

Negotiated Rule Draft No. 2
Docket No. 58-0103-1901, Dated November 26, 2019

This draft includes revisions based on the September 18, 2019, meeting discussion, review of written comments received, and DEQ staff review. These revisions are highlighted in yellow.

Written comment deadline for this draft – January 9, 2020

Individual/Subsurface Sewage Disposal Rules
IDAPA 58.01.03

~~000. (RESERVED)~~

0010. LEGAL AUTHORITY.

Title 39, Chapter 1 and Title 39, Chapter 36, Idaho Code, grants authority to the Board of Environmental Quality to adopt rules and standards to protect the environment and the health of the State, for the installation of cottage site sewage treatment facilities and for the issuance of pollution source permits. Title 39, Chapter 1, Idaho Code, grants to the Director the authority to issue pollution source permits; charges the Director to enforce all laws, rules, regulations, and standards relating to environmental protection and health, and those relating to the storage, handling and transportation of solids, liquids and gases which may cause or contribute to water pollution, and authorizes the Department of Environmental Quality to review for approval the plans and specifications for all proposed waste treatment facilities prior to their construction. (5-7-93)

0021. TITLE, SCOPE, CONFLICT AND RESPONSIBILITIES.

01. Title. These rules are titled IDAPA 58.01.03, “Individual/Subsurface Sewage Disposal Rules.” (5-7-93)

02. Scope. The provisions of these rules establish limitations on the construction and use of individual and subsurface sewage disposal systems and establish the requirements for obtaining an installation permit and an installer’s registration permit. These rules apply to every individual and every subsurface blackwaste and wastewater treatment system in Idaho. (5-7-93)

03. Conflict of Rules, Standards, and Ordinances. In any case where a provision of these rules is found to be in conflict with a provision of any state or local zoning, building, fire, safety, or health regulation, standard or ordinance, the provision that, in the judgment of the Director, establishes the higher standard for the promotion and protection of the health and safety of the people, shall prevail. (5-7-93)

04. Responsibilities. (7-1-93)

a. Every owner of real property is jointly and individually responsible for: (10-1-90)

i. Storing, treating, and disposing of blackwaste and wastewater generated on that property.(10-1-90)

ii. Connecting all plumbing fixtures on that property that discharge wastewaters to an approved wastewater system or facility. (10-1-90)

iii. Obtaining necessary permits and approvals for installation of individual or subsurface blackwaste and wastewater disposal systems. (10-1-90)

iv. Abandonment of an individual or subsurface sewage disposal system. (10-1-90)

b. Each engineer, building contractor, individual or subsurface system installer, excavator, plumber, supplier, and every other person, who for compensation shall design, construct, abandon, or provide any system or part thereof, is jointly and individually responsible for compliance with each of these rules that are relevant to that service or product. (5-7-93)

002. INCORPORATION BY REFERENCE AND REFERENCED MATERIAL.

01. Documents Incorporated by Reference. These rules do not contain documents incorporated by reference. The American National Standards Institute (ASTM) ASTM C 33 is incorporated by reference into these rules. Any reference in these rules to requirements, procedures, or specific forms contained in any section or subsection shall constitute the full adoption by reference of that section or subsection, including any corresponding tables, figures, equations, notes and appendices therein, unless expressly provided otherwise in these rules. The ASTM C 33 is available at webstore.ansi.org/standards/astm/astmc33c33m13.

02. Referenced Material.

a. The National Sanitation Foundation NSF International (NSF) NSF/ANSI 40: Residential Onsite Systems and NSF/ANSI 245: Nitrogen Reduction are referenced in these rules. The NSF/ANSI 40 and NSF/ANSI 245 are available at www.nsf.org/services/by-industry/water-wastewater/onsite-wastewater.

b. The Technical Guidance Manual for Individual Subsurface Sewage Disposal Systems is referenced in these rules and available at the Idaho Department of Environmental Quality, Water Quality Division, 1410 N. Hilton, Boise, ID 83706-1255, www.deq.idaho.gov.

003. DEFINITIONS.

For the purposes of these rules, the following definitions apply.

