 601.07 to mean the peak day flow of the plant anticipated for the season in which Class A effluent is being produced. The maximum number of times a facility could exceed on this basis is twice in one (1) week, both of which times are required to be immediately reported. Failure to report or exceeding more than twice in one (1) week are sufficient grounds for the Department to require the system to be shut down for inspection and repair. (3-30-07)~~
- ~~b. Redundant facilities, including, but not limited to, monitoring equipment and treatment trains shall be required. (4-6-05)~~
- ~~e. Standby Power sufficient to maintain all treatment and distribution works shall be required for the Class A effluent use. An alternative to this is to provide standby power sufficient for basic treatment and for automatic by-pass of filtration directly to an alternative permitted disposal option. (3-30-07)~~
- ~~d. Standby treatment filter units in fully operable condition capable of treating peak flow, with the largest filter unit out of service, shall be plumbed and wired in place for immediate use. Peak flow is defined for the purpose of this rule to mean the peak day flow of the plant anticipated for the season in which Class A effluent is being produced. An alternative to this is automatic by-pass of filtration directly to an alternative permitted disposal option. (3-30-07)~~
- ~~**08. Other Class A Effluent Requirements. (4-6-05)**~~
- ~~a. Minimum treatment system size shall be ten thousand (10,000) gallons per day of wastewater flow being treated. (4-11-06)~~
- ~~b. Five (5) Day Biochemical Oxygen Demand (BOD5) shall not exceed five (5) mg/L for ground water recharge systems, and ten (10) mg/L each for residential irrigation and other non-recharge systems, based on a monthly arithmetic mean as determined from weekly composite sampling. (3-30-07)~~
- ~~e. The pH as determined by daily grab samples or continuous monitoring shall be between six point zero (6.0) and nine point zero (9.0) inclusive. (4-11-06)~~
- ~~d. For any type of ground water recharge system, the Class A effluent must also meet ground water quality standards per IDAPA 58.01.11, "Ground Water Quality Rule," at the point of compliance, and comply with the remaining sections of the "Ground Water Quality Rule." For~~

~~these types of ground water recharge systems utilizing Class A effluent municipal reclaimed wastewater, the applicant shall propose to the Department for review and approval, the applicable testing requirements for the effluent as it relates to the primary and secondary ground water standards, as well as background ground water quality. Ground water recharge site locations shall be a minimum of one thousand (1000) feet from any down gradient drinking water extraction well and shall also provide for a minimum of six (6) months time of travel in the aquifer prior to withdrawal. The minimum requirements for site location and aquifer storage time may also be greater depending on any source water assessment zone studies for public drinking water wells in the area. The owners of these systems must control the ownership of this down gradient area to prohibit future wells from being drilled in the impact zone of the ground water recharge system. The Idaho Department of Water Resources requires additional permits for ground water injection wells.~~ (4-11-06)

~~e. A filter to waste operational criteria is required for all Class A effluent filtration facilities for each time a filter starts up. The filter will automatically filter to waste until the effluent meets the required turbidity standard.~~ (4-6-05)

~~f. Additional information in the form of reports by qualified soil scientists, professional geologists, professional engineers, or other qualified individuals relating to environmental assessments, nutrient management plans, or water rights issues shall be submitted to the Department at the pre-application conference or with the application and must be approved by the Department prior to permit issuance.~~ (4-6-05)

~~g. Requirements for Class A effluent distribution system operators. All operators of Class A effluent distribution systems, including operators of distribution systems that utilize a combination of Class A effluent and other irrigation waters, operators of the distribution system from the wastewater treatment plant to the point of compliance or point of use or point of sale, as applicable, and those operators that are employed by buyers of the Class A effluent for subsequent use, including home occupants, shall be required to sign a utility user agreement provided by the utility providing the Class A effluent that states that the user acknowledges that the user understands the origin of the effluent and the concept of agronomic rate for applying the Class A effluent. Contracts for sale of Class A effluent for subsequent use shall also include these requirements. Individual homeowners are allowed to operate or maintain Class A effluent distribution systems. Providers of the Class A effluent shall undertake a public education program within its service area to teach potential customers the benefits and responsibilities of using Class A effluent~~ (3-30-07)

~~h. Requirements for mixing Class A effluent with other irrigation waters. Mixing Class A effluent with other irrigation waters may be conducted in a pipe to pipe manner if both the other irrigation water source and the Class A source are protected by Department approved backflow devices. Class A effluent may be mixed with other irrigation water in an unlined pond if the Class A effluent is permitted for aquifer recharge. Class A effluent that is permitted for irrigation only and not aquifer recharge may be mixed with other irrigation water only in a lined pond. Water from these mixed ponds may then be used for permitted Class A uses. If any of the water from these mixed ponds ultimately discharges to a canal, drain or other surface water, an NPDES permit may be required due to the presence of effluent in the mixed water. A downstream water user does not need a permit under these rules when mixed effluent/irrigation water is used after it is discharged, in accordance with these rules, to a canal, drain or other surface water.~~

(3-30-07)

~~602. DEMONSTRATION OF TECHNICAL, FINANCIAL, AND MANAGERIAL CAPACITY OF CLASS A EFFLUENT RECLAIMED WASTEWATER SYSTEMS.~~

~~No person shall proceed, or cause to proceed, with construction of a new class A effluent reclaimed wastewater system until it has been demonstrated to the Department that the new Class A effluent reclaimed wastewater system will have adequate technical, financial, and managerial capacity. Demonstration of capacity shall 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 601.02.a. of these rules. The Applicant must obtain Department approval of the new system capacity demonstration prior to permit issuance and construction.~~ (4-6-05)

~~01. Technical Capacity. In order to meet this requirement, the Class A effluent reclaimed wastewater system shall submit documentation to demonstrate the following:~~ (4-6-05)

~~a. The system meets the relevant design, construction, operating and maintenance requirements of these rules;~~ (4-6-05)

~~b. The system has an adequate and consistent source of wastewater;~~ (4-6-05)

~~c. A security plan is in place to protect the wastewater source and deal with emergencies;~~ (4-6-05)

~~d. The system has trained personnel with an understanding of the technical and operational characteristics of the system;~~ (4-6-05)

~~e. A plan for cross-connection control;~~ (4-6-05)

~~f. Procedures for emergency response; and~~ (4-6-05)

~~g. Quality assurance and quality control plans.~~ (4-6-05)

~~02. Financial Capacity. A demonstration of financial capacity must include, but is not limited to, the following information:~~ (4-6-05)

~~a. Documentation that organizational and financial arrangements are adequate to construct and operate the Class A effluent reclaimed wastewater distribution system 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;~~ (4-6-05)

~~b. Demonstration of revenue sufficiency that includes, but is not limited to, billing and collection procedures, a proposed rate structure which is affordable and ensures availability of operating funds, revenues for depreciation and reserves, and the ability to accrue a capital replacement fund. A preliminary operating budget shall be provided;~~ (4-6-05)

~~c. Adequate fiscal controls shall be demonstrated; and~~ (4-6-05)

~~d. Equipment inventory controls shall be in place. (4-6-05)~~

~~**03. Managerial Capacity.** In order to demonstrate adequate managerial capacity, the owner and/or operator of a new Class A effluent reclaimed wastewater system shall submit at least the following information to the Department: (4-6-05)~~

~~a. Clear documentation of legal ownership of the Class A effluent reclaimed wastewater system, including collection, treatment and effluent distribution systems, and any plans that may exist for transfer of that ownership on completion of construction or after a period of operation; (4-6-05)~~

~~b. The name, address, and telephone number of the person who will be accountable for ensuring that the Class A effluent reclaimed wastewater system is in compliance with these rules; (4-6-05)~~

~~c. The name, address, and telephone number of the system operator; (4-6-05)~~

~~d. A description of the manner in which the wastewater system will be managed. By-laws, restrictive covenants, articles of incorporation, or procedures and policy manuals which describe the management organization structure are a means of providing this information; (4-6-05)~~

~~e. Personnel management policies and a description of staffing, including training, experience, certification or licensing, and continuing education completed by the Class A effluent reclaimed wastewater system staff; (4-6-05)~~

~~f. An explanation of how the wastewater system operators will establish and maintain effective communications and relationships between the wastewater system management, its customers, professional service providers, and any applicable regulatory agencies; and (4-6-05)~~

~~g. Evidence of short-term and long-term planning for future growth, equipment repair and maintenance, and long-term replacement of system components. (4-6-05)~~

~~**04. Consolidation.** In demonstrating new system capacity, the owner of the proposed new Class A effluent reclaimed wastewater system shall investigate the feasibility of obtaining water service from an established public water system. If such service is available, but the owner elects to proceed with an independent system, the owner shall explain why this choice is in the public interest in terms of environmental protection, affordability to water users, and protection of public health. (4-6-05)~~

~~**05. Exclusion.** New Class A effluent reclaimed wastewater systems 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, shall 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 wastewater systems shall not be required to meet any requirements of Section 602 which are in~~

