Technical Guidance Committee

Meeting Minutes

Wednesday May 3, 2017

Conference Room B

Department of Environmental Quality

1410 North Hilton

Boise, ID

TGC ATTENDEES:

Tyler Fortunati, REHS, IPDES Compliance, Inspection, and Enforcement Lead, DEQ (TGC Chairman)
Joe Canning, PE, B&A Engineers
Dale Peck, PE, Environmental & Health Protection Division Administrator, PHD
Michael Reno, REHS, Environmental Health Supervisor, CDHD
Jason Peppin, REHS, Senior Environmental Health Specialist, PHD
James Craft, Onsite Wastewater Coordinator, DEQ (TGC Co-Chairman)

GUESTS:

Larry Waters, PE, Wastewater Program Engineering Manager, DEQ
Mark Cecchini-Beaver, Deputy Attorney General, DEQ
Tim Wright, SWDH
Lisa Bahr, SWDH
PaRee Godsill, Everlasting Extended Treatment
Dick Bachelder, Infiltrator Systems, Inc.
Jay Holman, Infiltrator Systems, Inc
Norm Semanko, Moffatt Thomas Attorney representing Presby Environmental, Inc
Fred Vengrouske, Presby Plastics, Inc. (via telephone)
Don Prince, Presby Plastics, Inc. (via telephone)
Lee Rashkin, Presby Environmental, Inc. (via telephone)
Allen Worst, R.C. Worst & Company, Inc. (via telephone)

CALL TO ORDER/ROLL CALL:

Meeting called to order at 10:00 a.m.

Committee members and guests introduced themselves. James Craft introduced himself as the new Onsite Wastewater Coordinator for DEQ.

OPEN PUBLIC COMMENT PERIOD:
Allen Worst followed up with a question from the TGC’s last meeting on March 9, 2017 to see if his recommendations were considered on pump vault effluent filters. There was confusion on whether DEQ or Allen Worst would be drafting a proposal. Tyler Fortunati stated that DEQ would draft an amendment based on Allen’s proposal for the next meeting.

Tyler Fortunati stated that there was public comment received via email from PaRee Godsill. Tyler verified with PaRee that he would hold the comments until the specific agenda items were being discussed by the committee so they could better address the requests.

No further comments from the public.

MEETING MINUTES:

10:07 AM  March 9, 2017 Draft TGC Meeting Minutes: Amend and Approve

Recommendation from Mike Reno to amend meeting minutes regarding the Presby System Manual typo from “15” inches to “12” inches. Reference: “These sections need to be revised to show a minimum of [12] inches of sand below the natural ground surface and a minimum of 3 inches of the pipe invert below the natural ground surface.”

Motion: Mike Reno moved to approve the minutes as amended and post them to the DEQ website.

Second: Joe Canning

Voice vote: Motion carried unanimously.

NEW BUSINESS/REVIEW:

10:10 AM  Presby System Manual

Discussion began with the committee that the Presby manual be changed to be consistent with the above grade capping fill requirements as required by the Technical Guidance Manual (TGM) and as per the DEQ letter issued to Presby on April 19, 2017. The letter instructed Presby to revise appropriate sections of the Presby manual and then to resubmit for TGC review at the May 3, 2017 meeting. No response has been received by DEQ from Presby.

Norm Semanko, Attorney, representing Presby recapped on the approval process that Presby went through with DEQ for the Presby Advanced Enviro-Septic (AES) product. Norm Semanko expressed concerns about the TGC attempting to require changes to the Presby manual since DEQ approved the manual and product placement.

Mike Reno discussed how the approval process works on proprietary systems such as Presby’s and how approval of their manual was given by DEQ, not by the committee.
Tyler Fortunati recommended Presby respond in writing to the DEQ letter to address any specific concerns or interests regarding this issue.

Norm Semanko also addressed a possible conflict of interest with committee members voting on a matter which they or their business have a pecuniary interest, without first disclosing the conflict of interest, as required by law.

DEQ will consult with their assigned Deputy Attorney General regarding Presby’s concerns once a written response is received. Until the matter is resolved with Presby, Mike Reno requested DEQ to send guidance for deviation on Presby’s AES installation requirements from the above grade capping fill requirements to the seven health districts.

10:37 AM **Infiltrator ATL**

Dick Bachelder presented an approval request for the proprietary Infiltrator ATL system in Idaho. Design and installation manual details were discussed by the TGC for product approval consideration. TGC members stated initial comments and edits to Dick Bachelder. Tyler Fortunati stated DEQ needs more time to review the design and installation manual and will issue a letter to Infiltrator summarizing DEQ’s comments and the TGC’s recommendations for manual revisions. Dick Bachelder noted the initial recommended changes and edits and will revise the manual. A comment letter was received from Presby dated May 2, 2017 was just provided. See Appendix G.

11:47 AM **Working Group & DEQ Reviewed TGM changes during TGC Final Review.**

**Section 1.4 Product Approval**

No public comment was received on this section. The TGC made minor phrasing edits and inserted a reference to TGM section 4.8.2 to clarify section 1.4.2.2.3.

**Motion:** Mike Reno moved to approve section 1.4 Product Approval as amended.  
**Second:** Joe Canning  
**Voice Vote:** Motion passed unanimously. Section to be posted for 30-day public comment period.

See DEQ website and **Appendix B** and provide public comments by June 5, 2017 to James Craft by email at james.craft@deq.idaho.gov.

**Section 1.5 Installer’s Registration Permit and Service Provider Certification**

No public comment was received on this section. TGC made minor phrasing edits to include “Director identified” to section 1.5.
Motion: Dale Peck moved to approve Section 1.5 as amended.
Second: Mike Reno
Voice Vote: Motion passed unanimously. Section to be posted for 30-day public comment period
See DEQ website and Appendix C and provide public comments by June 5, 2017 to James Craft by email at james.craft@deq.idaho.gov.

Section 1.6 Service Provider

No public comment was received on this section. TGC defined “OMM” Operations, Maintenance and Monitoring within section 1.6.

Motion: Joe Canning moved to approve Section 1.6 as amended.
Second: Mike Reno
Voice Vote: Motion passed unanimously. Section to be posted for 30-day public comment period.
See DEQ website and Appendix D and provide public comments by June 5, 2017 to James Craft by email at james.craft@deq.idaho.gov.

Section 1.9 Managed Operation, Maintenance, and Monitoring

Tyler Fortunati read public comments submitted by PaRee Godsill. The TGC incorporated PaRee Godsill’s request to remove “Annual” from section 1.9.1(1) and 1.9.2(3)(a) in regards to operation and maintenance due to some systems requiring more frequent servicing per the manufacturer. The TGC agreed with the recommendation and removed the word “Annual” from said sections.

Motion: Dale Peck moved to approve Section 1.9 as amended.
Second: Joe Canning
Voice Vote: Motion passed unanimously. Section to be posted for 30-day public comment period.
See DEQ website and Appendix E and provide public comments by June 5, 2017 to James Craft by email at james.craft@deq.idaho.gov.

Section 4.8 Extended Treatment Package System

No public comment was received on this section. The committee had no further questions or comments.

Motion: Mike Reno moved to approve Section 4.8.
Second: Dale Peck
Voice Vote: Motion passed unanimously. Section to be posted for 30-day public comment period.

See DEQ website and Appendix F and provide public comments by June 5, 2017 to James Craft by email at james.craft@deq.idaho.gov.

TGC agreed no further committee review was needed on the following sections:

Section 4.8.2 Approval Conditions

Section 5.4 Extended Treatment Package System

Appendix A Glossary

12:27 AM Adjourn for Lunch

1:35 PM Meeting Resumed

1:35 PM Subsurface Sewage Disposal ETPS Program Instruction

The TGC discussed the draft changes to the Subsurface Sewage Disposal ETPS Program Instruction. The committee gave no further comments or edits. DEQ will work with the Environmental Health Directors to finalize the program instruction and template letters by July 1, 2017. The TGC will not need to review this document since it is a DEQ and health district SOP/policy on how to manage the ETPS enforcement.

1:39 PM Notification Letters

The committee held general discussion regarding notification letters and DEQ internal program requirements to reflect upcoming changes in the rule that come into effect on July 1, 2017. Tyler Fortunati read comments received from PaRee Godsill for notifications letters to include language on:

1) Eliminating the requirement to be a member of a non-profit entity,

2) How to stay in compliance or get into compliance for annual reporting,

3) Any violations or penalties, and

4) Providing a service providers list for property owners.

DEQ will obtain a current installed ETPS systems list from each Health District. DEQ will produce letter(s), public notices and templates with review from AG’s office. DEQ will verify with AG’s office on how a public notice letter can be used for recording the release of an O&M entity easement for the property owner. Notification letters from DEQ are to be mailed out to notify property owners of the rule change by May 22, 2017.
Service Provider Certification Exam
The TGC discussed service provider certification exam and types of questions that should be used. Questions will cover operation, testing and sampling of wastewater, and monitoring requirements on complex alternative systems. Questions may be used from the Idaho Bureau of Occupation Licenses (IBOL) Wastewater Treatment 1 exam. Exam questions will be vetted through Health Districts for input and consideration. Multiple versions of the service provider exam will be developed over time.

