



October 2, 2019

Ms. Paula Wilson
Idaho Department of Environmental Quality
Water Quality Division
1410 N. Hilton Street
Boise, ID 83706

Re: Public Comment
Preliminary Draft Rule (Draft No. 1)

By electronic transmission to: paula.wilson@deq.idaho.gov

Dear Ms. Wilson,

On behalf of Infiltrator Water Technologies (Infiltrator) and Presby Environmental, Inc. (PEI) I write to make comment on Draft No. 1 of the Preliminary Draft Rule.

1. Possible inconsistency in draft definitions and other sections

Section 003.(XX) reads as follows:

Proprietary Wastewater Treatment Product. *A subsurface sewage disposal product comprised of distribution media that is capable of providing supplemental treatment to septic tank effluent.*

Please consider:

Section 009.(01) addresses the types of "components and systems" that the Director may review, and subsection (b) reads:

Proprietary wastewater treatment products (e.g. subsurface dripline products and gravelless distribution products); and

These two sections are simply not consistent. Both utilize the exact same term - proprietary wastewater treatment product(s) – yet 003.(XX) defines this as being capable of providing supplemental treatment to septic tank effluent, whereas 009.(01)(b) lists "dripline products and gravelless distribution products", none of which in fact provide supplemental treatment to septic tank effluent, serving solely as conduits for dispersing wastewater within the subsurface.

Furthermore, Section 006.(01)(b) requires a complex alternative systems installer's registration permit for a number of "systems", including "proprietary wastewater treatment systems" (italics added). Yet "proprietary wastewater treatment system" is not defined in the Draft Rule.

Finally, Section 009.(04) is once again titled "Proprietary Wastewater Treatment Products", but subsection (c) introduces a new term "Proprietary wastewater treatment *media*" (italics added), which is not defined in the Draft Rule.

These concerns are far from fatal. However, we submit that these elements as a group may create a risk of confusion in the field and (more importantly) inadvertently impose competitive encumbrances on certain previously approved on-site wastewater system products. For example, it would be possible for a local permitting authority to interpret these sections, in their entirety, to require the installer to possess a complex alternative systems installer's registration permit in order to install an approved plastic chamber or bundled expanded polystyrene synthetic aggregate system. Certainly, this cannot be the intent of the Draft Rule language.

Recommendations:

- a. Rename the title "Proprietary Wastewater Treatment Product" in Section 003 and revise its content.

The Technical Guidance Manual (TGM) defines proprietary wastewater treatment products (PWTP) in Section 1.4.2.4 as products that are "produced by the manufacturer to provide secondary wastewater treatment". This language is appropriate because it places the burden on the manufacturer to claim (and subsequently provide supporting evidence to prove) that their product provides treatment of septic tank effluent.

We suggest that the title of this subsection and the definition be revised to reflect language current in place in the TGM¹:

XX. Proprietary Wastewater Treatment System. *An on-site wastewater system that incorporates proprietary on-site wastewater system media to provide secondary wastewater treatment.*

If the manufacturer does not claim treatment, then the product does not belong under the above definition. Therefore, we suggest:

- b. Add a definition for wastewater system products that are not claimed by the manufacturer to provide treatment.

Taking the lead from Section 009.(04)(c) of the Draft Rule, and considering both the definition of "Media, Distribution" as well as Section 1.4.2.3 from the TGM, we suggest adding a new subsection to 003. (DEFINITIONS) which reads:

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

¹ We are aware that use of the term "system" in this definition conflicts with Section 1.4.2.4 in the TGM. However, we submit the following for your consideration: Our company manufactures two proprietary products – the ATL conduit and the Advanced Enviro-Septic (AES) pipe – that are approved for use in Idaho. Yet these approvals are for the ATL System and the AES Wastewater Treatment System (*emphasis added*). The approvals are based in part upon NSF/ANSI 40 listing and certification. The data provided by the manufacturers to NSF in support of the request for certification and listing is based upon effluent which is exiting the system – the proprietary media and the surrounding tightly-specified system sand. We are aware no data which indicates that the "manufactured product" in and of itself provides treatment to NSF/ANSI 40 levels. In all cases, it is the system - not the just the proprietary product enveloped within the sand - which produces the standard-compliant effluent.