~~conflict with the provisions and requirements of the Idaho Public Utilities Commission. (4-6-05)~~

601. MUNICIPAL RECYCLED WATER - CLASSIFICATION, TREATMENT, USE.

01. Class A Recycled Water. In order to be classified as Class A recycled water, municipal wastewater shall be oxidized, coagulated, clarified, and filtered, or treated by an equivalent process and adequately disinfected. Class A treatment systems shall be reviewed by the Department and approved on a case-by-case basis. The Department may require pilot testing or demonstration prior to approval, or may condition approval upon the successful outcome of such testing or demonstration. ()

a. Disinfection Requirements. ()

i. Class A recycled water shall be disinfected by either: ()

(1) A chlorine disinfection process that provides a concentration/contact time (CT) of four hundred and fifty (450) milligram-minutes per liter (mg-min/L) measured at the end of the contact time based on total chlorine residual and a modal contact time of not less than ninety (90) minutes based on peak day dry weather flow; or ()

(2) A disinfection process that, when combined with filtration, has been demonstrated to achieve 5-log inactivation of virus. Acceptance by the State of California as published in their Treatment Technology Report for Recycled Water is one (1) method to constitute such a demonstration. ()

ii. The median number of total coliform organisms does not exceed two and two-tenths (2.2) per one hundred (100) milliliters, as determined from the bacteriological results of the last seven (7) days for which analyses have been completed. No sample shall exceed twenty-three (23) organisms per one hundred (100) milliliters in any confirmed sample. ()

iii. Sampling frequency and point of compliance. ()

(1) Class A recycled water shall be sampled and analyzed daily for total coliform when allowed uses specifically require Class A recycled water. The sampling frequency for Class A may be decreased and the alternate frequency will be determined based upon, but not limited to, the following: uses that are allowed with lower class recycled water, the volume of recycled water used, the disinfection method used, the demonstrated disinfection efficiency and reliability, the point of compliance, or other factors demonstrating that the alternative frequency is protective of public health. ()

(2) The point of compliance for Class A recycled water for total coliform shall be at any point in the system following final treatment and disinfection contact time. It is recommended that the recycled water also be disinfected following storage. ()

b. Turbidity Requirements. ()

i. Class A recycled water shall meet the following turbidity limits: ()

(1) For filtration systems utilizing sand or other granular media or cloth media, the daily arithmetic mean of all measurements of turbidity shall not exceed two (2) NTU, and turbidity shall not exceed five (5) NTU at any time. ()

(2) For filtration systems utilizing membrane filtration, the daily arithmetic mean of all measurements of turbidity shall not exceed zero point two (0.2) NTU, and turbidity shall not exceed zero point five (0.5) NTU at any time. The turbidity standard shall be met prior to disinfection. ()

ii. One (1) in-line, continuously monitoring, recording turbidimeter is required for each treatment train after filtration and prior to disinfection. ()

c. Nitrogen, pH and BOD5 Requirements. ()

i. Total nitrogen at the point of compliance shall not exceed ten (10) mg/L for ground water recharge systems and thirty (30) mg/L for residential irrigation and other non-recharge uses. These limits are based on a monthly arithmetic mean as determined from weekly composite sampling. These limits are a maximum value and may not be applicable if the results of an assessment of ground water quality impacts that may be required and is approved by the Department indicate that lower limits are necessary to protect existing ground water quality beneficial uses. ()

ii. The pH as determined by daily grab samples or continuous monitoring shall be between six point zero (6.0) and nine point zero (9.0). ()

iii. Five (5) Day Biochemical Oxygen Demand (BOD5) shall not exceed five (5) mg/L for ground water recharge systems, and ten (10) mg/L each for residential irrigation and other non-recharge systems, based on a monthly arithmetic mean as determined from weekly composite sampling. ()

02. Class B Recycled Water. In order to be classified as Class B recycled water, municipal wastewater shall be oxidized, coagulated, clarified, and filtered, or treated by an equivalent process and adequately disinfected. Class B treatment systems shall be reviewed by the Department and approved on a case-by-case basis. The Department may require pilot testing or demonstration prior to approval, or may condition approval upon the successful outcome of such testing or demonstration. ()

a. Disinfection Requirements. ()

i. Class B recycled water shall be disinfected by either: ()

(1) A chlorine disinfection process that provides a residual chlorine at the point of compliance of not less than one (1) mg/L total chlorine residual after a contact time of thirty (30) minutes at peak flow; or ()

(2) When an alternative disinfection process is used, it must be demonstrated to the satisfaction of the Department that the alternative process is comparable to that achieved by chlorination with a total chlorine residual of one (1) mg/L after a minimum contact time of thirty

(30) minutes. ()

ii. The median number of total coliform organisms does not exceed two and two-tenths (2.2) per one hundred (100) milliliters, as determined from the bacteriological results of the last seven (7) days for which analyses have been completed. No sample shall exceed twenty-three (23) organisms per one hundred (100) milliliters in any confirmed sample, as determined from the bacteriological results of the last seven (7) days for which analyses have been completed. ()

iii. Sampling frequency and point of compliance. ()

(1) Class B recycled water shall be sampled and analyzed daily for total coliform when allowed uses specifically require Class B recycled water. The sampling frequency for Class B may be decreased and the alternate frequency will be determined based upon, but not limited to, the following: uses that are allowed with lower class recycled water, the volume of recycled water used, the disinfection method used, the demonstrated disinfection efficiency and reliability, the point of compliance, or other factors demonstrating that the alternative frequency is protective of public health. ()

(2) The point of compliance for Class B recycled water for total coliform shall be at any point in the system following final treatment and disinfection contact time. It is recommended that the recycled water also be disinfected following storage. ()

b. Turbidity Requirements. Class B recycled water shall meet the following: ()

i. Turbidity Limits. The daily arithmetic mean of all measurements of turbidity shall not exceed five (5) NTU, and turbidity shall not exceed ten (10) NTU at any time. The turbidity standard shall be met prior to disinfection. ()

ii. Monitoring. One (1) in-line, continuously monitoring, recording turbidimeter is required for each treatment train after filtration and prior to disinfection. ()

03. Class C Recycled Water. In order to be classified as Class C recycled water, municipal wastewater shall be oxidized and adequately disinfected. ()

a. Disinfection Requirements. ()

i. The median number of total coliform organisms does not exceed twenty-three (23) per one hundred (100) milliliters, as determined from the bacteriological results of the last five (5) days for which analyses have been completed. No sample shall exceed two hundred thirty (230) per one hundred (100) milliliters in any confirmed sample. ()

ii. Sampling frequency and point of compliance. ()

(1) Class C recycled water shall be sampled and analyzed weekly for total coliform when allowed uses specifically require Class C recycled water. The sampling frequency for Class C may be decreased and the alternate frequency will be determined based upon, but not limited to, the following: uses that are allowed with lower class recycled water, the volume of recycled water used, the disinfection method used, the demonstrated disinfection efficiency and reliability, the

point of compliance, or other factors demonstrating that the alternative frequency is protective of public health. ()

(2) The point of compliance for Class C recycled water for total coliform shall be at any point in the system following final treatment and disinfection contact time. ()

04. Class D Recycled Water. In order to be classified as Class D recycled water, municipal wastewater shall be oxidized and adequately disinfected. ()

a. Disinfection Requirements. ()

i. The median number of total coliform organisms does not exceed two hundred thirty (230) per one hundred (100) milliliters, as determined from the bacteriological results of the last three (3) days for which analyses have been completed. No sample shall exceed two thousands three hundred (2300) organisms per one hundred (100) milliliters in any confirmed sample. ()

ii. Sampling frequency and point of compliance. ()

(1) Class D recycled water shall be sampled and analyzed monthly for total coliform when allowed uses specifically require Class D recycled water. The sampling frequency for Class D may be decreased and the alternate frequency will be determined based upon, but not limited to, the following: uses that are allowed with lower class recycled water, the volume of recycled water used, the disinfection method used, the demonstrated disinfection efficiency and reliability, the point of compliance, or other factors demonstrating that the alternative frequency is protective of public health. ()

(2) The point of compliance for Class D recycled water for total coliform shall be at any point in the system following final treatment and disinfection contact time. ()

05. Class E Recycled Water. In order to be classified as Class E recycled water, municipal wastewater shall meet at least primary effluent quality. ()

a. Class E recycled water has no disinfection requirements or applicable coliform standard. ()

b. Sampling frequency for total coliform. In general no sampling and analysis are required for Class E recycled water. In cases where sampling and analysis are required (e.g. buffer distance change reduction) the sampling frequency for total coliform will be established consistent with these rules in order to adequately protect human health and the environment. ()

602. MUNICIPAL RECYCLED WATER - CLASSIFICATION AND USES TABLES.

01. Municipal Recycled Water -- Classification Tables. The following tables provide a summary of the treatment requirements of municipal recycled water outlined in Section 601. If there are discrepancies between Sections 601 and 602, the requirements of Section 601 prevail.