Comments submitted by PaRee Godsill were discussed by TGC on how proper training in wastewater collection is necessary due to the 90% compliance requirement. PaRee Godsill recommends that a good portion of the exam should cover wastewater collection requirements.

Other
Service Provider Refresher Courses:
The TGC discussed providing service provider training/refresher courses through existing training opportunities offered by DEQ, regional conferences and/or to create specific OMM training related courses.

Manufacturers Specific Training Notification to Manufacturers & Service Providers:
Tyler Fortunati read submitted comments from PaRee Godsill about manufacturer specific training-service providers. The TGC agreed with PaRee Godsill’s comment that, “making exceptions for a service provider to service a technology they are not certified in should never be allowed again.”

Bonding:
Tyler Fortunati stated bonding companies may need to revise verbiage for service providers due to new rule change.

DEQ to discuss enforcement and involvement with Health Districts for the next 2 years during implementation of new requirements.

DEQ to post and maintain a list of service providers on DEQ internet after new rule becomes effective.

Tim Wright asked the TGC if nitrogen reduction requirements (less than 16 mg/L) only affect nitrate priority areas. Mike Reno replied that areas of concern will be stuck with the 16 mg/L requirement because the area or sub division may be a possible threat.

Tim Wright asked TGC for clarification about the proof of certification and training from manufactures and how that will be submitted to DEQ. Tyler Fortunati explained the certificate document will need to be submitted annually to DEQ.
NEXT MEETING:

2:20 PM  The next committee meeting is scheduled to be on June 8, 2017 at the Idaho Department of Environmental Quality’s state office.

Motion: Mike Reno moved to adjourn the meeting.

Second: Joe Canning.

Voice Vote: Motion carried unanimously

2:21 PM  The TGC meeting adjourned.

TGC Parking Lot
This is a running list of issues requested to be presented at a future TGC Meeting:

• DEQ to develop exam questions for service provider
• DEQ will draft an amendment based on Allen Worst’s recommendations on pump vault effluent filters.
• DEQ and TGC to review the Infiltrator ATL design and installation manual and provide feedback to Infiltrator
DEQ to send guidance for deviation on Presby’s AES installation requirements from the above grade capping fill requirements to the seven health districts.

List of Appendices from the May 3, 2017 Meeting

Appendix A:
March 9, 2017 TGC Meeting Minutes
Status: Final

Appendix B:
Section 1.4 Product Approval
Status: Preliminary Approval – Posted for 30-day Public Comment

Appendix C:
Section 1.5 Installer’s Registration Permit and Service Provider Certification
Status: Preliminary Approval – Posted for 30-day Public Comment

Appendix D:
Section 1.6 Service Provider
Status: Preliminary Approval – Posted for 30-day Public Comment

Appendix E:
Section 1.9 Managed Operation, Maintenance, and Monitoring
Status: Preliminary Approval – Posted for 30-day Public Comment

Appendix F:
Section 4.8 Extended Treatment Package System
Status: Preliminary Approval – Posted for 30-day Public Comment
Appendix A

Technical Guidance Committee Meeting
Minutes

Thursday, March 9, 2017

Conference Room B
Department of Environmental Quality
1410 North Hilton
Boise, Idaho

TGC ATTENDEES:

Tyler Fortunati, REHS, IPDES Compliance, Inspection, and Enforcement Lead, DEQ (TGC Co-Chairman)
Larry Waters, PE, Wastewater Program Engineering Manager, DEQ (TGC Co-Chairman)
Joe Canning, PE, B&A Engineers
Dale Peck, PE, Environmental & Health Protection Division Administrator, PHD
Michael Reno, REHS, Environmental Health Supervisor, CDHD
Jason Holm, JT Holm Construction, LLC
Jason Peppin, REHS, Senior Environmental Health Specialist, PHD

GUESTS:

Tim Wright, SWDH
Lisa Bahr, SWDH
Ryan Spiers, Alternative Wastewater Systems, LLC
Allen Worst, R.C. Worst & Company, Inc. (via telephone)
PaRee Godsill, Everlasting Extended Treatment
Kelly Eager, EIPHD (via telephone)
Kathleen Price, EIPHD (via telephone)
Kim Walker, Simple Septic Solutions (via telephone)
Dick Bachelder, Infiltrator Systems, Inc. (via telephone)
Fred Vengrouskie, Presby Plastics, Inc. (via telephone)
Dennis Fogg, Presby Plastics, Inc. (via telephone)
Don Prince, Presby Plastics, Inc. (via telephone)
Bob Rebori, Idaho Residential Wastewater Services (via telephone)

CALL TO ORDER/ROLL CALL:

Meeting called to order at 10:05 a.m.
Committee members and guests introduced themselves.

OPEN PUBLIC COMMENT PERIOD:
This section of the meeting is open to the public to present information to the TGC that is not on the agenda. The TGC is not taking action on the information presented.

No public comment was submitted during the allotted agenda timeframe.

**MEETING MINUTES:**
November 3, 2016 Draft TGC Meeting Minutes: Review, Amend, or Approve

**Motion:** Dale Peck moved to approve the minutes without amendment.

**Second:** Joe Canning

**Voice Vote:** Motion carried unanimously.

**NEW BUSINESS/REVIEW:**

4.19.3.4.4 Pump Vault Effluent Filters Review

Discussion to use recommendations provided by Allen Worst and include DEQ guidance for the health district’s to follow to determine that rule requirements for baffle depth are met.

**Motion:** Dale Peck moved that the TGC place this item in the parking lot to allow time for Allen Worst to draft and submit a final proposal for consideration by DEQ’s On-Site Coordinator in preparing recommended changes to present to the committee in a future meeting.

**Second:** Mike Reno.

**Voice Vote:** Motion carried unanimously.

4.19 Lateral Spacing Based on Orifice Spacing

The committee discussed that orifice and lateral spacing should be the same. Joe Canning will look into this matter further and asked that this matter be withdrawn from consideration.

**Presby System Manual**

Joe Canning discussed the need to change sections 9.5 and 9.15 of the Presby Design & Installation Manual to meet the requirements of the TGM for above grade capping fill systems.

**Motion:** Dale Peck moved to have DEQ draft a letter to Presby Plastics Inc. to revise sections 9.4 and 9.15 of their Design & Installation Manual to meet the TGM requirements for above grade capping fill systems. These sections need to be revised to
show a minimum of 15 inches of sand below the natural ground surface and a minimum of 3 inches of the pipe invert below the natural ground surface.

**Second:** Mike Reno.

**Voice Vote:** Motion carried unanimously.

**Presby System Inspection Checklist**

Joe Canning discussed the difficulty for Health District inspectors to use the Presby Design & Installation Manual along with the TGM to write a permit for these systems. A checklist for the inspectors was discussed as a guide for writing permits.

**Motion:** Joe Canning moved that this item be placed in the parking lot to allow time for a checklist to be developed by DEQ’s On-Site Coordinator.

**Second:** Dale Peck.

**Voice Vote:** Motion carried unanimously.

**IDAPA 58.01.03 Rule Changes, Sections 006 & 009, and Implementation to Meet the July 1, 2017 Deadline**

**Action Items:**

- TGC Working Group – Modify sections 1.4, 1.5, 1.6, 1.9 and 4.8 of the TGM prior to April 7, 2017.
- DEQ – Modify sections 5.4 Table 3, Update the rule section, and update, appendix A prior to April 7, 2017.
- DEQ – Mail out system notification letters by April 30, 2017.
- DEQ – Prepare service provider exam prior to May 15, 2017.

**NEXT MEETING:**

The next committee meeting is scheduled to be on May 3, 2017 at the Idaho Department of Environmental Quality’s state office.

**Motion:** Mike Reno moved to adjourn the meeting.

**Second:** Dale Peck.

**Voice Vote:** Motion carried unanimously.

The meeting adjourned at 12:41 p.m.
TGC Parking Lot
This is a running list of issues requested to be prepared and presented at a future TGC meeting.

- Add individual section and title callouts into TGM header on each page.
- Research summary on reduced separation to surface water for gray water system.
- ECOJOHN ® Residentia Septic Alternative Solutions Allen Worst to write up change and submit in a future meeting.
- Dosing Chamber effluent filters alternatives to screens, Allen Worst to draft and submit a final proposal for consideration by DEQ’s On-Site Coordinator in preparing recommended changes to present to the committee in a future meeting.
- DEQ to develop Presby System checklist for HD inspectors and present to the TGC for consideration at a future meeting.
Appendix B

1.4.2.2 Extended Treatment Package System Approvals

Extended treatment package systems (ETPS) are required to undergo two levels of approval in Idaho (IDAPA 58.01.03.009.03). The first level of approval is provisional approval based upon a manufacturer’s submitted literature and data that support the treatment claims for the product. The second level of approval is general approval based upon a manufacturer’s proven performance after installation and operation in Idaho. Upon receiving provisional approval, a manufacturer must proceed to obtain general approval within a specified timeframe otherwise the product will be disapproved.

