

Table of Contents

58.01.17 - Rules for the Reclamation and Reuse of Municipal and Industrial Wastewater

000. Legal Authority.	2
001. Title And Scope.	2
002. Written Interpretations.	2
003. Incorporation By Reference.	2
004. Administrative Provisions.	2
005. Confidentiality Of Records.	2
006. Office Hours -- Mailing Address And Street Address.	3
007. (Reserved).	3
008. Referenced Materials.	3
009. -- 099. (Reserved).	3
100. Applicability.	3
101. -- 199. (Reserved).	3
200. Definitions.	3
201. -- 299. (Reserved).	6
300. Permit Requirements And Application.	6
301. -- 399. (Reserved).	7
400. Application Processing Procedure.	7
401. Plan And Specification Review.	8
402. -- 499. (Reserved).	9
500. Standard Permit Conditions.	9
501. -- 599. (Reserved).	10
600. Specific Permit Conditions.	10
601. Class A Effluent Municipal Reclaimed Wastewater -- Additional Requirements.	15
602. Demonstration Of Technical, Financial, And Managerial Capacity Of Class A Effluent Reclaimed Wastewater Systems.	21
603. -- 699. (Reserved).	22
700. Permit Modification.	22
701. -- 799. (Reserved).	22
800. Permit Transferable.	22
801. -- 919. (Reserved).	23
920. Permit Revocation.	23
921. -- 929. (Reserved).	23
930. Violations.	23
931. -- 939. (Reserved).	23
940. Waivers.	23
941. -- 999. (Reserved).	23

**IDAPA 58
TITLE 01
CHAPTER 17**

**58.01.17 - RULES FOR THE RECLAMATION AND REUSE OF MUNICIPAL
AND INDUSTRIAL WASTEWATER**

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 and review of plans and specifications for waste treatment facilities. (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." (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. (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.

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)

004. ADMINISTRATIVE PROVISIONS.

Persons may be entitled to appeal agency actions authorized under these rules pursuant to IDAPA 58.01.23, "Rules of Administrative Procedure Before the Board of Environmental Quality." (3-15-02)

005. CONFIDENTIALITY OF RECORDS.

Information obtained by the Department under these rules is subject to public disclosure pursuant to the provisions of Chapter 3, Title 9, Idaho Code, and IDAPA 58.01.21, "Rules Governing the Protection and Disclosure of Records in the Possession of the Idaho Department of Environmental Quality." (3-15-02)

006. OFFICE HOURS -- MAILING ADDRESS AND STREET ADDRESS.

The state office of the Department of Environmental Quality and the office of the Board of Environmental Quality are located at 1410 N. Hilton, Boise, Idaho 83706-1255, telephone number (208) 373-0502. The office hours are 8:00 a.m. to 5:00 p.m. Monday through Friday. (4-11-06)

007. (RESERVED).

008. REFERENCED MATERIALS.

01. 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 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>. (3-30-07)

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/ddwem/publications/waterrecycling/treatmenttechnology.pdf>. (3-30-07)

009. -- 099. (RESERVED).

100. APPLICABILITY.

01. Applicability to Reclamation and Reuse Facilities. All reclamation and reuse facilities are subject to the permit requirements of these rules. (4-11-06)

02. Excluded Facilities. 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." 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 the practice of reuse of both municipal and industrial reclaimed wastewater 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. Board. The Idaho State Board of Environmental Quality. (12-31-91)

04. Buffer Distances. (4-11-06)

a. The distances between the actual point of reuse of reclaimed wastewater and other uses such as wells, adjoining property, inhabited dwellings, and 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. (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 wastewater. (4-11-06)
- 11. Land Application.** The application of municipal or industrial wastewater to land for the purpose of land treatment. (4-11-06)
- 12. Land Treatment.** The use of land, soil, and crops for treatment of municipal or industrial wastewater. (4-11-06)
- 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.** Waste water that contains sewage. (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)
- 16. 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. (4-1-88)
- 17. 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)