TABLE 1 - CLASSIFICATION TABLE						
Classification		Class A	Class B	Class C	Class D	Class E
<u>Oxidized</u>		<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>
<u>Clarified</u>		<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Filtered</u>		<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Disinfected</u>		<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>
<u>Total coliform (organisms/100 milliliters)</u>	<u>Median results for last x-days for which analysis have been completed</u>	<u>2.2</u> <u>7-day median</u>	<u>2.2</u> <u>7-day median</u>	<u>23</u> <u>5-day median</u>	<u>230</u> <u>3-day median</u>	<u>No limit</u>
	<u>Maximum in any sample</u>	<u>23</u>	<u>23</u>	<u>230</u>	<u>2300</u>	<u>No limit</u>
	<u>Monitoring frequency</u>	<u>Daily, or as determined.</u>	<u>Daily or as determined.</u>	<u>Once weekly or as determined.</u>	<u>Once monthly or as determined.</u>	
<u>Disinfection requirements contact time</u>		<u>Contact time of 450 mg-min L with 90 min of modal time</u> <u>Or</u> <u>disinfection to 5-log inactivation of virus.</u>	<u>Total chlorine not less than 1mg/L after 30 min contact time at peak flow</u> <u>Or</u> <u>alternate process comparable to this</u>			

()

TABLE 2 - CLASS A AND CLASS B ADDITIONAL REQUIREMENTS			
Classification		Class A	Class B
<u>Turbidity (NTU)</u>	<u>24-hr - mean. Not to exceed</u>	<u>Granular or cloth media - 2</u> <u>Membrane filter - 0.2</u>	<u>Granular or cloth media - 5</u>
	<u>Maximum, in any sample</u>	<u>Granular or cloth media - 5</u> <u>Membrane filter - 0.5</u>	<u>Granular or cloth media - 10</u>
	<u>Monitoring frequency</u>	<u>Continuous</u>	<u>Continuous</u>

TABLE 2 - CLASS A AND CLASS B ADDITIONAL REQUIREMENTS		
Classification	Class A	Class B
Maximum Total nitrogen (mg/L)	Ground water recharge - 10 Residential irrigation and other non-recharge uses - 30 or As required based on an analysis of ground water impacts	May be required based on an analysis of ground water impacts
BOD5 (mg/L) Monthly arithmetic mean, from weekly composite samples not to exceed	Ground water recharge - 5 Residential irrigation and other non-recharge uses - 10	
pH Daily grab samples or continuous monitoring	Between 6.0 and 9.0	

()

02. Municipal Recycled Water - Uses. The following table provides a summary of municipal recycled water uses for which a specific classification is required. Other uses not listed here may be considered on a case-by-case basis and approved by the Department.

TABLE 3 - RECYCLED WATER USES					
Recycled Water Uses	Class A	Class B	Class C	Class D	Class E
Uses relating to Irrigation and buffers					
Buffers required	No	Yes	Yes	Yes	Yes
Fodder, fiber crops	Yes	Yes	Yes	Yes	Yes
Commercial timber, firewood	Yes	Yes	Yes	Yes	Yes
Processed food crops or "food crops that must undergo commercial pathogen-destroying processing before being consumed by humans"	Yes	Yes	Yes	Yes	No
Ornamental nursery stock, or Christmas trees	Yes	Yes	Yes	Yes	No
Sod and seed crops not intended for human ingestion	Yes	Yes	Yes	Yes	No
Pasture for animals not producing milk for human consumption	Yes	Yes	Yes	Yes	No
Pasture for animals producing milk for human consumption	Yes	Yes	Yes	No	No

TABLE 3 - RECYCLED WATER USES					
Recycled Water Uses	Class A	Class B	Class C	Class D	Class E
<u>Orchards and vineyards irrigation during the fruiting season, if no fruit harvested for raw use comes in contact with the irrigation water or ground, or will only contact the unedible portion of raw food crops</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No</u>
<u>Highway medians and roadside vegetation irrigation on sides</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No</u>
<u>Cemetery irrigation</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No</u>
<u>Parks, playgrounds, and school yards during periods of non-use</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Parks, playgrounds, and school yards during periods of use</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Golf courses</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Food crops, including all edible food crops</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Residential landscape</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Uses at Industrial, Commercial, or Construction Sites</u>					
<u>Dust suppression at construction sites and control on roads and streets</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No</u>
<u>Toilet flushing at industrial and commercial sites, when only trained maintenance personnel have access to plumbing for repairs</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No</u>
<u>Nonstructural fire fighting</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No</u>
<u>Cleaning roads, sidewalks and outdoor work areas</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No</u>
<u>Backfill consolidation around non-potable piping</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No</u>
<u>Soil compaction</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No</u>
<u>Commercial campus irrigation</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Fire suppression</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Snowmaking for winter parks, resorts</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Commercial laundries</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Ground Water Recharge</u>					
<u>Ground water recharge through surface spreading, seepage ponds or other unlined surface water features, such as landscape impoundments</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Subsurface Distribution</u>					
<u>Subsurface distribution.</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>

()

603. MUNICIPAL RECYCLED WATER - ACCESS, EXPOSURE AND SIGNAGE.

01. Class A Recycled Water. When using Class A recycled water the public and personnel at the area of use must be notified that the water is recycled water and is not safe for drinking or human contact. Signs shall be posted and must state “Caution: Recycled Water - Do Not Drink”, or equivalent signage both in English and Spanish. ()

a. Class A distribution system identification and signage. ()

i. General. All new buried pipe conveying Class A Recycled Water, including service lines, valves, and other appurtenances, shall be colored purple, and the precise color used, e.g., Pantone 512, 522 or equivalent, shall be consistently used throughout the system. The precise color proposed for use shall be identified in the plans and specifications and reviewed by the Department during plan and specification review to ensure the pipes may be adequately identifiable and distinguishable. If fading or discoloration of the purple pipe is experienced during construction, identification tape or locating wire along the pipe is required. Label piping every ten (10) feet “Caution: Recycled Water - Do Not Drink” or equivalent signage in both Spanish and English. ()

ii. Identification Tape. If identification tape is installed along with the purple pipe, it shall be prepared with white or black printing on a purple color field as approved by the Department, having the words, “Caution: Recycled Water - Do Not Drink” or equivalent signage in both Spanish and English. The overall width of the tape shall be at least three (3) inches. Identification tape shall be installed eighteen (18) inches above the transmission pipe longitudinally, shall be centered over the pipe, and shall run continuously along the length of the pipe. ()

iii. Valve Boxes and Other Surface Identification. All valves shall have locking valve covers that are non-interchangeable with potable water valve covers, and shall have an inscription cast on the top surface stating “Recycled Water.” All above ground pipes and pumps shall be consistently color coded (purple) and marked to differentiate Class A recycled water facilities from potable water facilities. ()

b. Class A recycled water pumping facilities identification and signage. ()

i. Marking. All exposed and above ground piping, risers, fittings, pumps, valves, etc., shall be painted purple color (Pantone 512, 522 or other equivalent product acceptable to the Department). In addition, all piping shall be identified using an accepted means of labeling reading “Caution: Recycled Water - Do Not Drink” or equivalent signage in both Spanish and English lettering. In a fenced pump station area, signs shall be posted on the fence on all sides. ()

ii. Warning Labels. Warning labels shall be installed on designated facilities such as, but not limited to, controller panels and washdown or blow-off hydrants on water trucks, hose bibs, and temporary construction services. The labels shall read, “Caution: Recycled Water - Do Not Drink” or equivalent signage, in both Spanish and English. ()

c. Class A Lagoon Identification and Signage. Where Class A recycled water is stored or impounded, or used for irrigation in public areas, warning signs shall be installed and

contain, at a minimum, one (1) inch purple letters (Pantone 512, 522 or other equivalent product acceptable to the Department) on a white or other high contrast background notifying the public that the water is unsafe to drink. Signs may also have a purple background with white or other high contrast lettering. Warning signs and labels shall read, "Caution: Recycled Water - Do Not Drink" or equivalent signage in both Spanish and English. ()

d. **Class A Additional Access Requirements.** Drinking fountains, picnic tables, food establishments, and other public eating facilities shall be placed out of any spray irrigation area in which Class A recycled water is used, or shall be otherwise protected from contact with the Class A recycled water. Exterior drinking fountains, picnic tables, food establishments, and other public eating facilities shall be shown and called out on the construction plans. If no exterior drinking fountains, picnic tables, food establishments, or other public eating facilities are present in the design area, then it shall be specifically stated on the plans that none are to exist. ()

02. Class B Recycled Water. When using Class B recycled water, the public and personnel at the use area must be notified that the water used is recycled water and is not safe for drinking or human contact. Signs must be posted and the signs must state that recycled water is used and is not safe for drinking or human contact. Signs shall be posted and must state "Caution: Recycled Water - Do Not Drink", or equivalent signage both in English and Spanish. ()