1.4.2.2.1 Provisional ETPS Approval

Provisional ETPS approval allows a manufacturer’s unit to be installed on a property, but the system must undergo annual operation, maintenance, monitoring, and reporting performed by an approved service provider and third-party tester. Operation, maintenance, monitoring, and reporting are the responsibility of the manufacturer under provisional approval.

Manufacturers seeking provisional approval of ETPS technology shall submit product information to DEQ’s on-site wastewater coordinator for review by DEQ. In addition to product information (i.e., engineering designs and product manuals), manufacturers seeking approval on ETPS units for reducing total suspended solids (TSS) and carbonaceous biological oxygen demand (CBOD₅) must submit NSF/ANSI Standard 40 approvals, reports, and associated data or equivalent third-party standards. Manufacturers also seeking approval on the ETPS units for reduction of total nitrogen (TN) must submit NSF Standard 245 approvals, reports, and associated data or equivalent third-party standards. Equivalency determinations of third-party standards shall be made by DEQ on a case-by-case basis. All third-party standards evaluated for the ETPS model must be submitted including approvals, disapprovals, reports, and associated data. ETPS units that have not undergone third-party testing and wish to be approved for reduction in TSS, CBOD₅, and TN must be permitted and installed under the guidance in Section 4.7, “Experimental System.”

As part of their request for provisional approval, manufacturer shall submit a quality assurance project plan to document how sampling and analysis will occur under provisional approval and identify who will perform both the sampling and analysis. All operation and maintenance performed during the provisional approval stage shall be done by a service provider approved by DEQ. All effluent testing performed during the provisional approval stage shall be done by a third-party contracted by the manufacturer with experience in wastewater sampling. The service provider and effluent tester may not be the same individual or work for the same company. The manufacturer seeking approval and third-party tester will be responsible for obtaining property access for testing of their system’s effluent during the provisional approval stage. The manufacturer shall also be responsible for effluent testing costs.
All ETPS manufacturers that obtain provisional approval for one of their products must attempt to gain general approval and shall follow the minimum operation, maintenance, and effluent-testing procedures outlined in section 1.9. Upon receiving provisional approval for an ETPS model, a manufacturer must install that specific ETPS model within 2 years. If installation of the provisionally approved product does not occur within 2 years of the provisional approval, the ETPS model shall be disapproved (IDAPA 58.01.03.009.04). Once a manufacturer’s ETPS model is installed under provisional approval, operation, maintenance, and monitoring of that unit as described in the manufacturer’s quality assurance project plan and section 1.9 must begin that same reporting year unless the system was installed less than 3 weeks before the reporting deadline. Additionally, if operation, maintenance, and monitoring of the provisionally approved unit are not submitted to DEQ for any year after initial installation under provisional approval, the ETPS model shall be disapproved. Installed products under provisional approval that are disapproved shall be replaced by the manufacturer with a system that meets the installation requirements of the specific site where the ETPS model is installed.

ETPS with initial provisional approval effective July 1, 2016 must meet the requirements of section 1.4.2.2.2 for general approval by July 1, 2018 or may be considered a disapproved product.

1.4.2.2.2 General ETPS Approval

General ETPS approval allows a manufacturer’s unit to be installed on a property without the requirement to sample effluent on an annual basis for systems that are not required to obtain a TN level <27 milligrams per liter (mg/L). The property owner must still have their ETPS unit undergo annual operation, maintenance, and reporting performed by an approved service provider.

To obtain general approval, or to lower reduction levels from those set in a general approval for any constituent, the ETPS model manufacturer must submit data from the ETPS models installed in Idaho. The data submitted must be obtained through operation, maintenance, and monitoring protocols described in section 1.4.2.2.1 under a DEQ-accepted quality assurance project plan. Data from other states will not be considered under this approval process. Any data submitted must be specific to a particular ETPS make and model. Data submission must include information on 30 installations with a minimum of 3 full years of operational data on each system, or the equivalent number of data points obtained on an annual basis for a lesser number of installations. All maintenance and effluent testing records, as described in section 1.9, obtained over this period must be submitted for review.

DEQ will issue general approval of an ETPS product in conjunction with associated reduction levels for TSS, CBOD₅, and TN. TSS and CBOD₅ reduction levels will be set at less than or equal to 45 mg/L and 40 mg/L, respectively, based on the data showing that 90% of the installed units have successfully maintained effluent reduction levels at, or below, 45 mg/L TSS and 40 mg/L CBOD₅. TN reduction levels will be determined through statistical analysis of the data submitted. The submitted data will be statistically
evaluated to determine a resulting value that corresponds to a 95% upper confidence limit. The resulting value that corresponds to the 95% upper confidence limit will be used as the system’s TN performance limit. Third-party report average reduction values will not be accepted to establish system performance approvals for any constituent.

For an adjustment in reduction levels of effluent constituents to be approved from a current general approval, a manufacturer must submit data that were obtained through a DEQ-accepted quality assurance project plan as described in section 1.4.2.2.1. Adjustments shall be made based on data analysis described in section 1.4.2.2.2 except that the data must be obtained over a period of at least 2 years regardless of the number of data points and must be obtained for all of the specific ETPS models installed in Idaho for which the adjustment is being requested.

1.4.2.2.3  Disapproved Extended Treatment Package Systems

For those ETPS that were previously permitted and installed but are now disapproved on the approved ETPS product list, property owners are still responsible to have an approved service provider maintain these systems in accordance with section 4.8.2. Annual reports verifying proper maintenance and operations of the system must be submitted in accordance with section 1.9.3. Since disapproved systems may no longer be supported by the manufacturer in Idaho, the requirement for the service provider to be endorsed by the manufacturer is waived.

Owners of disapproved ETPS units that are no longer on the approved ETPS product list that fail to have their units maintained by an approved service provider and or fail to submit an annual report will may be considered failed and subject to enforcement action.
1.5 Installer’s Registration Permit and Service Provider Certification.

Revision: April 5, 2017

An installer is considered any person, corporation, or firm engaged in the business of excavation for, or the construction of, subsurface sewage disposal systems (IDAPA 58.01.03.003.19). A service provider is any person, corporation, or firm engaged in the business of providing operation, maintenance, and monitoring of specific complex alternative systems identified by the Director in the state of Idaho (IDAPA 58.01.03.003.30). Per IDAPA 58.01.03.006.01, Every all installers and service provider shall secure from the Director an installer’s registration permit must obtain either a standard/basic or complex 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. These permits and certification may be obtained from any health district in the state and may be used for installing subsurface sewage disposal systems throughout the state regardless of the health district through which the registration permit was obtained. Standard/basic installer’s registration permit holders are limited in the type of subsurface sewage disposal systems that may be installed. Complex alternative installer’s registration permit holders may install all systems that are allowed by the standard/basic registration permit and all of the following complex alternative systems:

- At-grade soil absorption system
- Drip distribution systems
- Evapotranspiration and evapotranspiration/infiltrative systems
- Experimental systems
- Extended treatment package systems
- Pressurized gray water systems
- Individual lagoons
- Pressure distribution or transport systems
- Recirculating gravel filters
- Intermittent sand filters
- Pretreated enveloped in-trench sand filters
- Pressurized in-trench sand filters
- Sand mound
- Subsurface flow constructed wetland
- Two-cell infiltrative systems
- Drainfield remediation components
- Large soil absorption systems

A service provider certification is required to perform operation, maintenance, or monitoring of specific Director identified complex alternative systems.
1.5.1 **Initial Installer's Registration Permit Issuance and Service Provider Certification Application, Bond, Fee, Training, and Exam**

To obtain an initial installer’s registration permit or service provider certification, the prospective applicant shall complete the following:

1. Submit an installer registration permit application or a service provider certification application to one of the health districts (IDAPA 58.01.03.006.04).
2. Submit a bond to the health district in a form approved by DEQ and in the sum applicable to the permit type or certification sought as specified in IDAPA 58.01.03.006.05.
3. Pay the applicable permit or certification application fee as set by the individual health district’s board of health (fees may vary from district to district based on program costs).
4. The applicant shall attend a scheduled installer training class or view the installer video prior to taking the required installer examination.
5. The applicant seeking certification as a service provider shall also provide annual documentation of manufacturer specific training, as required by 58.01.03.006.06.a.
6. Pass the installer or service provider examination administered by the health district with a score of 70% or higher (IDAPA 58.01.03.006.02).