- 18. Permit.** Written authorization by the Director to modify, operate, construct or discharge to a reclamation and reuse facility. (4-11-06)
- 19. Permittee.** The person to whom the reclamation and reuse permit is issued. (4-11-06)
- 20. Person.** An individual, corporation, partnership, association, state, municipality, commission, political subdivision of the state, state agency, federal agency, special district, or interstate body. (4-1-88)
- 21. Point of Compliance.** That point in the reclamation and reuse facility where the reclaimed wastewater must meet the requirements of the permit. There may be more than one (1) point of compliance within the facility depending on the constituents to be monitored. (4-11-06)
- 22. Primary Effluent.** Raw 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)
- 23. 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. 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. (4-1-88)
- 25. 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)
- 27. 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. Reuse.** The use of reclaimed wastewater for beneficial uses including, but not limited to, land treatment, irrigation, aquifer recharge, use in surface water features, toilet flushing in commercial buildings, dust control, and other uses. (4-11-06)
- 30. 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 is applied. This does not include industrial in-plant processes and reuse of process waters within the plant. (4-11-06)
- 31. Sewage.** The water-carried human wastes from residences, buildings, industrial establishments and other places. (4-1-88)
- 32. Sludge.** The semi-liquid mass produced by treatment of water or wastewater. (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)
- 34. 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)

35. 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. (4-1-88)

36. 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)

03. Pre-Application Conference. Prospective applicants are encouraged to meet with the Department to discuss 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)

05. Application Contents. Application shall be made on a form prescribed by the Director and available from the Department. Except as provided in Subsection 300.05.1., the application 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; (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; (4-1-88)
- j.** The climatic, hydrogeologic, and soil characteristics of the facility site. (4-1-88)
- k.** Other information may also be required. The Idaho Guidance for Reclamation and Reuse of Municipal and Industrial Wastewater 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)
- l.** Under certain circumstances for permit reissuances, some information required in Subsections 300.05.a. through k. may not be necessary for evaluation and will not be required. Application content requirements will be clarified at the pre-application conference. (3-30-07)

06. Existing Reclamation and Reuse Facility Plan of Operation. 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. (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. 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 be the date of the notice; and (4-1-88)
- b.** A projected schedule for processing the permit which lists the tentative dates for: (4-1-88)

- 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)

02. 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)

03. 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)

04. 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)

05. 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)

06. 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)

07. 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)

08. 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)

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)

402. -- 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: (4-1-88)

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 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. (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 time it is expected to continue; and (4-1-88)

iii. Steps taken or planned to reduce or eliminate 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)

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 (5) 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.

Classification Table					
Classification	Class A	Class B	Class C	Class D	Class E
Treatment	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.	Oxidized, coagulated, clarified, and filtered, or treated by an equivalent process, turbidity limits requirements, and adequately disinfected and tested.	Oxidized and adequately disinfected	Oxidized and adequately disinfected	At least primary effluent quality
Disinfection	Total coliform organisms does not exceed two and two-tenths (2.2) per one hundred (100) milliliters	Total coliform organisms does not exceed two and two-tenths (2.2) per one hundred (100) milliliters	Total coliform organisms does not exceed twenty three (23) per one hundred (100) milliliters	Total coliform organisms does not exceed two hundred thirty (230) per one hundred (100) milliliters	Total coliform organisms up to "too numerous to count"

Classification Table					
Classification	Class A	Class B	Class C	Class D	Class E
Uses	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.	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.	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.	May be used to irrigate fodder, seed, or processed food crops; or Class E uses. See Subsection 600.07.d.	May be used to irrigate forested sites. See Subsection 600.07.e.
Access Restriction	Irrigated during periods of non-use.	Irrigated during periods of non-use by the public.	Irrigated during periods of non-use by the public.	Public access restricted.	Public access restricted.
Signing and Posting	See Subsection 601.02	Site specific - See Idaho Guidance for The Reclamation and Reuse of Municipal and Industrial Wastewater	Site specific - See Idaho Guidance for The Reclamation and Reuse of Municipal and Industrial Wastewater	Site specific - See Idaho Guidance for The Reclamation and Reuse of Municipal and Industrial Wastewater	Site specific - See Idaho Guidance for The Reclamation and Reuse of Municipal and Industrial Wastewater

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) feet 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)

c. 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)

c. 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)

c. 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)

603. -- 699. (RESERVED).

700. PERMIT MODIFICATION.

01. 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. Minor modifications are normally limited to: (4-1-88)

a. The correction of typographical errors. (4-1-88)

b. Transfer of ownership or operational control. (4-1-88)

c. A change in monitoring or reporting frequency. (4-1-88)

02. 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. (4-1-88)

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)

801. -- 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. (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)

921. -- 929. (RESERVED).

930. VIOLATIONS.

Any person violating any provision of these rules or any permit or order issued thereunder shall be liable for a civil penalty not to exceed ten thousand dollars (\$10,000) or one thousand dollars (\$1,000) for each day of a continuing violation, whichever is greater. In addition, pursuant to Title 39, Chapter 1, Idaho Code, any willful or negligent violation may constitute a misdemeanor. (4-1-88)

931. -- 939. (RESERVED).