03. Class C Recycled Water. When using Class C recycled water for irrigation, the personnel at the use area must be notified that the water used is recycled water and is not safe for drinking. For the public, signs must be posted around the perimeter of the irrigation site stating that recycled water is used and is not safe for drinking or human contact. Signs shall be posted and must state "Warning: Recycled Water - Do Not Enter", or equivalent signage both in English and Spanish. ()

04. Class D Recycled Water. When using Class D recycled water for irrigation, the personnel at the use area must be notified that the water used is recycled water and is not safe for drinking. For the public, signs must be posted around the perimeter of the irrigation site stating that recycled water is used and is not safe for drinking or human contact. Signs shall be posted and must state "Warning: Recycled Water - Do Not Enter", or equivalent signage both in English and Spanish. ()

05. Class E Undisinfected Recycled Water. When using Class E undisinfected recycled water for irrigation, public access to the irrigation site shall be prevented using a physical barrier or other measure approved by the Department. Signs shall be posted around the perimeter of the irrigation site stating that recycled water is used and is not safe for drinking or human contact. Signs shall be posted and must state "Warning: Recycled Water - Do Not Enter", or equivalent signage both in English and Spanish. ()

604. REUSE FACILITIES - BUFFER DISTANCES.

01. Buffer Distance Considerations. Buffer distances shall be established for the following purposes: ()

a. Protect public health by limiting exposure to recycled water and conditions associated with reuse facilities; ()

b. Protect waters of the state, including surface water, ground water and drinking water supplies; and ()

c. Help ensure that the use of recycled water is restricted to within the physical boundaries of the reuse facilities. ()

02. Determining Buffer Distances. In determining buffer distances for inclusion in a reuse permit the Department will consider the following: ()

a. Characterization of the recycled water; ()

b. The method of irrigation; ()

c. The physical or vegetative barriers; ()

d. Microbial risk assessments; ()

e. Any applicable best management practices; ()

f. Environmental conditions, such as wind speed and direction; and ()

g. Any other information relevant to the purposes described in this section. ()

605. MUNICIPAL RECYCLED WATER -- PRELIMINARY ENGINEERING REPORTS.

Preliminary engineering reports shall comply with these rules and applicable provisions of IDAPA 58.01.16 "Wastewater Rules." Preliminary engineering reports for new municipal recycled water systems or major upgrades to municipal recycled water systems shall be submitted to the Department for review and approval prior to submittal of plans and specifications. ()

606. REUSE FACILITY - PLAN AND SPECIFICATION REVIEW.

All plans and specifications for the construction of new reuse facilities or modification or expansion to same shall be submitted to and approved by the Director in accordance with Chapter 1, Title 39, Idaho Code, and IDAPA 58.01.16, "Wastewater Rules." ()

607. MUNICIPAL RECYCLED WATER -- DISTRIBUTION PIPELINES.

01. Compliance with Wastewater Rules Required. The design and construction of municipal recycled water distribution pipelines shall comply with applicable provisions of IDAPA 58.01.16, "Wastewater Rules," Section 430. The design and construction of municipal recycled water distribution pipelines shall also comply with applicable provisions of IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems." Any person or agency that is planning to construct all or part of the distribution system must obtain a plan and specification approval from the Department prior to beginning construction. ()

a. Recycled water mains shall be treated as non-potable mains when considering their separation from potable water. Recycled water mains shall be treated as potable water mains

when considering their separation from sewers. ()

b. For a system that proposes to use an alternative to the distribution pipeline requirements in these rules, IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems," or IDAPA 58.01.16, "Wastewater Rules," the design engineer shall submit data to the Department for review and approval demonstrating that the installation of an alternative will protect public health and environment. ()

02. Additional Distribution System Requirements for Class A Recycled Water. Class A distribution systems and the continued distribution systems of all of its customers shall have specific requirements including, but not limited to the following. ()

a. Where Class A recycled water is to be provided by pressure pipeline, the following standards may be used as guidance: the current edition of "Recommended Standards for Wastewater Facilities - Great Lakes-Upper Mississippi River Board of State Sanitary Engineers," the "AWWA Manual M24" Chapter 4 for dual water systems, and the current edition of "Idaho Standards for Public Works Construction." ()

b. Conversion of Existing Drinking Water or Irrigation Water Lines. Requirements for irrigation systems proposed for conversion from use of non-Class A recycled water to use with Class A recycled water will be considered on a case-by-case basis considering protection of public health and the environment. Existing water lines that are being converted to use with Class A recycled water or a combination of Class A recycled water and irrigation water shall be accurately located, pressure tested and leakage tested prior to conversion in coordination with the Department. AWWA Standard(s) for pressure and leakage testing of drinking water lines shall be utilized on the lines to be converted. The pipeline must be physically disconnected from any potable water lines and brought into compliance with applicable cross connection rules and requirements in IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems," Section 543, and must meet minimum separation requirements set forth in these rules. If the existing lines meet approval of the water supplier and the Department based upon the requirements set forth in these rules, the lines shall be approved for Class A recycled water distribution. If regulatory compliance of the system (accurate location, pressure testing, and verification of no cross connections) cannot be verified with record drawings, testing, televising, or otherwise, the lines shall be uncovered, inspected, and identified or otherwise verified to the Department's satisfaction prior to use. All accessible portions of the system must be retrofitted to meet the requirements of these rules. After conversion of the water or irrigation line to a Class A recycled water line, the lines shall be marked as stated in Subsection 603.01.a.iii. of these rules. ()

c. Blow-off Assemblies. If either an in-line type or end-of-line type blow-off or drain assembly is installed in the system, a plan for proposed discharge or runoff locations shall be submitted to the Department for review and approval. ()

d. Requirements for mixing Class A recycled water with other irrigation waters. Mixing Class A recycled water with other irrigation waters may be conducted in a pipe to pipe manner if both the other irrigation water source and the Class A source are protected by Department approved backflow devices. Class A recycled water may be mixed with other irrigation water in an unlined pond if the Class A recycled water is permitted for ground water recharge. Class A recycled water that is permitted for irrigation only and not ground water

recharge may be mixed with other irrigation water only in a lined pond. Water from these mixed ponds may then be used for permitted Class A uses. ()

e. Requirements for Class A recycled water distribution system operators. All operators of Class A recycled water distribution systems, including operators of distribution systems that utilize a combination of Class A recycled water and other irrigation waters, operators of the distribution system from the wastewater treatment plant to the point of compliance or point of use or point of sale, as applicable, and those operators that are employed by buyers of the Class A recycled water for subsequent use, including home occupants, shall be required to sign a utility user agreement provided by the utility providing the Class A recycled water that states that the user understands the origin of the effluent and the concept of agronomic rate for applying the Class A recycled water. Contracts for sale of Class A recycled water for subsequent use shall also include these requirements. Individual homeowners are allowed to operate or maintain Class A recycled water distribution systems. Providers of the Class A recycled water shall undertake a public education program within its service area to teach potential customers the benefits and responsibilities of using Class A recycled water. ()

608. MUNICIPAL RECYCLED WATER -- PUMPING STATIONS.

01. Pumping Station Requirements. All municipal recycled wastewater pumping stations shall comply with applicable provisions of IDAPA 58.01.16 "Wastewater Rules", Sections 440. ()

02. Additional Pumping Station Requirements for Recycled Water. ()

a. Backflow Protection-Seal Water. Any potable water used as seal water for recycled water pump seals shall be protected from backflow with a Department approved backflow prevention device or air gap. ()

b. Backflow Protection-Potable and Recycled Water. In no case shall a direct connection be made between the potable and recycled water system. If it is necessary to put potable water into the recycled water distribution system, a Department approved reduced pressure principal device or air gap must be provided to protect the potable water system. ()

c. Equipment and Facilities. Any equipment or facilities such as tanks, temporary piping or valves, and portable pumps that have been or may be used with recycled water shall not be used with potable water or sewage. Any equipment or facilities such as tanks, temporary piping or valves, and portable pumps that have been or may be used with sewage shall not be used with recycled water or potable water. ()

609. MUNICIPAL RECYCLED WATER -- LAGOONS.

01. Requirements for Municipal Recycled Water Lagoons. All new and existing lagoons for municipal recycled water shall comply with applicable provisions of IDAPA 58.01.16 "Wastewater Rules," Section 493. ()

02. Class A Recycled Water Lagoons. Surface water features, such as landscape impoundments used for Class A recycled water, that are not lined or sealed to prevent seepage

may be approved provided the ground water quality standards for ground water protection are met. ()

610. MUNICIPAL RECYCLED WATER -- CLASS A RECYCLED WATER FILTRATION.

01. Class A Filtration Technology Approval. The Department shall approve the following filter technologies for use in compliance with these rules: ()

a. Those approved and listed in the State of California Treatment Technology Report for Recycled Water, www.cdph.ca.gov/healthinfo/environhealth/water/pages/waterrecycling.aspx. ()

b. The Department may consider for approval filtration technologies other than those listed in the report referenced in Subsection 610.01.a. upon submission of a written request accompanied by all necessary product information. Approval of these filtration technologies shall be in accordance with procedures provided in the State of California Treatment Technology Report for Recycled Water. ()