1.5.2 **Installer Registration Permits and Certifications Required Annually Renewal**

All installer registration permits and service provider certifications shall be renewed annually (IDAPA 58.01.03.006.03). To renew an installer registration permit or service provider certification, the following items must be completed:

1. The health district issuing the registration permit or service provider certification must receive items 1 through 3 as described in section 1.5.1. If renewing service provider certification, item number 5 in section 1.5.1 above is also needed.
   a. A bond continuation form may be substituted in lieu of a new bond upon registration permit or certification renewal.
   b. If the installer registration permit is to be upgraded from a basic/standard registration permit to a complex alternative system registration permit at the time of renewal, then the complex installer shall attend a complex class or video, and the complex installer examination shall also be taken.
2. The applicant must attend a refresher course at least every third year meeting the requirements as described in section 1.5.2.1. *Individuals holding both a complex installer registration permit and service provider certification shall attend one refresher course for the complex installer registration permit and another course for the service provider certification. Installer and service provider refresher courses are not interchangeable.*
1.5.2.1 Refresher Course Requirements

Installer or service provider refresher (continuing education) courses must be attended every 3 years to renew an installer registration permit or service provider certification per IDAPA 58.01.03.006.03. All refresher courses used to fulfill the refresher course requirements for an installer’s registration permit or service provider certification must be approved by DEQ. Installer refresher courses delivered by the health district or DEQ are approved courses. All other courses proposed to be held by non-DEQ or health district organizations to fulfill the refresher course requirements must submit an agenda and curriculum to DEQ’s on-site wastewater coordinator for review prior to holding the course. Courses held to fulfill the refresher course requirements of IDAPA 58.01.03.006.03 must meet the following:

- Be based on the most recent version of IDAPA 58.01.03 and the TGM.
- Contain information on recent updates to the TGM as approved by the TGC.
- Not contain manufacturer specific information.
- Have an agenda capable of filling a minimum of a 4-hour course.

Refresher courses may also contain the following:

- Health district information specific to the subsurface sewage disposal program.
- Discussion on issues related to the subsurface sewage disposal program identified by the health districts that need to be addressed with the installers or service providers.
- Presentations by non-health district or DEQ personnel as long as the presentations are not manufacturer specific.
- Other information as approved by DEQ.

Sign-in sheets should be maintained for all courses and should be filled out at the start and near the end of the course. Upon completion of the course, the course provider should provide the installer or service provider a certificate of completion that includes the course date, time attended, and course holder. Health districts should maintain a copy of the most current certificate in each installer or service provider’s file. For courses attended by an installer or service provider that are not held by the health district they are licensed through, it is the installer or service provider’s responsibility to provide the health district with a copy of their course completion certificate. If installers or service providers cannot attend a refresher course, they may meet the permit issuance requirement by completing the process described in section 1.5.2.2.

1.5.2.2 Refresher Course Substitution

If installers or service providers cannot attend an approved refresher course to renew their registration permit or certification, they may complete the following:

1. Schedule a time with the permitting health district to watch a health district-approved video that meets the requirements of section 1.5.2.1.

2. If installers or service providers cannot attend an in-person class for 3 consecutive years to renew their installer registration permit or service provider certification, installers and service providers must watch the video referred to above and retake the installer or certification exam that applies to the permit_type or certification sought for renewal.
1.5.3 Service Provider Responsibilities

All certified service providers, who provide operation, maintenance, or monitoring for any specific complex alternative system, are responsible for compliance with each of these rules that are relevant to those services. Additionally, each certified service provider shall:

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. If a system manufacturer is no longer in business, that manufacturer-specific training is not required.

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

c. Submit all operation, maintenance, and monitoring records in the form of an annual report, by US Mail, 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 58.01.03-005.14. The annual reports shall be provided to the Director by the timeframe specified in the Technical Guidance Manual 1.9.3 for the specific complex alternative system for which operation, maintenance, or monitoring is required. Annual report submittals may include more than one individual real property owner.

1.5.4 Installer’s Registration Permit Exemption

An installer’s registration permit is not required for the following (IDAPA 58.01.03.006.06):

1. Any person, corporation, or firm constructing a central or municipal subsurface sewage disposal system if that person, corporation, or firm is a licensed public works contractor, is experienced in the type of system to be installed, and is under the direction of a PE licensed in Idaho.

2. Any property owner installing their own standard or basic alternative system.
   a. Property owners installing a subsurface sewage disposal system on their property under the property owner exemption must perform all work related to the excavation and must help and supervise all aspects of construction for the system.
   b. Commercial and industrial property owners and government entities are also allowed the exemption from an installer’s registration permit for work performed on standard or basic alternative systems installed on land owned by the entity. The entity may utilize their staff and must own or rent the equipment to install the system.
The installer’s registration permit exemption does not apply under the following scenarios:

1. The excavation and construction of the system are performed by an outside contractor or individual that is not the property owner.
2. The installer is installing a complex alternative system and is not a licensed public works contractor under the direction of a PE.

1.5.5 **Installer’s Registration Permit or Service Provider Certification Revocation**

All permitted subsurface sewage disposal installers and service providers must comply with IDAPA 58.01.03.002.04. Failure to comply with these rules may result in the revocation of an installer’s registration permit or service provider certification for the remainder of the current permit cycle. Permit or certification revocation may be initiated by any health district regardless of where an installer or service provider obtained their registration permit or certification.
Appendix D

1.6 Nonprofit Corporations Service Provider

Revision: March 20, 2015

Nonprofit corporations (entities) that manage large soil absorption systems, extended treatment, experimental systems, or any other complex system, which the Director deems a maintenance entity is required to manage, must guarantee that they will be responsible for the system and be available to provide operation and maintenance. This section provides guidance for a nonprofit corporation to meet this requirement. If an O&M entity is set up to provide operation and maintenance for ETPSs (IDAPA 58.01.03.009.02 and 58.01.03.009.03) or large soil absorption systems (IDAPA 58.01.03.013.07.c) according to the following minimum elements, the maintenance entity will likely be approved by the Director. These minimum elements provide assurance that operation and maintenance, as conditioned for these particular systems by the Director, occurs. Other O&M entity elements may be acceptable on a case-by-case basis depending upon the maintenance needs of an entity. Elements not included within this guidance section will be evaluated on a case-by-case basis. A service provider is any person, corporation, or firm engaged in the business of providing operations maintenance, and monitoring (OMM) of specific (listed below) complex alternative systems in the State of Idaho (IDAPA 58.10.03.003.30).

Complex Alternative Systems requiring Service Providers for OMM:

- Extended Treatment Package Systems
- Recirculating Gravel Filters

1.6.1 Required Nonprofit Incorporation Elements Extended Treatment Package System (ETPS) OMM

Beginning July 1, 2017, real property owners served by an ETPS are no longer required to be members of a non-profit operation and maintenance entity. To meet the operation, maintenance and monitoring requirements of their ETPS, real property owners shall retain the services of a service provider approved by DEQ (IDAPA 58.01.03.006.10.b).

Real property owners with member agreements and easements recorded with their county as a condition of subsurface sewage disposal permit issuance, may seek to remove those recorded documents at their own expense.

The following elements must be included within the nonprofit entity’s articles of incorporation or bylaws:

1. The nonprofit organization should be incorporated according to Idaho Code §30-3.
2. The articles of incorporation shall include a requirement that any changes to the entity’s articles of incorporation or bylaws shall be approved by DEQ’s Water Quality Division Administrator (Director) or designee per Idaho Code §30-3-99. The Director shall provide the nonprofit entity approval in writing of any changes to the articles of incorporation or bylaws that are not in conflict with section 1.6 or 1.9 of the TGM.

3. Membership should be limited to property owners only.

4. Voting should be limited to one parcel/one full membership/one vote.

5. Voting rights should be restricted to members with improved property.

6. Voting rights should not be cancelled.

   Exception is allowed in the event that an ETPS is disconnected and removed from the property as approved by the Director.

7. Purposes of the organization should be clearly defined in the articles of incorporation.

8. The nonprofit entity should hold an annual meeting of the membership.

9. Funds generated are to operate specific functions and should be restricted for use to the specific purpose. Those purposes should be defined in the bylaws or associated membership agreement.

10. Annual financial reports should be made available to the membership upon request by individual members and through the annual membership meeting.

11. Multiple-purpose organization funds generated are to be separately maintained, and funds from one account should not be available for another account’s use.

12. The nonprofit entity may own the system(s) it intends to maintain and must have an access easement in place.

   Access easements for ETPSs should be executed through a membership agreement as outlined in section 1.6.3.

13. Membership (and shares) in the nonprofit entity must run with the land, and successive owners must acquire the preceding owner’s membership or voting share(s).

14. The nonprofit entity should provide the purchaser and any new member with a copy of the articles of incorporation, bylaws, covenants, and contracts (i.e., membership agreement) with the entity.

15. There should be no provisions restricting ownership of improved property.

16. The nonprofit entity should be capable of raising revenue by setting and collecting user charges.

17. Board of director requirements:

   a. For ETPS nonprofit O&M entities, the board of directors should contain one permanent position required to be filled by a corporate officer, general partner, or owner of the manufacturer of the treatment technology. The only exemption to this requirement shall be for cases where manufacturers are no longer in business. In this case, the existing board members and associated membership shall vote in a new board member to ensure that the minimum position requirement is fulfilled.
b. The board of directors should include a minimum of three board member positions.