(5-7-93)

(BREAK IN CONTINUITY)

XX. Extended Treatment Package System. An advanced subsurface sewage treatment product that provides additional biological-secondary wastewater treatment and/or tertiary wastewater treatment to septic tank effluent.

[TGM Section 4.8.1]

(BREAK IN CONTINUITY)

XX. Manufactured Medium Sand. Sand that conforms to the meets the following gradation requirements of ASTM C 33 for size, and less than 2% passes through a #200 sieve for cleanliness according to the following table:

Manufactured medium sand (modified ASTM C 33)-allowable particle size percent composition.

<u>Sieve Size</u>	<u>Passing (%)</u>
<u>4</u>	<u>95-100</u>
<u>8</u>	<u>80-100</u>
<u>16</u>	<u>50-85</u>
<u>30</u>	<u>25-60</u>
<u>50</u>	<u>10-30</u>
<u>100</u>	<u>2-10</u>
<u>200</u>	<u><2</u>

[TGM Section 3.2.8.1.2]

(BREAK IN CONTINUITY)

XX. Proprietary Wastewater System Media. A manufactured product through which effluent flows and is stored before infiltration.

XX. Proprietary Wastewater Treatment Product System. A subsurface sewage disposal product comprised of distribution media that is capable of providing supplemental system that incorporates proprietary wastewater system media to provide additional biological treatment to septic tank effluent system.

004. GENERAL REQUIREMENTS.

(BREAK IN CONTINUITY)

08. Duties of the Technical Guidance Committee. The Committee shall maintain a technical guidance manual which shall be used in the design, construction, alteration, operation, and maintenance of conventional systems, their components and alternatives. The Committee shall review variances and commercially manufactured wastewater treatment components and systems at the request of the Director and provide recommendations on such variances and manufactured wastewater treatment components and systems. (10-1-90)

09. Technical Guidance Manual for Individual and Subsurface Alternative Sewage Disposal. The manual maintained by the Technical Guidance Committee shall provide state-of-the-art technical guidance on alternative sewage disposal components and systems, soil type determination methodology and other information pertinent to the best management practices of individual and subsurface sewage disposal. (10-1-90)

10. Alternative System. If a standard system as described in these rules cannot be installed on a parcel of land, an alternative system may be permitted if that system is in accordance with the recommendations of the Technical Guidance Committee and is approved by the Director as set forth in Section 009. (5-7-93)

005. PERMIT AND PERMIT APPLICATION.

(BREAK IN CONTINUITY)

14. Operation, Maintenance and Monitoring.

a. The Director may require as a condition of issuing a permit, that specific operation, maintenance, and monitoring procedures be observed. Those procedures will be contained in the installation permit-application. (10-1-90)

b. All operation, maintenance, and monitoring requirements of installation permits including effluent sampling shall be perpetual unless:

i. The system is not installed;

ii. The system is removed, abandoned, or replaced; or

iii. The permit is amended or revoked by the Director.

c. If the proprietary wastewater treatment system gains general approval as described by the Technical Guidance Manual, sampling requirements may be removed.

006. INSTALLER'S REGISTRATION PERMIT AND SERVICE PROVIDER CERTIFICATION.

01. Permit and Certification Required. Every installer and service provider shall secure from the Director an installer's registration permit. Service providers must also obtain a service provider's certification. Two (2) types of installer permits and one (1) type of service provider certification are available. (7-1-17)

a. A standard and basic alternative system installer's registration permit is required to install all individual systems not listed under Subsection 006.01.b. (5-7-93)

b. A complex alternative system installer's registration permit is required to install evapotranspiration systems, extended treatment package systems, lagoon systems, large soil absorption systems, pressure distribution systems, proprietary wastewater treatment systems products, intermittent sand filters, sand mounds or other systems as may be specified by the Director. (7-1-17)

c. A service provider certification is required to perform operation, maintenance, or monitoring of complex alternative systems extended treatment package systems and any other Director identified complex alternative systems. (7-1-17)

[TGM Section 1.5]

(BREAK IN CONTINUITY)