02. Filter to Waste Requirement. The Department may require certain types of Class A recycled water filtration facilities to install and operate a filter to waste system that operates each time a filter starts up. Filter to waste systems shall automatically filter to waste until the effluent meets the required turbidity standard. ()

611. MUNICIPAL RECYCLED WATER -- RELIABILITY AND REDUNDANCY.

01. Reliability and Redundancy Requirements. The reliability and redundancy for all wastewater systems shall comply with the requirements in IDAPA 58.01.16 "Wastewater Rules." ()

02. Additional Reliability and Redundancy Requirements. Following are additional reliability and redundancy requirements for Class A recycled water: ()

a. Class A treatment systems shall have treatment capabilities able to treat peak day flow for the season in which Class A recycled water is being produced. ()

b. Class A treatment systems shall also provide for one (1) of the following alternative back-up systems: ()

i. Another permitted disposal option; or ()

ii. Diversion to adequate lined storage capable of storing Class A recycled water during a malfunction or emergency. ()

c. An alternative back-up system must be automatically activated if turbidity exceeds or chlorine residual drops below the instantaneous required value for more than five (5) minutes, or if the alternative filtration/ disinfection system is not achieving its required 5-log removal/ inactivation of virus for more than five (5) minutes. The maximum number of times a facility

could exceed on this basis is twice in one (1) week, both of which times are required to be immediately reported. Failure to report or exceeding more than twice in one (1) week are sufficient grounds for the Department to require the system to be shut down for inspection and repair. ()

d. Class A redundant monitoring equipment and automatic by-pass equipment must be provided. ()

e. Standby power sufficient to maintain all treatment and distribution works or to meet the requirements for an alternative back-up system shall be required for the Class A recycled water facilities. ()

612. DEMONSTRATION OF TECHNICAL, FINANCIAL, AND MANAGERIAL CAPACITY OF MUNICIPAL REUSE FACILITY.

01. Compliance with Wastewater Rules Required. All reuse facilities shall comply with applicable provisions of IDAPA 58.01.16 “Wastewater Rules,” Section 409. ()

02. Exclusion. New Class A recycled water systems 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, are governed by and must meet the regulatory requirements of Chapter 1, Title 61, Idaho Code, Public Utilities Law, and IDAPA 31.01.01, “Rules of Procedure of the Idaho Public Utilities Commission.” In any conflict arising out of the application of these rules and IDAPA 31.01.01, the provisions and requirements of the Idaho Public Utilities Commission shall prevail. ()

613. REUSE FACILITY - RAPID INFILTRATION SYSTEM.

Rapid infiltration systems shall be designed such that the beneficial uses of the waters of the state will not be injured. Prior to construction of a new recycled water system that includes as treatment rapid infiltration systems all plans and specification shall be submitted to and approved by the Director before construction can begin. The Preliminary Engineering Report shall include the parameters for the design of the rapid infiltration systems. ()

01. Design and Construction. Following are the design and construction criteria for rapid infiltration systems: ()

a. The system shall be designed to allow a relatively high rate of recycled water infiltration into the soil followed by rapid percolation; ()

b. The system shall consist of either two (2) or more cells which can be alternately loaded and rested, or one (1) cell preceded by an effluent storage or stabilization pond system. Where only one (1) cell is provided, the storage and stabilization pond(s) shall have sufficient capacity to allow intermittent loading of the rapid infiltration systems; ()

c. The rapid infiltration system shall be designed to provide even distribution of the recycled water and prevent erosion; ()

d. The system shall be designed to ensure that the subsurface soils have the capacity

to transmit the applied recycled water down and away from the basins at an acceptable rate to avoid excessive water mounding beneath the basin that would interfere with infiltration at the basins surface; and ()

e. The system shall be designed to ensure proper operation during the winter conditions in cold climate areas. ()

02. Discharge Requirements. Following are the discharge requirements for recycled water discharged to a rapid infiltration system: ()

a. The discharge to a rapid infiltration system may not exceed the hydraulic, organic, nitrogen, suspended solids or other limitations specified in the permit or plans developed pursuant to a permit requirement. In determining discharge limitations, the Department shall consider past operating performance, the ability of the soils to treat the pollutants in the recycled water, hydrogeologic characteristics of the site such as permeability and infiltration rates, and other relevant information; and ()

b. Compliance with IDAPA 58.01.11, "Ground Water Quality Rule," and IDAPA 58.01.02, "Water Quality Standards" shall be ensured. ()

614. GROUND WATER RECHARGE - CLASS A RECYCLED WATER.

All ground water recharge systems shall comply with IDAPA 58.01.11, "Ground Water Quality Rule." The minimum requirements for site location and aquifer storage time shall be based on site-specific modeling and any source water assessment zone studies for public drinking water wells in the area. The owners of these systems must control the ownership of this down gradient area to prohibit future wells from being drilled in the impact zone of the ground water recharge system. Authorization from the Idaho Department of Water Resources is required for ground water injection wells. ()

615. SUBSURFACE DISTRIBUTION OF RECYCLED WATER.

01. Subsurface Use of Recycled Water. The subsurface distribution and use of recycled water must be designed and located so that compliance with IDAPA 58.01.11, "Ground Water Quality Rule," is maintained and pollutants cannot be reasonably expected to enter waters of the state in concentrations resulting in injury to beneficial uses. In addition, the subsurface distribution and use of recycled water shall comply with these rules, and with applicable IDAPA 58.01.03, "Individual/Subsurface Sewage Disposal Rules." ()

02. Design and Construction. ()

a. The system shall be constructed to prevent surface runoff from entering the system. ()

b. Precautions shall be taken during construction of the subsurface distribution system to minimize compaction and prevent a reduction in soil infiltration rate. ()

c. Erosion control measures shall be taken during construction to prevent erosion of soil into surface water. ()

03. Discharge limitations. ()

a. Prior to discharge to a subsurface system, the wastewater shall be treated such that the recycled water is Class A, B, C or D quality. ()

b. The discharge to a subsurface distribution system may not exceed the hydraulic, organic, nitrogen, or other limitations specified in a permit or plans developed pursuant to a permit requirement. The Department shall consider past operating performance, the ability of the soils to treat the pollutants in the discharge, hydrogeologic characteristics of the site such as permeability and infiltration rates and other relevant information. ()

616. PERMIT FOR USE OF INDUSTRIAL RECYCLED WATER.

Industrial recycled water shall only be used in accordance with a permit issued pursuant to these rules. Permit conditions and limitations shall be developed by the Department on a case-by-case basis taking into account the specific characteristics of the wastewater to be recycled, the treatment necessary to ensure the use of such recycled water is in compliance with IDAPA 58.01.11, "Ground Water Quality Rule," and IDAPA 58.01.02, "Water Quality Standards." Unless otherwise indicated in this section, the permit application, processing and issuance procedures provided in this rule shall apply to industrial reuse permits. ()

01. Additional Application Contents. In addition to the requirements in Section 300 of these rules, a permit application for reuse of industrial recycled water shall include: ()

a. The source of the water and the projected rates and volumes; and ()

b. The chemical, biological, and physical characteristics of the industrial recycled water from each source. ()

02. Permit Content. The Department shall include the requirements of Section 500, Standard Permit Conditions, in all permits issued for use of industrial recycled water. The Department shall develop additional permit conditions on a case-by-case basis considering the following factors: ()

i. The risk to public health and the environment; ()

ii. The degree of public access to the site where the recycled water is used and the degree of human exposure anticipated; ()

iii. Any additional measures necessary to prevent nuisance conditions; ()

iv. Specific recycled water quality necessary for the intended type of reuse; and ()

v. The means of application of the recycled water. ()

60317. -- 699. (RESERVED).