18. The board of directors should be able to raise revenue for emergency operation and maintenance of community-owned systems without majority vote.

19. The nonprofit entity must be capable of suing and of being sued, maintain the capability to impose liens on those members (shareholders) who become delinquent in user charges, and suspend services, providing such suspension will not jeopardize other members' use.

20. The nonprofit entity should provide an O&M manual that shall be approved by the Director.

21. The O&M manual should be provided to all new members for ETPSs and shall include the monitoring requirements as outlined in section 1.9.2.

22. Conditions for dissolution of the nonprofit entity should be specified. Dissolution should be limited to connection to a municipal wastewater treatment facility or merger with another approved nonprofit entity with management capability.

23. Except as provided in item 22 above, the nonprofit entity should not be able to vote itself out of existence.

24. For nonprofit entities, a third party (i.e., maintenance entity or service provider) should be identified to execute the specified operations and maintenance functions.

25. Service providers for nonprofit entities overseeing ETPSs should be certified in writing by the manufacturer for the servicing of their technology. The certification should be provided to the Director prior to approval.

26. The nonprofit entity should be able to plan and control how and at what time additional service functions will be extended or added.

27. The articles of incorporation and/or bylaws should provide for proxy voting.

28. Proxies should not be binding on new purchasers.

29. For community systems, the project developer should be required to contribute to the operation and maintenance until the nonprofit entity is self-sustaining. Consider either a specified period of time or when a specified number of lots have been sold.

30. The nonprofit entity should have a defined service area boundary.

1. Notification Requirements

The nonprofit entity shall notify the Director for any of the following reasons:

1. Content changes to the articles of incorporation, bylaws, or membership agreements that occur after initial approval by the Director shall be provided to the Director for review and approval prior to implementation. Changes that conflict with any portion of section 1.6.1 should not be approved.

2. Changes occur to the board of directors.

3. Service provider(s) are changed.

4. Sampling plan changes or adjustments are necessary.
2. Membership Agreements for Extended Treatment Package Systems

The membership agreement is separate from the articles of incorporation and bylaws for the nonprofit entity but is required for membership in the nonprofit entity and to ensure that proper operation and maintenance will be performed (IDAPA 58.01.03.009.03). Membership agreements should contain the following elements:

1. The title of the membership agreement should include the words lien notice, access easement, member agreement, and the name of the nonprofit entity.
2. The contact information for the nonprofit entity should be list a mailing address and phone number.
3. A statement that annual fees will be assessed for services rendered by the nonprofit entity should be included.
4. The agreement should describe the exact services that are and are not included within the agreement (e.g., service, maintenance, annual testing, repairs, and annual report submission).
5. The access easement language should be included.
6. A description of the lien process should be included.
7. The legal description of the property should be included.
8. A requirement that upon each sale of the property the buyer will sign an acknowledgement that they have reviewed the membership agreement and its requirements are understood.
9. The agreement should state that the current property owner must disclose the terms of the membership agreement prior to any sales transaction of the property.

3. Sampling Plans for Extended Treatment Package Systems

Nonprofit entities formed for the purpose of maintaining, servicing, and testing ETPSs shall develop a sampling plan for effluent testing (IDAPA 58.01.03.009.03). Sampling plans should contain the following elements:

1. Signed letter from the manufacturer of the treatment technology certifying that the sampling method provided is acceptable for their technology.
2. Sampling location and design that is located after the secondary treatment unit for both gravity and pressurized systems.
4. Method to collect all samples from a free-flowing effluent pipe. Hose or portable water sources may be used to induce flowing conditions but should be used as a last resort when access to a water source within the home is not available. If a hose or portable water source is used to induce a flowing condition, the water source should discharge into the cleanout between the structure and primary septic tank. Cross-connection and backflow prevention should be considered if hoses are used to induce flow.
5. Sample point cleaning and flushing procedures prior to sample collection.
6. Any necessary sampling device calibration techniques, equipment, and reagents.
7. Effluent field sample indicators that may be recommended for evaluation prior to grab sample collection. These indicators should provide indication that the treatment unit is operating properly.
1.9 **Managed Operation, Maintenance, and Monitoring**

Revision: August 18, 2016

Operation, maintenance, and monitoring (OMM) may be required for any system specified by the Director. The Director may specify OMM as a condition of a product’s design approval (IDAPA 58.01.03.009.03) or as a condition of issuing a subsurface sewage disposal permit (IDAPA 58.01.03.005.14) to ensure protection of public health and the environment. This section lists the Director-specified OMM requirements.

Managed OMM is performed by an O&M entity (section 1.6) or a certified service provider (section 1.6).

### 1.9.1 Managed Operation and Maintenance

Operation and maintenance refers to direct access to a subsurface sewage disposal system to provide planned or reactive activities that are necessary to ensure efficiency, effectiveness, and sustainability of the system. Managed operation and maintenance is required for systems the Director has determined need professional oversight to ensure the systems operate according to the rules (IDAPA 58.01.03) and system-specific recommendations provided by the TGC (IDAPA 58.01.03.004.10). When managed operation and maintenance is specified for a system, the following requirements shall be met (IDAPA 58.01.03.005.14 and 58.01.03.009.03):

1. **Annual Maintenance** shall be performed on the system as described in the manufacturer’s or design engineer’s O&M manual submitted under sections 1.4, 1.6, or the specific alternative system’s guidance section.
   a. Manufactured systems that are incorporated into an engineered design shall also follow the minimum O&M requirements set by the design engineer.
   b. Additional maintenance not specified in an O&M manual may be required to ensure the system functions properly.

2. Records for each O&M visit shall be kept and should include the following information for the primary maintenance visit:
   a. Date and time.
   b. Observation for objectionable odors.
   c. Observation for surfacing of effluent from the system or drainfield.
   d. Notation as to whether the system was pumped since the last O&M visit including the portions of the system pumped, pumping date, and volume.
   e. Sludge depth and scum layer thickness in the system’s tanks and/or treatment unit.
   f. If responding to an alarm event, provide the cause of the alarm and any maintenance necessary to address the alarm situation.
   g. Field testing results for any system effluent quality indicators included in the system’s approved sampling plan (if required) or as recommended in section 1.9.2(2).
   h. Record of any cleaning and lubrication.
i. Notation of any adjustments to control settings or equipment.

j. Test results for pumps, switches, alarms, and blowers.

k. Notation of any equipment or component failures.

l. Equipment or component replacement including the reason for replacement.

m. Recommendations for future service or maintenance and the reason for the recommendations.

n. Any maintenance occurring after the primary maintenance visit should only record and address the reason for the visit and the associated activities that occur.

1.9.2 Managed Monitoring

Monitoring refers to the requirement for effluent sampling and analysis of wastewater discharged from a treatment system prior to the effluent entering the drainfield. Managed monitoring is required for systems that the Director has determined need field verification of the system’s performance to ensure effluent quality limits are being met. When managed monitoring is specified for a system, the following requirements shall be met (IDAPA 58.01.03.005.14 and 58.01.03.009.03):

1. Effluent quality shall be monitored annually.

2. Annual monitoring included in the annual report must occur within the reporting period (Figure 1-1).

3. Effluent monitoring may be done for a group of treatment systems from a common dosing chamber resulting in the sample from the common dosing chamber being applied to all of the associated systems if:

   a. **Annual Operation** and maintenance is performed on an annual basis with a frequency outlined in the manufacturer’s O&M manual and documented as described in section 1.9.1 for each individual treatment system, and O&M records are submitted for each individual treatment system as described in section 1.9.3.

   b. All of the treatment systems connected to the common dosing chamber are from the same manufacturer or are the same engineered alternative treatment system design.

      1) If there are multiple manufacturers’ units or multiple engineered alternative treatment system designs connected to the common dosing chamber, then each system must be monitored individually.

      2) If there are multiple common dosing chambers discharging to a single drainfield, then each common dosing chamber must be monitored.

      3) If there are any individual manufacturers’ units or engineered alternative treatment system designs discharging to the same system independently of a common dosing chamber, then those individual units must also be monitored.

   c. If the effluent sample from the common dosing chamber does not meet any one of the required effluent constituent levels for the system, then each individual treatment system connected to the common dosing chamber must be sampled independently for the failing constituent to determine which individual systems do not meet the effluent monitoring requirements.
1) Individual systems that do not meet the effluent constituent levels upon individual sampling must follow the O&M and retesting requirements described in item 10 below.

2) Individual systems that do meet the effluent constituent levels upon individual sampling do not need to continue with the O&M and retesting requirements.

4. DEQ recommends that before collecting effluent samples from a treatment system for laboratory analysis that effluent quality indicators be field tested as described in the system’s approved sampling plan. Recommendations included in this section are recommendations only and should be verified with the treatment technology manufacturer or design engineer as acceptable with their field sampling plan and as suitable effluent quality indicators. Field testing is recommended to include, but may not be limited to the following:
   b. Constituents shown in Table 1-1.

Table 1-1. Recommended field testing constituents for effluent quality indication.