If these two new definitions are adopted, several additional changes must be made to existing text in the Draft Rule in order to provide consistency.

c. In Section 009.(01)(b) as presently drafted reads:

b. Proprietary wastewater treatment products (e.g. subsurface dripline products and gravelless distribution products); and

This subsection must be revised². We suggest that subsection (b) be separated into two separate subsections:

(b) Proprietary wastewater treatment systems;

(c) Proprietary on-site wastewater system media; and

Finally, Section 009.(04) must be revised. As presently drafted, the title of this subsection reads:

04. Proprietary Wastewater Treatment Products

This would be revised to read:

04. Proprietary Wastewater Treatment Systems

Also, subsection (c) of 009.(04) now reads, in part:

Proprietary wastewater treatment distribution media must:

For consistency, this should be revised to read:

Proprietary on-site wastewater system media must:

Or (as an alternative):

Proprietary on-site wastewater system media utilized in a proprietary wastewater treatment system must:

2. Add a minimum storage capability requirement to Section 009.(04)(c).

As presently drafted this subsection includes three requirements for the proprietary on-site wastewater system media utilized in a proprietary wastewater treatment system: non-decaying, provide suitable effluent distribution, and ability to maintain the integrity of the trench or bed as well as the material itself. We support this language.

² This subsection must be revised, even if the aforementioned changes are not adopted. As presently drafted, these products are NOT proprietary wastewater treatment products, as they do not provide treatment.

We submit that storage capability is a critical component of any on-site wastewater treatment and/or dispersal system. This belief is supported in two persuasive manners beyond our company's subjective beliefs:

- the EPA *Onsite Wastewater Treatment Systems Manual* (2002) underscores the importance of storage capacity in a subsurface wastewater infiltration system on page 4-4 when it describes the function of the media in the excavation: "The porous medium maintains the structure of the excavation, exposes the applied wastewater to more infiltrative surface, and provides storage space for the wastewater within its void fractions (interstitial spaces, typically 30 to 40 percent of the volume) during peak flows with gravity systems.
- Section 1.4.2.3 of the TGM states:
 - Each component will be analyzed independently and compared to a standard trench and:
 - ...analyzing the open trench bottom area, associated sidewall area, and storage capacity in comparison to a standard trench.

Accordingly, we respectfully suggest that Section 009.(04)(c) would be improved if it were to include language which recognizes the importance of the proprietary on-site wastewater system media utilized in a proprietary wastewater treatment system to provide adequate storage. For discussion we submit the following language:

iv. Proprietary on-site wastewater system media shall have a minimum height of 7 inches, not including sand surrounding the media.

v. The proprietary on-site wastewater system media, not including sand surrounding the media, shall be capable of storing a minimum of two days of design flow.

3. Housekeeping

The Draft Rule includes language which refers to NSF International (NSF) as the National Sanitation Foundation, which is its former name. References should be to NSF International.

References to NSF standards in sections 002.(02)(a); 009.(03)(b) and (c); as well as 009.(04)(a) and (b) should be updated to reflect the document titles. The NSF International Certification Policies document *Certification Policies for Wastewater Treatment Devices: October 30, 2018* lists the correct reference to the standards as follows³:

NSF/ANSI 40
NSF/ANSI 245

In addition, it has been our experience that Sharon Steiner at NSF is available and willing to assist with any NSF-related issues. She may be reached at steiner@nsf.org or via phone at (734) 827-6846.

In an attempt to provide clarity and with an objective of allowing for maximum understanding of these comments, we have taken the liberty of incorporating the recommendations made

³ ANSI stands for American National Standards Institute.

above into the *Preliminary Draft Negotiated Rule (Draft No. 1), Docket No. 58-0103-1901, Dated September 3, 2019*. The changes are offered in blue font and strikeout formatting⁴. We provide an electronic copy of this document as a separate file labeled "Attachment 1 Infiltrator PEI Edited Draft No. 1_100219".

Thank you for your consideration of these comments. I plan to participate in the next Negotiated Rulemaking Meeting scheduled for December 12, 2019 and look forward to the discussion, including that of these comments. If in the interim any additional information is required or anyone wishes to discuss these comments, please know that I will welcome the inquiry. I may be best contacted by phone at (603) 498-5306 or via email at rbachelder@infiltratorwater.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Dick Bachelder", with a long horizontal flourish extending to the right.

Dick Bachelder
Science & Government Affairs

cc: Mr. Jay Holman, Infiltrator Water Technologies
Ms. Jeanne Allen, PEI

⁴ Use of "Track Changes" formatting seemed to create more problems than it solved...