700. PERMIT MODIFICATION.

01. Modification of Permits. A permit modification may be initiated by the receipt of a request for modification from the permittee, or may be initiated by the Department if one (1) of more of the following causes for modification exist: ()

a. Alterations. There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit. ()

b. New standards or regulations. 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. ()

c. Compliance schedules. The Department determines good cause exists for modification of a compliance schedule or terms and conditions of a permit. ()

d. Non-limited pollutants. When the level of discharge of any pollutant which is not limited in the permit exceeds the level which may cause an adverse impact to surface or ground waters. ()

e. To correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions. ()

f. When a treatment technology proposed, installed, and properly operated and maintained by the permittee fails to achieve the requirements of the permit. ()

012. Minor Modifications. Minor modifications are those which if granted would not result in any increased hazard to the environment or to the public health. ~~Such modifications shall be made by the Director.~~ If a permit modification satisfies the criteria for "minor modifications," the permit may be modified without issuance of a draft permit or public review. Minor modifications are normally limited to: (4-1-88)()

a. The correction of typographical errors or formatting changes; (4-1-88)()

b. Transfer of ownership or operational control, or responsible official; (4-1-88)()

c. A change in monitoring or reporting frequency requirements, or revision of a laboratory method; (4-1-88)()

d. Change compliance due date in a schedule of compliance, provided the new date does not exceed six (6) months; ()

e. Change or add a sampling location; ()

f. Change to a higher level of treatment without a change in end uses; ()

g. Change in terminology; ()

- h. Removal of an allowed use; ()
- i. Correct minor technical errors, such as citations of law, and citations of construction specifications; ()
- or i. Change in a contingency plan resulting in equal or more efficient responsiveness; ()
- k. Removal of acreage from irrigation without an increase in loadings. ()

023. Major Modifications. All modifications not considered minor shall be considered major modifications. The procedure for making major modifications shall be the same as that used for a new permit under these rules. Some examples of the major modifications are: (4-1-88)()

- a. Changes in the treatment system; ()
- b. Adding an allowed use; ()
- c. Changes to a lower (less treated) class of water; ()
- d. Addition of acreage used for irrigation; or ()
- e. Changes to less stringent discharge limitations. ()

701. -- 799. (RESERVED).

800. PERMIT TRANSFERABLE.

~~Permits shall be transferable to a new owner or operator provided that the permittee notifies the Director by requesting a minor modification of the permit before the date of transfer.~~ (4-1-88)

01. General. A permit may be transferred only upon approval of the Department. No transfer is required for a corporate name change as long as the secretary of state can verify that a change in name alone has occurred. An attempted transfer is not effective for any purpose until approved in writing by the Department. ()

02. Request for Transfer. Either the permit holder (permittee) or the person to whom the permit is proposed to be transfer (transferee) shall submit to the department a request for transfer at least thirty (30) days before the proposed transfer date. The request for transfer shall include: ()

- a. Legal name and address of the permittee; ()
- b. Legal name and address of the transferee; ()
- c. Location and the common name of the facility; ()

- d.** Date of proposed transfer; ()
- e.** Sufficient documentation for the Department to determine that the transferee will meet the requirements listed in IDAPA 58.01.16 “Wastewater Rules,” Section 409, relating to technical, financial and managerial capacity; ()
- f.** A signed declaration by the transferee that the transferee has reviewed the permit and understands the terms of the permit; ()
- g.** A sworn statement that the request is made with the full knowledge and consent of the permittee if the transferee is submitting the request; ()
- h.** Identification of any judicial decree, compliance agreement, enforcement order, or other outstanding obligating instrument, the terms of which have not been met, along with legal instruments sufficient to address liabilities under such decree, agreement, order, or other obligating instrument; and ()
- i.** Any other information the director may reasonably require. ()
- 03.** **Effective Date of Transfer.** Responsibility for compliance with the terms and conditions of the permit and liability for any violation associated therewith is assumed by the transferee, effective on the date indicated in the approved transfer. ()
- 04.** **Compliance with Permit Conditions Pending Transfer Approval.** Prior to a transfer approval, the permittee shall continue to be responsible for compliance with the terms and conditions of the permit and be liable for any violation associated therewith, regardless of whether ownership or operational control of the permitted facility has been transferred. ()
- 05.** **Transferee Liability Prior to Transfer Approval.** If a proposed transferee causes or allows operation of the facility under his ownership or control before approval of the permit transfer, such transferee shall be considered to be operating without a permit or authorization required by these rules and may be cited for additional violations as applicable. ()
- 06.** **Compliance Record of Transferee.** The director may consider the prior compliance record of the transferee, if any, in the decision to approve or disapprove a transfer. ()

801. TEMPORARY CESSATION OF OPERATIONS AND CLOSURE.

01. Temporary Cessation. A permittee shall implement any applicable conditions specified in the permit for temporary cessation of operations. When the permit does not specify applicable temporary cessation conditions, the permittee shall notify the Director prior to a temporary cessation of operations at the facility greater than sixty (60) days in duration and any cessation not for regular maintenance or repair. Cessation of operations necessary for regular maintenance or repair of a duration of sixty (60) days or less are not required to notify the Department under this section. All notifications required under this section shall include a proposed temporary cessation plan that will ensure the cessation of operations will not pose a threat to human health or the environment.

()

02. Closure. A closure plan shall be required when a facility is closed voluntarily and when a permit is revoked or expires. A permittee shall implement any applicable conditions specified in the permit for closure of the facility. Unless otherwise directed by the terms of the permit or by the Director, the permittee shall submit a closure plan to the Director for approval at least ninety (90) days prior to ceasing operations. The closure plan shall ensure that the closed facility will not pose a threat to human health and the environment. Closure plan approval may be conditioned upon a permittee's agreement to complete such site investigations, monitoring, and any necessary remediation activities that may be required. ()

~~802.~~ -- 919. (RESERVED).

920. PERMIT REVOCATION.

01. Conditions for Revocation. The Director may revoke a permit if the permittee violates any permit condition or these rules, or the Director becomes aware of any omission or misrepresentation of condition or information relied upon when issuing the permit. ~~(4-1-88)~~ ()

02. Notice of Revocation. Except in cases of emergency, the Director shall issue a written notice of intent to revoke to the permittee prior to final revocation. Revocation shall become final within thirty-five (35) days of receipt of the notice by the permittee, unless within that time the permittee requests an administrative hearing in writing. The hearing shall be conducted in accordance with IDAPA 58.01.23, Rules of Administrative Procedure Before the Board of Environmental Quality." (5-3-03)

03. Emergency Action. If the Director finds the public health, safety or welfare requires emergency action, the Director shall incorporate findings in support of such action in a written notice of emergency revocation issued to the permittee. Emergency revocation shall be effective upon receipt by the permittee. Thereafter, if requested by the permittee in writing, the Director shall provide the permittee a revocation hearing and prior notice thereof. Such hearings shall be conducted in accordance with IDAPA 58.01.23, Rules of Administrative Procedure Before the Board of Environmental Quality." (3-15-02)

04. Revocation and Closure. A permittee shall perform the closure requirements in a permit, the closure requirements of these rules, and complete all closure plan activities notwithstanding the revocation of the permit. ()

(BREAK IN CONTINUITY OF SECTIONS)

940. WAIVERS.

Waivers from the requirements of these rules may be granted by the Director on a case-by-case basis upon full demonstration by the person requesting the waivers that such activities for which the waivers are granted will not have a detrimental effect upon existing water quality and beneficial uses are adequately protected; ~~and:~~ ~~(4-11-06)~~ ()

- ~~01.~~ ~~Effect.~~ ~~That the proposed loadings on the site will be di-minimus in both quantity and quality;~~ ~~(4-11-06)~~
- ~~02.~~ ~~Treatment Requirements.~~ ~~That the treatment requirements are:~~ ~~(4-1-88)~~
- ~~a.~~ ~~Unreasonable with current technology; or~~ ~~(4-1-88)~~
- ~~b.~~ ~~Economically prohibitive.~~ ~~(4-1-88)~~

IDAPA 58 - DEPARTMENT OF ENVIRONMENTAL QUALITY

58.01.23 - RULES OF ADMINISTRATIVE PROCEDURE BEFORE THE BOARD OF ENVIRONMENTAL QUALITY

DOCKET NO. 58-0123-0901

NOTICE OF RULEMAKING - ADOPTION OF PENDING RULE

EFFECTIVE DATE: This rule has been adopted by the Board of Environmental Quality (Board) and is now pending review by the 2011 Idaho State Legislature for final approval. The pending rule will become final and effective immediately upon the adjournment sine die of the First Regular Session of the Sixty-first Idaho Legislature unless prior to that date the rule is rejected in whole or in part by concurrent resolution in accordance with Sections 67-5224 and 67-5291, Idaho Code.

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 67-5206, 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, December 2, 2009, Vol. 09-12, pages 187 through 193](#). DEQ received no public comments; however, the proposed rule has been revised at Sections 052, 354, 355, 730, 740, 750, 791, and 801 for consistency with revisions made to the Idaho Administrative Procedure Act (APA) under House Bill 555. Under House Bill 555, the 2010 Idaho Legislature revised the APA so that the time periods for seeking reconsideration or judicial review of an agency action begin to run when the order is served upon the parties rather than the date the order is issued. The remainder of the rule has been adopted as proposed. The Rulemaking and Public Comment Summary can be obtained at http://www.deq.idaho.gov/rules/admin/58_0123_0901_pending.cfm or by contacting the undersigned.

IDAHO CODE SECTION 39-107D STATEMENT: This rule does regulate an activity not regulated by the federal government. The federal government does not regulate administrative procedures for the state of Idaho; therefore, the rule revisions are not broader in scope or more stringent than federal law or regulations. This rule governs administrative procedures and is not a rule based on science or that proposes a standard necessary to protect human health or the environment. Therefore, the requirements of Section 39-107D(2) and (3), Idaho Code, are not applicable.