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Acceptable Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6 to 9</td>
</tr>
<tr>
<td>Dissolved oxygen</td>
<td>≥2 mg/L</td>
</tr>
<tr>
<td>Turbidity</td>
<td>≤40 NTU</td>
</tr>
</tbody>
</table>

Notes: milligram per liter (mg/L); nephelometric turbidity unit (NTU)

5. Monitoring samples provided to a laboratory will analytically quantify that the treatment system is operating in compliance if samples do not exceed:
   a. 40 mg/L (40 parts per million [ppm]) for \(\text{CBOD}_5\)
   b. 45 mg/L (45 ppm) for TSS
   c. Permit-specific levels stipulated on the installation permit for nitrogen as described in item 6.
   d. Permit-specific levels stipulated on the installation permit for other constituents of concern that may be determined on a case-by-case basis.
   e. Effluent specific constituents that must be monitored for a treatment system may be specified in the treatment system-specific guidance in section 4 or determined on a case-by-case basis.

6. For those systems installed in areas of concern, including nitrogen sensitive areas, or are used to fulfill NP evaluation results and requirements, the following total nitrogen related constituents may be monitored to determine total nitrogen concentration:
   a. Total Kjeldahl nitrogen (TKN)
   b. Nitrate-nitrite nitrogen (\(\text{NO}_3+\text{NO}_2-N\))
   c. Results for total nitrogen (\(\text{TN} = \text{TKN} + [\text{NO}_3+\text{NO}_2-N]\))

7. Results for monitoring samples that exceed the stipulated levels on the installation permit indicate the treatment system is not achieving the required reduction levels.
8. Monitoring samples will be collected, stored, transported, and analyzed according to the latest version of *Standard Methods for the Examination of Water and Wastewater* (Rice et al. 2012) and other acceptable procedures:
   a. Each sample will have a chain-of-custody form, identifying, at a minimum, the sample’s source (street address or installation permit number), date and time of collection, and the person who extracted the sample.
   b. Chain-of-custody form should also specify the laboratory analyses to be performed on the sample.
   c. Sample storage and transport will take place in appropriate containers under appropriate temperature control.

9. Sample analysis will be performed by a laboratory capable of analyzing wastewater according to the acceptable standards identified in Table 1-2, and the monitoring results will be submitted as part of the annual report to the local health district.
   a. Effluent analysis shall be performed using the standards in Table 1-2 from the *Standard Methods for the Examination of Water and Wastewater* (Rice et al. 2012) or the equivalent standards from EPA.
   b. Annual reports submitted with laboratory analysis results differing from these standard methods will be rejected.

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Standard Method Number</th>
<th>EPA Method Equivalent to Standard Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total suspended solids (TSS)</td>
<td>SM 2540 D</td>
<td>—</td>
</tr>
<tr>
<td>Carbonaceous biological oxygen demand (CBOD₅)</td>
<td>SM 5210 B</td>
<td>—</td>
</tr>
<tr>
<td>Total Kjeldahl nitrogen (TKN)</td>
<td>SM 4500-Norg B</td>
<td>351.2</td>
</tr>
<tr>
<td>Nitrate-nitrite nitrogen (NO₃ + NO₂-N)</td>
<td>SM 4500-NO₃₋ F</td>
<td>353.2</td>
</tr>
</tbody>
</table>

a. Person requesting the analysis from the laboratory must specify the CBOD₅ on the chain-of-custody form.

10. Treatment systems failing to achieve the required effluent constituent levels shall require the following:
   a. Additional operation and maintenance within 15 days of the failed sample results as determined by the date provided on the laboratory form.

   If additional operation and maintenance or component replacement is necessary as determined from this service, then the reason, maintenance necessary, and dates must be provided as part of the service record.
   b. Additional sampling to demonstrate the operation and maintenance performed successfully restored the treatment system to proper operation.
   c. Sample extraction and analysis must occur within 30 days after servicing the system (as determined in item 10.a above).

   The 30-day time frame for sample extraction will begin based on the last documented O&M visit required under item 10.a above.
d. A maximum of three sampling events, within 90 days (as determined from the last documented O&M visit from item 10.a above), will be allowed to return the system to proper operation. Failure to correct the system within this time frame will result in the system being classified as a failing system (section 1.9.4.1, Figure 1-2).

e. If an annual report, as described in section 1.9.3, for a system identifies that an effluent sample fails to meet the limits stipulated on the installation permit, and the required resampling of the system did not occur, then the regulatory authority will issue the Failure to Perform Operation, Maintenance, and Resampling of Your Extended Treatment Package System letter provided in the DEQ program instruction “Extended Treatment Package System Program Letters”.[1] If resampling as described in this section does not occur by the date provided in the Failure to Resample letter, then the actions will be considered a refusal of service as described in section 1.9.5, and the enforcement procedures provided in section 1.9.5 shall be followed by the regulatory authority.

Comment [DP4]: This Instruction needs to be updated.
NOTES
Monitoring = sampling + analysis
Permit limits = effluent limits stipulated on installation permit
NOV = notice of violation

Figure 1-1. Individual treatment system sampling process.
1.9.3 Annual Reporting of Managed Operation, Maintenance, and Monitoring

The annual reporting period is from July 1 of the preceding year through June 30 of the reporting year. Annual reporting is the responsibility of the property owner, and DEQ recommends that property owners have their O&M entity or service provider compile and submit their annual report. The property owner responsible for the treatment system under IDAPA 58.01.03 shall ensure the following annual reporting requirements are met:

1. Annual report for each property owner shall include these items:
   a. A copy of the maintenance records for the reporting period as required under section 1.9.1.
   b. A copy of all laboratory records for effluent sampling as described in section 1.9.2 (if required).
   c. A copy of each chain-of-custody form associated with each effluent sample as described in section 1.9.2 (if required).

2. If an O&M entity or service provider is fulfilling annual reporting requirements for their property owners, then DEQ recommends that the following additional information be included within the annual report:
   a. A current list of all O&M entity or service provider contracted property owners within the health district to which the annual report was submitted.
   b. The property owner list should clearly identify which property owners the O&M entity or service provider is contracted with for annual reporting requirements and the status of each property owner in regards to completing the annual reporting requirements.
   c. If annual reporting requirements are not complete for any property owner who the O&M entity or service provider is responsible for providing the annual report, then an explanation should be included with that property owner’s records within the annual report.

3. Annual report exemptions
   a. A property owner may be exempt from effluent testing based upon extreme medical conditions. Annual operation and maintenance on the property owner’s treatment system shall not be exempt due to medical conditions, and record of annual operation and maintenance shall still be submitted with the member’s annual report.
   b. An O&M entity or service provider contracted by a property owner to fulfill annual reporting requirements may be exempt from reporting annual OMM for an individual property owner if that owner’s activities fall within the guidelines of section 1.9.5. The O&M entity or service provider should still report the activities described in section 1.9.5 for each property owner exempt from annual reporting based on the guidelines in section 1.9.5.

4. Annual reporting process
   a. The annual report shall be submitted to the local health district by the property owner, O&M entity, or service provider on behalf of the property owner no later than July 31 of each year for the preceding 12-month period.
The annual report shall be submitted to the local health district that issued the subsurface sewage disposal permit for the treatment system.

b. The local health district shall provide whoever submitted the annual report a written response within 45 days of receipt of the report detailing compliance or noncompliance with septic permit requirements.

1) The O&M entity or service provider should inform individual property owners of their compliance status.

2) All correspondence from the health district regarding a noncompliant annual report shall be copied to DEQ.

5. Delinquent annual reports

a. If the property owner, O&M entity, or service provider contracted to submit the property owner’s annual report does not submit the annual report by July 31 of the reporting year, then the local health district shall send the property owner, O&M entity, or service provider contracted to submit the property owner’s annual report, a reminder letter providing a secondary deadline of August 31 of the reporting year for the annual report submission. The reminder letter shall detail the report requirements and that failure to submit the annual report by the secondary deadline will result in the health district forwarding a notice of nonreport to DEQ. DEQ may seek any remedy available under IDAPA 58.01.03 including, without limitation, requiring the property owner to replace the treatment system with another system, as outlined in section 1.9.4.

b. All correspondence from the health district regarding delinquent annual reports shall be copied to DEQ.

1.9.4 Treatment System Failure, Disapproval, and Reinstatement

Commercially manufactured and alternative wastewater treatment systems must be approved by DEQ (IDAPA 58.01.03.004.10 and 58.01.03.009.01). Installation of a commercially manufactured or alternative wastewater treatment system requires a subsurface sewage disposal permit pursuant to IDAPA 58.01.03.005. As part of the alternative system approvals for commercially manufactured or alternative wastewater treatment systems, DEQ defines the specific circumstances under which the treatment systems may be installed, used, operated, and maintained within the alternative treatment system guidance (IDAPA 58.01.03.009.03 and 58.01.03.005.14).