**Preliminary Draft Negotiated Rule (Draft No. 1)
Docket No. 58-0103-1901, Dated September 3, 2019**

Written comment deadline for this draft – October 2, 2019

**Individual/Subsurface Sewage Disposal Rules
IDAPA 58.01.03**

~~00. (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)

02. INCORPORATION BY REFERENCE AND REFERENCED MATERIAL.

01. Documents Incorporated by Reference. The American National Standards Institute (ASTM) ASTM C-33 (2018) 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) 40: Residential Onsite Systems and NSF 245: Nitrogen Reduction are referenced in these rules. The NSF 40 and NSF 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.

03. DEFINITIONS.

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

(5-7-93)

(BREAK IN CONTINUITY)

XX. Extended Treatment Package System. A subsurface sewage treatment product that provides additional biological treatment to septic tank effluent.

[TGM Section 4.8.1]

(BREAK IN CONTINUITY)

XX. Manufactured Medium Sand. Sand that conforms to the 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 Treatment Product System. A subsurface sewage disposal product ~~comprised of distribution media that is capable of providing supplemental treatment to septic tank effluent.~~ An on-site wastewater system that incorporates proprietary on-site wastewater system media to provide secondary wastewater treatment.

[TGM Section 1.4.2.4]

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

04. GENERAL REQUIREMENTS.

(BREAK IN CONTINUITY)

08. Duties of the Technical Guidance Committee. The Committee shall maintain a technical Preliminary Draft Negotiated Rule, Docket No. 58-0103-1901

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)

(BREAK IN CONTINUITY)

06. 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, intermittent sand filters, sand mounds or other systems as may be specified by the Director. (7-1-17)
[TGM Section 1.5]

c. A service provider certification is required to perform operation, maintenance, or monitoring of complex alternative systems. (7-1-17)

(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. ~~(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; 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. 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)

09. 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:

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

b. ~~Proprietary wastewater treatment products (e.g., subsurface dripline products and gravelless distribution products); and~~
[TGM Section 1.4.2.4]

x. Proprietary wastewater treatment systems;

xx. Proprietary on-site wastewater system media; and

c. 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, manufacturers' installation, operation and maintenance instructions, 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 borrowed from 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) 40: Residential Wastewater Treatment 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 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 standard drainfields as directed in Section 008. Products approved under Subsection 009.03.b. shall maintain minimum separation between the trench or bed bottom shown in the following table.

Vertical separation to limiting layers (feet).

<u>Limiting Layer</u>	<u>Flow < 2,500 GPD</u>	<u>Flow ≥ 2,500 GPD</u>
	<u>All Soil Types</u>	<u>All Soil Types</u>
<u>Impermeable layer</u>	<u>2</u>	<u>4</u>
<u>Fractured rock or very porous layer</u>	<u>1</u>	<u>2</u>
<u>Normal high ground water</u>	<u>1</u>	<u>2</u>

Note: Gallons per day (GPD)

[TGM Sections 4.8.2.3 and 4.22.4]

e. The distribution laterals within the trench or bed shall meet the requirements of Section 008. 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]

<u>Soil Design Subgroup</u>	<u>Application Rate (gallons/square foot/day)</u>
<u>A-1</u>	<u>1.7</u>
<u>A-2a</u>	<u>1.2</u>

<u>A-2b</u>	<u>1.0</u>
<u>B-1</u>	<u>0.8</u>
<u>B-2</u>	<u>0.6</u>
<u>C-1</u>	<u>0.4</u>
<u>C-2</u>	<u>0.3</u>

f. Any extended treatment package system using reduced vertical separation limits described in Subsection 009.03.d. shall 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]

g. 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 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]

h. Property owners with an extended treatment package system installed on their property must complete annual operation, maintenance and monitoring requirements in accordance with Section 006, including effluent monitoring if required by the permit. 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]

i. 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 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 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) 40: Residential Wastewater Treatment 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 245: Nitrogen Reduction approvals, reports, and associated data or equivalent third-party standards.
[TGM Section 1.4.2.4]

c. Proprietary on-site wastewater ~~treatment distribution~~ system 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.

iv. Proprietary on-site wastewater system media shall have a minimum height of 7 inches, not including sand surrounding the media.

v. The proprietary on-site wastewater system media, not including sand surrounding the media, shall be capable of storing a minimum of two days of design flow.

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]

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

[TGM Section 1.4.2.4]

f. The distribution laterals within the trench or bed shall meet the requirements of Section 008. 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.e. 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]

g. 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]

03. 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)

04. 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)

05. Amendments or Revocations of Approval. The Department may amend or revoke approval of a commercially manufactured blackwaste 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]