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 technical questions concerning this rulemaking, contact Paula Wilson at paula.wilson@deq.idaho.gov, (208)373-0418.

Dated this 26th day of April, 2010.

Paula J. Wilson
Hearing Coordinator
Department of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706-1255
(208)373-0418/Fax No. (208)373-0481
paula.wilson@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 Sections 39-105, 39-107 and 67-5206, 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 December 16, 2009. If no such written request is received, a public hearing will not be held.

DESCRIPTIVE SUMMARY: This rulemaking has been initiated to make revisions to the Rules of Administrative Procedure Before the Board of Environmental Quality for clarification purposes and for consistency with the Idaho Administrative Procedure Act (APA) and the Environmental Protection and Health Act.

The proposed rule includes revisions to the following sections:

1. Section 052. Revisions made for consistency with Section 67-5273, Idaho Code.
2. Section 303. Revisions made to provide flexibility that would allow potential parties to enter into a tolling agreement.
3. Sections 353 through 355. Revisions made for clarity and to provide a time limit within which an intervenor, once granted permission to intervene, may file its response to the petition for contested case.
4. Section 720. Revisions made for clarity, to streamline the process, for consistency with Section 730, and for consistency with Sections 67-5244 and 67-5273, Idaho Code.
5. Section 730. Revisions made for clarity, to streamline the process, for consistency with Section 720, and for consistency with Sections 67-5245 and 67-5273, Idaho Code. Revisions made to this section remove the Board's discretion to hear petitions for review of preliminary orders. The APA does not provide discretion as to whether or not an agency will hear a petition for review.
6. Sections 740, 750, and 801. Revisions made for consistency with Section 67-5273, Idaho Code.

7. Section 790. Revisions made for consistency with Section 67-5270, Idaho Code.
8. Section 791. Revisions made for clarity and for consistency with Sections 39-107(6) and 67-5273, Idaho Code.
9. Section 860. Revisions made for clarity and for consistency with Section 39-107(6), Idaho Code.

Citizens of the state of Idaho and representatives of regulated industry having an interest in the procedures for obtaining Board review of an action of DEQ 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.

After consideration of public comments, DEQ intends to present the final proposal to the Board of Environmental Quality in the spring of 2010 for adoption as a pending rule. The pending rule is expected to be final and effective upon the adjournment of the 2011 legislative session if adopted by the Board and approved by the Legislature.

NEGOTIATED RULEMAKING: The text of the rule has been drafted based on discussions held and concerns raised during negotiations conducted pursuant to Idaho Code Section 67-5220 and IDAPA 58.01.23.810-815. On September 2, 2009, the “Notice of Intent to Promulgate - Negotiated Rulemaking” was published in the [Idaho Administrative Bulletin, Vol. 09-9, pages 336 and 337](#), and a preliminary draft rule was made available for public review. One meeting was held on September 23, 2009. Members of the public participated in this negotiated rulemaking process by attending the meeting.

IDAHO CODE SECTION 39-107D STATEMENT: This rule does regulate an activity not regulated by the federal government. The federal government does not regulate administrative procedures for the state of Idaho; therefore, the proposed rule revisions are not broader in scope or more stringent than federal law or 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 Paula Wilson at paula.wilson@deq.idaho.gov, (208)373-0418.

Anyone may submit written comments by mail, fax or e-mail at the address below regarding this proposed rule. DEQ will consider all written comments received by the undersigned on or before December 30, 2009.

DATED this 20th day of October, 2009.

THE FOLLOWING IS THE TEXT OF DOCKET NO. 58-0123-0901

052. PETITIONS FOR DECLARATORY RULINGS TO BE DECIDED BY ORDER.

01. Final Agency Action. The Board's decision on a petition for declaratory ruling on the applicability of any statute, rule or order administered by the Department is a declaratory ruling and a final agency action within the meaning of Section 67-5255, Idaho Code. (3-15-02)

02. Content. The Board's order issuing the declaratory ruling shall contain or must be accompanied by a document containing the following paragraphs or substantially similar paragraphs: (3-15-02)

a. This is a final agency action issuing a declaratory ruling. (3-15-02)

b. Pursuant to Sections 67-5270 and 67-5272, Idaho Code, any person aggrieved by this declaratory ruling may appeal to district court by filing a petition for judicial review in the District Court in the county in which: (3-15-02)()

i. A hearing was held; (3-15-02)

ii. The declaratory ruling was issued; (3-15-02)

iii. The party appealing seeking review resides, or operates its principal place of business in Idaho; or (3-15-02)()

iv. The real property or personal property that was the subject of the declaratory ruling is located. (3-15-02)

c. ~~This appeal~~ The petition for judicial review must be filed within twenty-eight (28) days of the *service* date of the declaratory ruling. See Section 67-5273, Idaho Code. (3-15-02)()

(BREAK IN CONTINUITY OF SECTIONS)

303. DEFECTIVE, INSUFFICIENT OR UNTIMELY PLEADINGS.

Defective, insufficient or untimely pleadings shall not be considered unless the presiding officer determines otherwise that good cause exists, but the presiding officer shall not consider a petition that is filed outside the time limit set forth in Section 100 unless all parties agree to the tolling of the time limit. (3-15-02)()

(BREAK IN CONTINUITY OF SECTIONS)

~~3543. ORDERS GRANTING INTERVENTION~~ — OBJECTIONS TO PETITIONS TO INTERVENE.

Any party opposing a petition to intervene, must file the objection within seven (7) days after receipt of the petition to intervene and serve the objection upon all parties of record and upon the person petitioning to intervene. Responses shall be filed within seven (7) days after service of the objection. (3-20-04)()

~~3534.~~ GRANTING PETITIONS TO INTERVENE.

01. General. If a petition to intervene shows direct and substantial interest in any part of the subject matter of a proceeding, does not unduly broaden the issues, and will not cause delay or prejudice to the parties, the presiding officer may grant intervention, subject to reasonable conditions. In addition, upon timely filing of a petition in accordance with Subsection 352.02, a permit applicant or permit holder may intervene as a matter of right in any contested case in which the permit is contested. (3-15-02)()

02. Intervenor Response. Within fourteen (14) days of the *service* date of the order granting the petition to intervene, the intervenor shall file a response to the petition initiating the contested case. The response shall be in the form and content set out in Subsection 212.02. ()

355. REVIEW OF ORDERS GRANTING OR DENYING INTERVENTION.

Any party may petition the Board to review an order granting or denying intervention. Petitions for review shall be filed within fourteen (14) days *after of the service date* of the order. Responses shall be filed within fourteen (14) days after service of the petition for review. The Board may schedule oral argument in the matter before issuing a decision. (3-20-04)()

(BREAK IN CONTINUITY OF SECTIONS)

720. RECOMMENDED ORDERS.

01. Definition. Recommended orders are orders issued by the presiding officer that will become a final order of the Board only after review by the Board pursuant to Section 67-5244, Idaho Code. (3-15-02)

02. Content. Every recommended order must include a schedule for review of the order by the Board and must contain or be accompanied by a document containing the following paragraphs or substantially similar paragraphs: (3-15-02)()

a. This is a recommended order of the presiding officer. It will not become final without action of the Board. (3-15-02)

b. ~~Within twenty-one (21) days after the service date of this recommended order, any~~

~~party may in writing support or take exceptions to any part of this recommended order and file briefs in support of the party's position on any issue in the proceeding.~~ (3-15-02)

~~eb.~~ ~~Written briefs in support of or taking exceptions to the recommended order shall be filed with the hearing coordinator. Opposing parties shall have twenty one (21) days to respond.~~ The Board shall allow all parties an opportunity to file briefs in support or taking exceptions to the recommended order and may schedule oral argument in the matter before issuing a final order. The hearing coordinator shall issue a notice setting out the briefing schedule and date and time for oral argument. The Board will issue a final order within fifty-six (56) days of receipt of the written briefs or oral argument, whichever is later, unless waived or extended by the parties or for good cause shown. The Board may hold additional hearings or may remand the matter for further evidentiary hearings if further factual development of the record is necessary before issuing a final order. (3-15-02)()

03. No Motions for Reconsideration. Motions for reconsideration of any recommended order shall not be considered. (3-15-02)

721. -- 729. (RESERVED).