- 04. Contents of Application.** (7-1-17)
- a.** Applications for installer permits and service provider certifications shall: (7-1-17)
- i. Be in writing; (7-1-17)
 - ii. Be signed by the applicant or by an officer or authorized agent of a corporation; (7-1-17)
 - iii. Contain the name and address of the applicant; ~~and~~ (7-1-17)
 - iv. Indicate whether the permit is to be for: (7-1-17)
 - (1) Installation of standard and basic alternative systems; (7-1-17)
 - (2) Installation of standard, basic and complex alternative systems; or (7-1-17)
 - (3) Installation of standard, basic and complex alternative systems and certification as a service provider; and (7-1-17)
 - v. Contain the expiration date of the bond required by Subsection 006.05. (7-1-17)
- b.** Additionally, for applicants seeking certification as a service provider, the application shall also contain ~~annual~~ documentation of manufacturer specific training, as required by Subsection 006.06.a. (7-1-17)

(BREAK IN CONTINUITY)

06. Service Provider Responsibilities. All certified service providers who provide operation, maintenance, or monitoring for any complex alternative system are responsible for compliance with each of these rules that are relevant to those services. Additionally, each certified service provider shall: (7-1-17)

a. Obtain documentation of the completed manufacturer-specific training of each manufactured and packaged treatment system for which the service provider intends to provide operation, maintenance, or monitoring. Proper documentation includes a certificate or letter of training completion provided by the manufacturer and an expiration date of the manufacturer's certification. If a system manufacturer is no longer in business, that manufacturer-specific training is not required; ~~and~~ (7-1-17)

b. Maintain a comprehensive list of real property owners who contracted with the certified service provider. The list shall include the current real property owner name, service property address, real property owner contact address, and subsurface sewage disposal permit number. This list shall be provided to the Director as part of the annual operation, maintenance, and monitoring reports for individual real property owners; ~~and~~ (7-1-17)

c. Notify the system owner in writing of any improper system function that cannot be remedied during the time of inspection operation, maintenance, and monitoring services; and *[Oregon Onsite Wastewater Treatment System Rules 340-071-0130]*

d. Submit all operation, maintenance, and monitoring records in the form of an annual report for each individual real property owner with whom the service provider contracts to fulfill the real property owner's operation, maintenance, or monitoring responsibilities required through the real property owner's subsurface sewage disposal installation permit as allowed in Subsection ~~005.14~~ 009.03. The annual reports shall be provided to the Director by the timeframe specified in the Technical Guidance Manual for the specific complex alternative system for which operation, maintenance, or monitoring is required. (7-1-17)

(BREAK IN CONTINUITY)

009. OTHER COMPONENTS.

01. Design Approval Required. Commercially manufactured ~~blackwater and~~ wastewater treatment ~~and storage~~ components ~~and systems~~ may not be used in the construction of a subsurface sewage disposal system unless their design is approved by the Director through the recommendation of the Technical Guidance Committee as directed in Section 004. The Department has developed recommended standards and guidance for these systems in the Technical Guidance Manual. Approval may be limited to those locations or conditions for which achievement of standards has been demonstrated. Commercially manufactured wastewater treatment components and systems reviewed by the Director may include but are not limited to: (10-1-90)

a. Extended treatment package systems (e.g., aerobic treatment systems and packed bed filters);
[TGM Section 4.8]

b. Proprietary wastewater treatment products systems (e.g., subsurface dripline products or gravel-less distribution products proprietary wastewater system media with specified sand); and

c. Proprietary wastewater system media (e.g., gravelless distribution products); and

d. Proprietary nondischarging systems (e.g., individual wastewater incinerators, composting toilets, or vault toilets).
[TGM Section 5.5]

02. Plan and Specification Submittal. Plans and specifications for all commercially manufactured ~~individual and subsurface~~ wastewater treatment ~~and storage~~ components ~~and systems~~ will be submitted to the Director for approval. Plans and specifications will ~~show or include as requested by the Director,~~ detailed construction drawings, capacities, structural calculations, lists of materials, evidence of stability and durability, performance expectations standards, manufacturers' installation, operation and maintenance instructions, an installation inspection checklist, a list of all prior approvals from other states including any review or compliance related issues, and any other relevant information as requested by the Director. (10-1-90)
[The requirement for submittal of a "list of all prior approvals from other states" is found in other state rules (e.g., New Mexico).]