If a commercially manufactured or alternative wastewater treatment system product is not shown to be installed, used, operated, or maintained according to DEQ requirements, then DEQ may pursue enforcement against a property owner and seek those remedies available under IDAPA 58.01.03. Enforcement and remedies against the property owner may include a determination that the treatment system has failed and the requirement that the property owner replace the treatment system with a different system authorized by DEQ. Replacement may include installing another commercially manufactured wastewater treatment system approved by DEQ, or engineering and installing another alternative system that is capable of meeting the requirements of the property owner’s subsurface sewage disposal permit. If a commercially manufactured or alternative wastewater treatment system is not shown to comply or consistently function in
compliance with IDAPA 58.01.03 and specified OMM requirements, DEQ may disapprove the commercially manufactured wastewater treatment product or classify the alternative wastewater treatment system as a failing system for failure to meet the intent of the rules related to wastewater treatment (IDAPA 58.01.03.003.13.a). Reasons for DEQ enforcement, which may include seeking remedies against a property owner or disapproval/failure classification of a commercially manufactured or alternative wastewater treatment product as outlined herein, include, but are not limited to, the following:

1. Failure to submit an annual report by the secondary deadline of August 31.
2. Annual reports for a particular commercially manufactured wastewater treatment product or alternative treatment system identify a malfunctioning system rate of 10% or more. Malfunctioning systems are defined as any system that fails to receive annual operation and maintenance or exceeds the effluent reduction levels for any constituent specified in the subsurface sewage disposal permit (i.e., TSS, CBOD₅, or TN).
3. Property owner’s commercially manufactured wastewater treatment product or alternative treatment system has been determined to be a failing system. Failing commercially manufactured wastewater treatment systems are defined in section 1.9.2.

1.9.4.1 Failing System Enforcements

The regulatory authority shall follow the procedures below after a wastewater treatment system has been determined to be a failing system (Figure 1-2):

1. When the regulatory authority is notified that a system is failing, a notice of violation (NOV) shall be issued to the property owner. The property owner shall have the opportunity to hold a compliance conference with the regulatory authority to enter into a consent order.
2. Consent orders should allow a property owner a 12-month period to return the system to proper operation or replace the failing system.
   a. Over this 12-month period, the property owner should have their O&M entity or service provider service the wastewater treatment system at least monthly.
   b. Monthly effluent samples should be taken by the O&M entity or service provider until the wastewater treatment system passes 3 consecutive monthly samples.
      Three consecutive passing monthly samples taken 1 month apart would be cause for the regulatory authority to terminate the consent order and NOV, and reclassify the system as compliant.
   c. OMM records as described in sections 1.9.1 and 1.9.2 should be submitted to the regulatory authority on a monthly basis as part of the consent order.
   d. If the commercially manufactured wastewater treatment system cannot produce 3 consecutive monthly samples over the 12-month period, then the system may be replaced with another alternative system that meets the effluent quality requirements based upon applicable site conditions.
   e. Replacement systems must meet the treatment requirements of the original septic permit. Appropriate replacement systems will be determined on a case-by-case basis.
NOTES

NOV = notice of violation
O&M = operation and maintenance
OMM = operation, maintenance, and monitoring
Permit limits = effluent limits specified on installation permit

System has failed 3 consecutive samples over a 90 day period. System is now in failing status.

Issue NOV with option for compliance conference

Property owner schedules compliance conference

Yes

Develop OMM and sampling plan as part of a consent order, not to exceed 12 months, requiring:
- Monthly O&M
- Monthly monitoring
- Monthly reporting of OMM records

No

Proceed with Legal Process to have property owner replace treatment component of septic system*

System produces 3 consecutive monthly samples that meet permit limits at any time during the 12 month period

Yes

Terminate the consent order and reclassify the ETPS system as compliant.

No

Proceed with Legal Process to have property owner replace treatment component of septic system*

Property owner returns to normal O&M and sampling schedule

* Replacement systems must be capable of meeting the property owner’s permit requirements.
- Acceptable replacement systems will be determined on a case-by-case basis.
- Property owners should be presented with all feasible options for replacement based upon their permit requirements.

Figure 1-2. Failing wastewater treatment system enforcement flowchart.
1.9.4.2 Commercially Manufactured Wastewater Treatment System Disapproval

In addition to determining a particular system is a failing system as described in section 1.9.4.1, if DEQ determines that a commercially manufactured wastewater treatment system cannot consistently function in compliance with IDAPA 58.01.03, then DEQ may disapprove the product (IDAPA 58.01.03.009.04). A written notice of DEQ’s intent to disapprove the commercially manufactured wastewater treatment system will be provided following Idaho Code §67-52 and sent to the wastewater treatment system manufacturer, O&M entity or service provider, and health districts. The commercially manufactured wastewater treatment system manufacturer will be allowed an opportunity to respond before product disapproval. Upon disapproval of a manufacturer’s wastewater treatment system product line, the health districts shall not issue a septic permit on new applications for the commercially manufactured wastewater treatment system product line from the disapproved manufacturer. OMM requirements for existing installations of the commercially manufactured wastewater treatment system product line will not be affected by the product disapproval (Figure 1-3) per section 1.4.2.2.3.

1.9.4.3 Commercially Manufactured Wastewater Treatment System Reinstatement

Upon commercially manufactured wastewater treatment system product disapproval, DEQ will provide the manufacturer the opportunity to enter into a corrective action plan (CAP) for product reinstatement. The CAP should establish the time frame to return the noncomplying or failing systems to proper operation. The product disapproval will remain in effect until the malfunctioning and failing system rate for the manufacturer’s technology is below 10%. Manufactures will resubmit for Provisional Approval per section 1.4.2.2.1.

1.9.5 Property Owner Refusal of Operation, Maintenance, or Monitoring Requirements

Individual property owners are responsible for ensuring their DEQ approved O&M entity or service provider can meet the required annual OMM requirements for their wastewater treatment system. Failure of an individual property owner to permit the O&M entity or service provider from carrying out the required OMM services is considered a violation of IDAPA 58.01.03.012.01. Actions engaged in by a property owner toward the O&M entity or service provider that may be considered a refusal of service action include, but are not limited to, the following:

1. Refusal to allow annual operation, maintenance, or monitoring (e.g., refusal to pay annual fees, refusal to allow access for O&M activities), contract with a DEQ approved service provider to perform annual OMM services.

2. Refusal to maintain the wastewater treatment system in operating condition (e.g., refusal to replace broken components or refusal to provide electricity to the unit).
3. If the refusal of service continues through the annual reporting period, then the O&M entity or service provider should substitute and submit the following documents in the annual report for property owners refusing service that the O&M is contracted with:
   a. Copies of all correspondence and associated certified mail receipts documenting the property owner’s receipt of the correspondence regarding the refusal of service. Refusal of service by a property owner through nonpayment should include documentation of a lien being placed on the individual’s property.
   b. If the documentation is not included within the annual report, there will be insufficient documentation of the property owner’s refusal to allow OMM, and therefore, the lack of OMM may count against the malfunctioning rate for the wastewater treatment system product. Failure to submit or have their contracted service provider submit the annual report.
Figure 1-3. ETPS product disapproval process based upon annual reports.

Total System Statistics:
Calculate the manufacturer’s percentage of malfunctioning and failing systems (%NC).
\[
\%NC = 100 \times \frac{\text{number of malfunctioning and failing systems}}{\text{total number of systems}}
\]

NOTES
O&M = operational maintenance
%NC = percentage of noncompliant systems
Noncompliant = malfunctioning and failing systems

Is %NC ≥ 10%?

Yes

DEQ disapproves manufacturer's product following section 1.8.4.2

No

Systems Data Set:
Combine ALL system's lab analyses and service reports

Annual Report:
Prepare and submit annual report following section 1.9.3.
1. All systems report
2. %NC < 10%

Noncompliant system:
1. Consult with homeowner on the following:
   - medication usage
   - water and product usage
2. Perform manufacturer recommended O&M
3. Sample within 30 days for failing constituents(s)

Does the grab sample exceed the permit limits?

Functioning systems

If %NC is less than 10% and manufacturer's product is currently disapproved, restate manufacturer's product.
1.9.5.1 Refusal of Service-Failure to Perform Proper Required OMM and Reporting Enforcement Procedures

Upon receipt of an annual report showing that failure of an individual property owner to have refused to allow maintenance and/or monitoring as described in section 1.9.5, the following guidelines apply:

1. The regulatory authority shall issue Letter 1 B with the associated enclosure provided in the DEQ program instruction, “Extended Treatment Package System Education and Enforcement Letters.”
   a. Letter 1 B shall be sent to the property owner by certified mail and copied to the associated O&M entity or service provider.
   b. The property owner is responsible for working with the regulatory authority and the O&M entity or service provider to address their delinquent responsibilities. The O&M entity or service provider should contact the regulatory authority and associated property owner 30 days after receiving Letter 1 to inform the regulatory authority of the property owner’s voluntary compliance status.