730. PRELIMINARY ORDERS.

01. Definition. Preliminary orders are orders issued by the presiding officer that will become a final order of the Board unless reviewed by the Board pursuant to Section 67-5245, Idaho Code. (3-15-02)

02. Content. Every preliminary order must contain or be accompanied by a document containing the following paragraphs or substantially similar paragraphs: (3-15-02)

a. This is a preliminary order of the presiding officer. It can and will become final without further action of the Board unless any party appeals to the Board by filing with the hearing coordinator a petition for review of the preliminary order; (3-15-02)()

b. Within fourteen (14) days ~~after~~ of the service date of this preliminary order, any party may ~~appeal to the Board~~ take exceptions to any part of this preliminary order by filing with the hearing coordinator a petition for review of the preliminary order ~~or exceptions to any part of the preliminary order and may file briefs in support of the party's position on any issue in the proceeding to the Board.~~ Otherwise, this preliminary order will become a final order of the Board. The basis for review must be stated in the petition. The Board may review the preliminary order on its own motion. (3-15-02)()

c. If any party ~~appeals or takes exceptions to this~~ files a petition for review of the preliminary order, ~~opposing parties shall have twenty one (21) days to respond to any party's appeal. Written briefs in support of or taking exceptions to the preliminary order shall be filed with the hearing coordinator. The Board may review the preliminary order on its own motion.~~ (3-15-02)

~~d.~~ If the Board grants a petition to review the preliminary order, the Board shall allow all parties an opportunity to file briefs in support of or taking exceptions to the preliminary order

and may schedule oral argument in the matter before issuing a final order. The hearing coordinator shall issue a notice setting out the briefing schedule and date and time for oral argument. The Board will issue a final order within fifty-six (56) days of receipt of the written briefs or oral argument, whichever is later, unless waived or extended by the parties or for good cause shown. The Board may hold additional hearings or may remand the matter for further evidentiary hearings if further factual development of the record is necessary before issuing a final order. (3-15-02)()

ed. Pursuant to Sections 67-5270 and 67-5272, Idaho Code, if this preliminary order becomes final, any party aggrieved by the final order or orders previously issued in this case may appeal the final order and all previously issued orders in this case to district court by filing a petition for judicial review in the district court of the county in which: (3-15-02)()

- i. A hearing was held, (3-15-02)
- ii. The final agency action was taken, (3-15-02)
- iii. The party seeking review of the order resides, or operates its principal place of business in Idaho, or (3-15-02)
- iv. The real property or personal property that was the subject of the agency action is located. (3-15-02)

fe. ~~This appeal~~ The petition for judicial review must be filed within twenty-eight (28) days of this preliminary order becoming final. See Section 67-5273, Idaho Code. The filing of ~~an appeal to~~ a petition for judicial review in district court does not itself stay the effectiveness or enforcement of the order under ~~appeal review~~. (3-15-02)()

03. No Motions for Reconsideration. Motions for reconsideration of any preliminary order shall not be considered. (3-15-02)

731. -- 739. (RESERVED).

740. FINAL ORDERS.

01. Definition. Final orders are preliminary orders that have become final under Section 730 pursuant to Section 67-5245, Idaho Code, or orders issued by the Board pursuant to Section 67-5246, Idaho Code. An order shall be considered a final order pursuant to Section 67-5246, Idaho Code, if issued after a decision by the number of Board members necessary to constitute a quorum. Emergency orders issued under Section 67-5247, Idaho Code, shall be designated as final orders if the Board will not issue further orders or conduct further proceedings in the matter. (3-15-02)

02. Content. Every final order issued by the Board must contain or be accompanied by a document containing the following paragraphs or substantially similar paragraphs: (3-15-02)

- a.** This is a final order of the Board. (3-15-02)

b. Pursuant to Sections 67-5270 and 67-5272, Idaho Code, any party aggrieved by this final order or orders previously issued in this case may appeal this final order and all previously issued orders in this case to district court by filing a petition for judicial review in the district court of the county in which: (3-15-02)()

- i. A hearing was held; (3-15-02)
- ii. The final agency action was taken; (3-15-02)
- iii. The party seeking review of the order resides, or operates its principal place of business in Idaho; or (3-15-02)
- iv. The real property or personal property that was the subject of the agency action is located. (3-15-02)

c. ~~An appeal~~ The petition for judicial review must be filed within twenty-eight (28) days of the *service* date of this final order. See Section 67-5273, Idaho Code. The filing of ~~an appeal to~~ a petition for judicial review in district court does not itself stay the effectiveness or enforcement of the order under ~~appeal~~ review. (3-15-02)()

03. No Motions for Reconsideration. Motions for reconsideration of any final order shall not be considered. (3-15-02)

741. -- 749. (RESERVED).

750. ORDER NOT DESIGNATED.

If an order is not designated as recommended, preliminary or final at its ~~release~~ issuance, but is designated as recommended, preliminary or final after its ~~release~~ issuance, its *effective* date for purposes of ~~appeal~~ judicial review is the *service* date of the order of designation. If a party believes that an order not designated as a recommended order, preliminary order or final order according to the terms of these rules should be designated as a recommended order, preliminary order or final order, the party may move to designate the order as recommended, preliminary or final, as appropriate. (3-15-02)()

(BREAK IN CONTINUITY OF SECTIONS)

790. ~~PERSONS WHO MAY APPEAL~~ RIGHT OF JUDICIAL REVIEW.

Pursuant to Section 67-5270, Idaho Code, any person aggrieved by a final order of the Board in a contested case ~~may appeal to district court~~ is entitled to judicial review. Pursuant to Section 67-5271, Idaho Code, a person is not entitled to judicial review of an agency action in district court until that person has exhausted all administrative remedies available with the Board, but a preliminary, procedural, or intermediate agency action or ruling is immediately reviewable in district court if administrative review of the final agency action would not provide an adequate remedy. (3-15-02)()

791. ~~NOTICE OF APPEAL~~ PETITION FOR JUDICIAL REVIEW.

The notice of appeal must be filed with the hearing coordinator as set out in Section 008 and with the district court and served on all parties. (3-15-02)

01. Filing ~~Appeal~~ and Service. The petition for judicial review must be filed with the hearing coordinator as set out in Section 008 and with the district court and served on all parties. Pursuant to Section 39-107(6), Idaho Code, the petition for judicial review shall also be served upon the Chairman of the Board, the Director of the Department, and upon the Attorney General of the State of Idaho. Pursuant to Section 67-5272, Idaho Code, *appeals* petitions for judicial review may be filed in the District Court of the county in which: (3-15-02)()

- a. The hearing was held; (3-15-02)
- b. The final agency action was taken; (3-15-02)
- c. The party seeking review of the agency action resides; or (3-15-02)
- d. The real property or personal property that was the subject of the agency action is located. (3-15-02)

02. Filing Deadline. Pursuant to Section 67-5273, Idaho Code, a petition for judicial review of a final order in a contested case must be filed within twenty-eight (28) days of the service date of the final order. (3-15-02)

(BREAK IN CONTINUITY OF SECTIONS)

801. BOARD RESPONSE TO PETITION.

01. Action of Board. The Board shall have until the first regularly scheduled meeting that takes place fourteen (14) or more days after submission of the petition to initiate rulemaking proceedings in accordance with Sections 67-5220 through 67-5225, Idaho Code, and these rules or deny the petition in writing, stating its reasons for the denial. (3-15-02)

02. Denial. If the petition is denied, the written denial shall state: (3-15-02)

a. The Board has denied your petition to initiate rulemaking. This denial is a final agency action within the meaning of Section 67-5230, Idaho Code. (3-15-02)

b. Pursuant to Section 67-5270, Idaho Code, any person aggrieved by this final agency action may seek review of the denial to initiate rulemaking by filing a petition for judicial review in the District Court of the county in which: (3-15-02)()

- i. The hearing was held; (3-15-02)
- ii. This final agency action was taken; (3-15-02)

- iii. The party seeking review resides, or operates its principal place of business in Idaho; or (3-15-02)
- iv. The real property or personal property that was the subject of the denial of the petition for rulemaking is located. (3-15-02)
- c. ~~This appeal~~ **The petition for judicial review** must be filed within twenty-eight (28) days of the *service* date of this denial of the petition to initiate rulemaking. ~~(3-15-02)~~()

(BREAK IN CONTINUITY OF SECTIONS)

860. ~~PERSONS WHO MAY SEEK~~ **PETITION FOR JUDICIAL REVIEW OF AN ADMINISTRATIVE RULE OF THE DEPARTMENT.**

Pursuant to Section 67-5270, Idaho Code, any person aggrieved by an administrative rule of the Department (either temporary or final) may seek judicial review in district court. ~~(3-15-02)~~()

01. Filing and Service. The petition for judicial review must be filed with the hearing coordinator as set out in Section 008 and with the district court and served on all parties. Pursuant to Section 39-107(6), Idaho Code, the petition for judicial review shall also be served upon the Chairman of the Board, the Director of the Department, and upon the Attorney General of the State of Idaho. Pursuant to Section 67-5272, Idaho Code, petitions for review may be filed in the District Court of the county in which: ~~(3-15-02)~~()

- a. The hearing was held; (3-15-02)
- b. The final agency action was taken; (3-15-02)
- c. The party seeking review of the agency action resides, or operates its principal place of business in Idaho; or (3-15-02)
- d. The real property or personal property that was the subject of the agency action is located. (3-15-02)

02. Time. Pursuant to Section 67-5273, Idaho Code, a petition for judicial review of a final rule (except for a challenge to procedures used in promulgating the rule) may be filed at any time. (3-15-02)