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 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)

941. -- 999. (RESERVED).

Subject Index

- A**
Applicability to Reclamation & Reuse Facilities 3
Application Contents, Permit Requirements & Application 6
Application Processing Procedure 7
Application Required, Permit Requirements & Application 6
- B**
Basis for Specific Permit Conditions 10
- C**
Complete Application, Application Processing Procedure 7
Compliance Required, Standard Permit Conditions 9
Compliance Schedules, Specific Permit Conditions 11
Conditions for Revocation, Permit Revocation 23
Confidentiality of Records 2
Consolidation, Technical, Financial, & Managerial Capacity of Class A Effluent Wastewater Systems 22
Contents of the Staff Analysis, Application Processing Procedure 8
- D**
Definitions, IDAPA 58.01.17
Applicable Requirements 3
Applicant 3
Board 3
Buffer Distances 3
Class A Capacity 4
Class A Effluent Distribution System 4
Idaho Guidance for the Reclamation & Reuse of Municipal & Industrial Wastewater 4
Industrial Wastewater 4
Land Application 4
Land Treatment 4
Municipal Wastewater 4
New Activity 4
Non-Contact Cooling Water 4
NTU, Nephelometric Turbidity Unit 4
Permit 5
Permittee 5
Person 5
Point of Compliance 5
Primary Effluent 5
Processed Food Crop 5
Rapid Infiltration System 5
Raw Food Crop 5
Reclaimed Water 5
Reclamation 5
- Reclamation & Reuse Facility or Facility 5
Restricted Public Access 5
Reuse 5
Sewage 5
Sludge 5
Time Distribution of Flows 5
Turbidity 5
Wastewater 6
Waters & Waters of the State 6
Demonstration Of Technical, Financial, & Managerial Capacity Of Class A Effluent Wastewater Systems 21
Direct Use of Municipal Reclaimed Wastewater, Specific Permit Conditions 12
Direct Use of Municipal Wastewater, Specific Permit Conditions 11
Dischargers, Permit Requirements & Application 6
Duration of Permit, Specific Permit Conditions 10
- E**
Effective Date of Final Permit, Application Processing Procedure 8
Emergency Action, Permit Revocation 23
Entry & Access, Standard Permit Conditions 9
Excluded Facilities 3
Exclusion, Technical, Financial, & Managerial Capacity of Class A Effluent Wastewater Systems 22
Existing Reclamation & Reuse Facility Plan of Operation 7
- F**
Financial Capacity, Technical, Financial, & Managerial Capacity of Class A Effluent Wastewater Systems 21
- I**
Incomplete Application, Application Processing Procedure 8
Information or Consultation Before Issuance of Draft Permit or Application Denial, Application Processing Procedure 8
Issuance & Contents of the Draft Permit, Application Processing Procedure 8
Issuance of the Final Permit, Application Processing Procedure 8
- L**
Limitations to Operation, Specific Permit Conditions 10
- M**
Major Modifications, Permit Modification 22
Managerial Capacity, Technical, Financial, & Managerial Capacity of Class A Effluent Wastewater Systems 21
Minimize Impacts, Standard Permit Conditions 10
Minor Modifications, Permit Modification 22
Monitoring Requirements, Specific Permit Conditions 11
- N**
New Reclamation & Reuse Facility Plan of Operation 7
Notice of Revocation, Permit Revocation 23
- O**
Operation of Facilities, Standard Permit Conditions 9
- P**
Permit Modification 22
Permit Required 6
Permit Requirements & Application 6
Permit Revocation 23
Permit Transferable 22
Plan & Specification Review 8
Pre-Application Conference, Permit Requirements & Application 6
Preliminary Decision/Application Denial, Application Processing Procedure 8
Provide Information, Standard Permit Conditions 9
- R**
Rapid Infiltration Systems, Specific Permit Conditions 11
Renewal Responsibilities, Standard Permit Conditions 9
Reporting, Standard Permit Conditions 9
Requirement for Preparation of Plans & Specifications, Plan & Specification Review 9
Requirement for Professional Engineer's Seal, Plan & Specification Review 9
Requirement for Single Point of Contact Responsible for Entire Wastewater Project, Plan & Specification Review 8
- S**
Specific Permit Conditions 10
Standard Permit Conditions 9

T

Technical Capacity, Technical,
Financial, & Managerial Capacity of
Class A Effluent Wastewater
Systems 21
Treatment Requirements, Waivers 23

V

Violations 23

W

Waivers 23