2. If the property owner fails to voluntarily comply with the 30-day time frame, then the regulatory authority shall issue Letter 2 C provided in the DEQ program directive, “Extended Treatment Package System Education and Enforcement Letters.”
   a. Letter 2 shall be sent to the property owner by certified mail and copied to the associated O&M entity or service provider.
   b. The property owner is responsible for working with the regulatory authority and their O&M entity or service provider to address their delinquent responsibilities. The O&M entity or service provider should contact the regulatory authority and associated property owner by the voluntary compliance date provided in Letter 2 to inform the regulatory authority of the property owner’s voluntary compliance status.

3. If the property owner fails to voluntarily comply by the date provided in Letter 2 C, then the regulatory authority may issue an NOV to the property owner submit an Enforcement Referral Memorandum to DEQ to ensure compliance with the property owner’s subsurface sewage disposal permit requirements.

1.9.6 Service Provider Transition

In recognition of the need to create a more effective and useful means of approving and overseeing service providers and expanded choices of service for private property owners, the Idaho State Legislature approved Docket No. 58-0103-1501. Effective July 1, 2017 ETPSs will be operated and maintained by approved service providers (section 1.6).

The first ETPS annual reports under the service provider model shall be submitted by July 31, 2018. This provides a one year transition for property owners to contract with an approved service provider, have proper operations and maintenance conducted on their units and for completed annual reports to be submitted. DEQ and the Health Districts will work together to inform property owners with installed ETPS of the changes in OMM responsibilities.
1.9.6.1 Transition Sampling and Maintenance Requirements

General approved ETPS must be maintained by an approved service provider, sampled if permitted for Nitrogen less than 27 mg/l and have annual reports submitted per section 1.4.2.2.2.

ETPS with Provisional approval permitted before July 1, 2016 must be maintained by an approved service provider (with or without the manufactures endorsement) and have an annual report submitted.

For ETPS with Provisional approval permitted after July 1, 2016 the maintenance, sampling and reporting is the responsibility of the system manufacturer per section 1.4.2.2.1.

Disapproved ETPS must be maintained by an approved service provider (manufacturer’s endorsement not required) and have an annual report submitted per section 1.4.2.2.3.

1.9.6.2 Transition Enforcement Protocol

A transitional enforcement protocol will be utilized for ETPS installations required to submit annual reports on July 31, 2018 through July 31, 2020. After education and outreach efforts by DEQ and the Health Districts, those property owners who refuse service, fail to submit annual reports or have general approved systems permitted for Nitrogen reduction less than 27 mg/l that are not meeting permit requirements, will be referred by the Health Districts to DEQ for enforcement.

During this transition period, all letters required by the DEQ Subsurface Sewage Disposal EPGTPS Program Instruction will be produced and mailed by DEQ.

Only after systems referred to DEQ for enforcement have been brought back into full regulatory compliance will the Health Districts be responsible for monitoring and future compliance.
Appendix F

4.8 Extended Treatment Package System

Revision: August 18, 2016 March 13, 2017
Installer registration permit: Complex
Licensed professional engineer required: No

4.8.1 Description

Manufactured and packaged mechanical treatment devices that provide additional biological treatment to septic tank effluent. Such units may use extended aeration, contact stabilization, rotating biological contact, trickling filters, or other approved methods to achieve enhanced treatment after primary clarification occurs in an appropriately sized septic tank. These systems provide secondary wastewater treatment capable of yielding high-quality effluent suitable for discharge in environmentally sensitive areas.

Property owners that install an ETPS unit must choose an O&M entity Service Provider capable of meeting their OMM requirements. Verification of the chosen O&M entity Service Provider shall be submitted with the subsurface sewage disposal permit application ensuring that the OMM (effluent quality testing) will occur (IDAPA 58.01.03.005.04.k). Property owners that do not want to meet the OMM requirements must meet the requirements of section 4.8.2(2) or choose another alternative system that will meet the conditions required for subsurface sewage disposal permit issuance.

4.8.2 Approval Conditions

1. A maintenance entity Service Provider will be available to manage system OMM as described in section 1.9.1 and 1.9.2 (IDAPA 58.01.03.005.14). The OMM is to be performed by an approved O&M entity Service Provider (IDAPA 58.01.03.009.03006.06). Approval of the O&M entity Service Provider will be made by the Director before permit issuance. Approvable entities may include, but are not limited to, the following:
   a. Municipal wastewater treatment departments
   b. Water or sewer districts
   c. Licensed complex installer with a service provider license certification

An O&M entity membership agreement and an accompanying general access easement service provider contract should be entered into between the property owner and the O&M entity Service Provider, as a necessary condition for issuing an installation permit (IDAPA 58.01.03.005.04.k). This agreement and the easement will be recorded with the county as a condition for issuing an installation permit.
2. ETPSs may be used for properties without an approved O&M Entity only under all of the following conditions:
   a. The site is acceptable for a standard system. All separation distances from ground water, surface water, and limiting layers shall be met.
   b. Enough land is available, and suitable, for two full-size drainfields. One complete full-size drainfield shall be installed.

3. Final effluent disposal through subsurface discharge will meet the following criteria:
   a. If an 85% reduction or better in CBOD₅ and TSS can be achieved, the effluent may be discharged to a drainfield satisfying Section 4.21.5 “Drainfield Trenches” application rate criteria and vertical setback requirements.
      1) Otherwise, the effluent must be discharged to a standard drainfield, sized as directed in IDAPA 58.01.03.008 (section 7.1), and meet the required effective soil depth for standard drainfields as directed in IDAPA 58.01.03.008.02.
      2) Additional drainfield-sizing reduction granted for use of gravelless trench products is not allowed.
   b. The 85% reduction will be accepted as being met if the effluent exhibits a quantitative value obtained from laboratory analysis not to exceed 40 mg/L (40 ppm) CBOD₅ and 45 mg/L (45 ppm) TSS.
   c. TN reduction may be required for ETPS units located in an area of concern as determined through an NP evaluation. Permit-specific TN reduction levels will be determined through the NP evaluation. Results for TN are determined through the addition of TKN and nitrate-nitrite nitrogen (TN = TKN + [NO₃+NO₂-N]). TN reduction will be accepted as being met if the effluent exhibits a quantitative value obtained from laboratory analysis not to exceed the TN level stipulated on the subsurface sewage disposal permit.

4. Annual effluent monitoring and reporting is required for all ETPS units that discharge to a reduced size drainfield, to a drainfield with a reduced separation distance to limiting layers, and/or to a drainfield located in an environmentally sensitive area (area of concern). Monitoring shall meet the requirements of section 1.9.2. Reporting shall meet the requirements of section 1.9.3.

5. The ETPS will be preceded by an appropriately sized septic tank.
   a. The septic tank may be either a separate septic tank, a volume integral with the system’s package, or a combination of internal clarifier volume coupled with an external tank.
   b. The septic tank shall provide the minimum tank capacity for residential facilities as specified in IDAPA 58.01.03.007.07.a, or for nonresidential facilities, a minimum of 2 days of hydraulic residence time (HRT) as stipulated in IDAPA 58.01.03.007.07.b.
   c. Timed dosing from the clarifier to the aerobic treatment unit is preferred and highly recommended to maintain a constant source of nutrients for the system’s aerobic microbes.
4.8.3 ETPS Unit Design

Procedures relating to design are required by IDAPA 53.01.03 (section 7.1) or may be required as permit conditions, as appropriate, to ensure protection of public health and the environment.

1. All materials will be durable, corrosion resistant, and designed for the intended use.
2. All electrical connections completed on site shall comply with the National Fire Protection Association (NFPA) Standard NFPA 70, National Electrical Code, as required by the Idaho Division of Building Safety, Electrical Division.
3. Design for each specific application should be provided by a PE licensed in Idaho.
4. Manufactured and packaged mechanical treatment devices will be required to prove that the specified equipment model meets the ETPS product approval policy outlined in section 1.4.2.2.

4.8.4 Construction

Procedures relating to construction are required by IDAPA 58.01.03 (section 7.1) or may be required as permit conditions, as appropriate, to ensure the protection of public health and the environment.

1. Installation
   a. A licensed complex system installer shall be required to install an ETPS unit and all other portions of the septic system connected to the ETPS unit or that the ETPS unit discharges to (IDAPA 58.01.03.006.01.b).
   b. A public works contractor may install an ETPS unit if they are under the direct supervision of a PE licensed in Idaho.
   c. Licensed plumbers and electricians will be required to install specific devices and components for proper system operation. If the device requires any on-site fabrication or component assembly, a public works contractor should be used.
   d. A sample port will be installed in the effluent line after the aerobic treatment unit. Figure 4-13 shows the placement of a sampling port after the ETPS unit, and Figure 4-14 shows the sample port and drainfield after the septic and treatment tank.

![Sample Port Example](image-url)
2. Within 30 days of completing the installation, the property owner shall provide certification to the regulatory authority, from their [O&M entityManufacturer's Representative], that the system has been installed and is operating in accordance with the manufacturer’s recommendations (IDAPA 58.01.03.005.15).
   a. A statement requiring the submission of the installation verification form described above shall be written on the face of the subsurface sewage disposal permit.
   b. The regulatory authority 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 ETPS unit installed.