03. Extended Treatment Package Systems.

a. In addition to the items listed in Subsection 009.02., extended treatment package system plan and specification submittals shall include:

i. A plan for training and certifying system installers and service providers under Section 006;

ii. An operation and maintenance manual which contains all operation and maintenance specified by the design engineer or manufacturer and the Department; and

iii. A quality assurance project plan which documents how sampling will occur if sampling is required by the Director for product approval and continued monitoring.
[TGM Section 1.4.2.2.1]

b. Manufacturers seeking approval on extended treatment package systems for reducing total suspended solids (TSS) and carbonaceous biological oxygen demand 5-day (CBOD₅) when used with residential strength wastewater must submit National Sanitation Foundation (NSF) NSF/ANSI 40: Residential Wastewater Treatment Onsite Systems approvals, reports, and associated data or equivalent third-party standards.
[TGM Section 1.4.2.2.1]

c. Manufacturers also seeking approval for reduction of total nitrogen (TN) must submit NSF/ANSI Standard 245: Nitrogen Reduction approvals, reports, and associated data or equivalent third-party standards.
[TGM Section 1.4.2.2.1]

d. The effluent must be discharged to a drainfield that meets the requirements of a standard drainfields as directed in Section 008 or a Director approved alternative.

e. For products approved under Subsection 009.03.b., shall maintain minimum separation between the trench or bed bottom shown in the following table must be maintained:

Vertical Separation to Limiting Layers (Feet)		
Limiting Layer	Flow < 2,500 GPD	Flow ≥ 2,500 GPD
	All Approved Soil Types	All Approved Soil Types
Impermeable layer	2	4
Fractured rock or very porous layer	1	2
Normal high ground water	1	2

Note: Gallons per day (GPD)

[TGM Sections 4.8.2.3 and 4.21.5]

f. The distribution laterals within the trench or bed shall meet the requirements of Section 008 or a Director approved alternative.

g. Products approved under Subsection 009.03.b. require a minimum area, in square feet of bottom trench or bed surface, the greater of the manufacturer's recommended minimum sizing requirement or the maximum daily flow of effluent divided by the hydraulic application rate for the applicable soil design subgroup listed in the following table:

Secondary Biological Treatment System Hydraulic Application Rates	
[TGM Sections 4.8.2.3 and 4.22.4]	
Soil Design Subgroup	Application Rate (gallons/square foot/day)
A-1	1.7
A-2a	1.2
A-2b	1.0
B-1	0.8
B-2	0.6
C-1	0.4
C-2	0.3

h. Extended treatment package system tank access lids must be brought to grade or above with a sealed riser and must be fitted with a secured lid for monitoring and maintenance.
[TGM Section 3.2.3]

i. Any extended treatment package system using reduced vertical separation limits described in Subsection 009.03.d. shall must have a sampling port which can provide a representative sample of the effluent from the extended treatment package system.
[TGM Section 4.8.4.d]

j. Within thirty (30) days of completing installation of an extended treatment package system, the property owner shall provide certification to the health district from the manufacturer's representative that the system has been installed and is operating will operate in accordance with the manufacturer's recommendations. The health district shall not finalize the subsurface sewage disposal permit until the certification of proper installation and operation is received and includes information on the manufacturer, product, model number, and serial number of the extended treatment package system installed.
[IDAPA 58.01.03.005.15 and TGM Section 4.8.4.2]

k. Property owners with an extended treatment package system installed on their property must complete have annual operation, maintenance and monitoring requirements completed by a certified service provider in accordance with Section 006, including effluent monitoring if required by the permit. The annual reporting period is from July 1st through June 30th each year. The certified service provider who completed operation, maintenance and monitoring for the system must submit an annual report by July 31st of each calendar year detailing the results of the operation, maintenance and monitoring demonstrating that the system is working as designed.

[TGM Section 1.9]

l. Permit requirements for extended treatment package systems are transferable with ownership changes. Before transferring ownership of a property with an extended treatment package system, the system owner must notify all transferees of the extended treatment package system operation, maintenance and monitoring requirements. Within thirty (30) days of transferring ownership of a property with an extended treatment package system, the transferor transferee must notify the health district of the new owner of the property.

04. Proprietary Wastewater Treatment Products Systems.

a. Manufacturers seeking approval for proprietary wastewater treatment products systems for reducing total suspended solids (TSS) and carbonaceous biological oxygen demand 5- day (CBOD₅) when used with residential strength wastewater must submit National Sanitation Foundation (NSF) NSF/ANSI 40: Residential Wastewater Treatment Onsite Systems approvals, reports, and associated data or equivalent third-party standards.

[TGM Section 1.4.2.4]

b. Manufacturers also seeking approval for reduction of total nitrogen (TN) must submit NSF Standard /ANSI 245: Nitrogen Reduction approvals, reports, and associated data or equivalent third-party standards.

[TGM Section 1.4.2.4]

c. Proprietary wastewater system media utilized with a proprietary wastewater treatment system treatment distribution media must:

i. Be constructed or manufactured from materials that are non-decaying and non-deteriorating and do not leach unacceptable chemicals when exposed to sewage and the subsurface soil environment;

ii. Support the distribution pipe and provide suitable effluent distribution and infiltration rate to the absorption area at the soil interface; and

iii. Maintain the integrity of the trench or bed. The material used, by its nature and manufacturer-prescribed installation procedure, must withstand the physical forces of the soil sidewalls, soil backfill, and weight of equipment used in the backfilling.

d. A minimum of twelve (12) inches of manufactured medium sand must be installed below the non sand component of a proprietary wastewater treatment system.

[TGM Section 4.23.3.22]

d. The drainfield shall meet the required effective soil depth for standard drainfields as directed in Subsection 008.

e. Products approved under Subsection 009.04.a. shall maintain minimum separation distances between the bottom of the manufactured medium sand component of the trench or bed bottom, if applicable, and the limiting layers described in Subsection 009.03.de.

[TGM Section 1.4.2.4]

f. The distribution laterals within the trench or bed shall meet the requirements of Section 008 or a Director approved alternative.

g. Products approved under Subsection 009.04.a. require a minimum area, in square feet of bottom trench or bed surface, the greater of the manufacturer's recommended minimum sizing requirement or the maximum daily flow of effluent divided by the hydraulic application rate for the applicable soil design subgroup listed in Subsection 009.03.eg. Reduction in square footage shall not be in addition to other allowable disposal area reductions (e.g, drainfield size reductions due to increased treatment from an extended treatment package system).

[TGM Section 1.4.2.4]

h. Pressure distribution, when used with a proprietary wastewater treatment product, may be required to be designed by an Idaho licensed professional engineer.

[TGM Section 4.19]

i. A proprietary wastewater treatment system may be required to follow the same operation, maintenance, monitoring and reporting requirements described in Subsection 009.03.k. due to factors such as product complexity and/or site specific constituent reduction requirements.
[TGM Section 1.4.2.4]

0305. Effect of Design Approval. The Director may condition a design approval by specifying circumstances under which the component must be installed, used, operated, maintained, or monitored. (7-1-17)

a. The Director shall specify the complex alternative systems that must undergo professionally managed operation, maintenance, service, or effluent testing. (7-1-17)

b. Manufacturers shall provide training to a reasonable number of service providers to perform required operation, maintenance, or monitoring as specified by the Director. (7-1-17)

c. Manufacturers may enter into agreements with certified service providers trained in their technology but shall not limit the service providers from being trained in the technology of other manufacturers. (7-1-17)

0406. Notice of Design Disapproval. If the Director is satisfied that the component described in the submittal may not be in compliance with or may not consistently function in compliance with these rules, or that the manufacturer of the proposed system failed to comply with Subsection 009.03, the Director will disapprove the design as submitted. The manufacturer or distributor submitting the design for approval will be notified in writing of the disapproval and the reason for that action. (7-1-17)

07. Amendments or Revocations of Approval. The Department Director may amend or revoke approval of a commercially manufactured blackwater or wastewater treatment and storage device if it determines:

a. Approval was based on false or misleading information;

b. The material, technology, or design no longer achieves performance standards for which it was approved; or

c. The manufacturer is not meeting the requirements of these rules or conditions of the approval.

[Oregon Onsite Wastewater Treatment System Rules 340-071-0135]