



Extended Treatment Package System Subcommittee Meeting

Minutes

Wednesday, March 27, 2013

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

TGC-ETPS ATTENDEES:

Tyler Fortunati, R.E.H.S., On-Site Wastewater Coordinator, DEQ
Bob Erickson, R.E.H.S., Senior Environmental Health Specialist, South Central Public Health District
Ryan Spiers, Alternative Wastewater Systems, LLC
David Loper, R.E.H.S., Environmental Health Director, Southwest District Health Department
Brent Gee, Effluent Technologies, Inc.
James Bell, Bio-Microbics, Inc. (via telephone and GoToMeeting)
Raymond Keating, R.E.H.S., Environmental Health Specialist, Eastern Idaho Public Health District (via telephone and GoToMeeting)
Jay Loveland, R.E.H.S., Senior Environmental Health Specialist, Panhandle Health District (via telephone and GoToMeeting)

GUESTS:

Chas Ariss, P.E., Wastewater Engineering Manager, DEQ
Steve Wielang, Bedrock Excavating
PaRee Godsill, Everlasting Extended Treatment, Inc.
Kellye Eager, Environmental Health Director, Eastern Idaho Public Health Department (via telephone and GoToMeeting)
Scott Hendrick, Norweco, Inc. (via telephone and GoToMeeting)
Janette Young, Administrative Assistant, DEQ

CALL TO ORDER/ROLL CALL:

Meeting called to order at 9:15 a.m.
Committee members and guests introduced themselves.

MEETING MINUTES:

February 21, 2013 Draft ETPS Subcommittee Minutes: Review, Amend, or Approve

Motion: David Loper moved to accept minutes as presented.

Second: Bob Erickson.



Voice Vote: Motion carried unanimously.

Minutes will post as final. See DEQ webpage and **Appendix A**.

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

No public comments were submitted during the allotted agenda timeframe.

Update on Action Items from February 21, 2013 ETPS Subcommittee Meeting (Appendix B)

- **Review of sampling port photos from NSF testing facility**
James Bell presented the information on sampling ports and photos from the NSF testing facility. Discussion was held on grab samples versus composite samples, sampling from the ETPS unit versus a sampling port, and different ETPS units' ability to eliminate solids before discharging to drainfields.
- **Effect of removing refusal of service members on O&M Entity compliance rates**
The effect of removing members that would be considered refusing service under proposed changes on the O&M Entity compliance rates in regards to the 90% passing statistic was discussed. Tyler Fortunati presented information on the O&M Entities, currently eight out of the 12 are suspended, and of these only one of the eight sent in their annual report. The compliance of this submitted report would not be affected by removal of refusal of service members. Data from another one of the entities indicates that roughly 30% would fall into the refusal of service category, but the annual report was incomplete so there is no way to judge how removal of these members would affect the compliance rate. No other information available from the other O&M entities. The list of O&M Entities from the November ETPS meeting was reviewed showing overall O&M Entity compliance. Discussion was held on Southern's bankruptcy. Overall there is not enough information to know how removal of refusal of service members would impact the ability of the O&M Entities to be in compliance.
- **Update on O&M Entity status if compliance rate was lowered from 90% down to 85% or 80%**
Tyler Fortunati stated that due to the lack of recent reporting by the O&M Entities it was not possible to judge how lowering the compliance rate would affect the status of the existing O&M Entities. Ray Keating stated he had compliance data from annual reports that showed what the compliance rates of the Entities were back from 2008 and wanted to know if this could be used to unsuspend Entities if the compliance rate was lowered. Tyler Fortunati stated that suspensions would only be lifted based on data that was submitted within the current reporting year. O&M Entities need to provide data from the last full year of testing, and be aware that O&Ms are already being provided a break on medical, vacant, and refusal of service/payment on their member properties. Without adequate and recent data supporting a change DEQ is not willing to adjust the current compliance rate. This



could be revisited in the future after full annual reports are submitted on a regular basis supporting a change.

- **Reviewed Massachusetts sampling and troubleshooting requirements for ETPS systems**

MA has 3 levels of certification: Pilot, Provisional and General Use. During the Pilot certification the ETPS unit is required to be tested for Total Suspended Solids (TSS), Biological Oxygen Demand (BOD₅), pH and Total Nitrogen (TN) on a monthly basis for 18 months. Units must meet the following testing requirements: 30mg/L for TSS and BOD, TN varies from 19 mg/L for residential to 25 mg/L for commercial or large systems. Under the Provisional Certification the unit is tested quarterly for TSS, BOD, pH and TN for three a minimum of 3 years. To complete the Provisional requirements a manufacturer must have 50+ units installed in the State and submit a performance evaluation report showing that 90% of the units are reliably treating effluent to the required standards over the entire 3 year period. Once the provisional certification is completed, the units can be moved into General Use with tests of TN and pH (6-9) twice a year. The service provider is also required to perform field tests for Dissolved Oxygen (DO) (>2mg/L) and turbidity (<40NTU). Under the pilot and provisional certifications DO, pH, and turbidity are used as indicators to troubleshoot if the system is functioning properly. If field tests show any of these indicators are failing they are required to submit lab samples for TSS and BOD. TSS and BOD are recommended to be field tested during every service visit. See Appendix B for additional MA website links outlining these program requirements. James Bell stated that it took Bio-Microbics 6 years to complete the provisional phase in MA due to various issues. Testing costs under MA's program were about \$400-600/year. Massachusetts wants field data, not NSF data to approve units. James Bell also clarified that a manufacturer may be able to begin in the provisional phase if they have units installed in other States of similar climate to MA and have the associated effluent testing data on those units. This data has to be reviewed and approved by MA prior to the technology being granted provisional status.

- **Lab variability sampling study proposal**

Tyler Fortunati discussed DEQ's support for a lab variability sampling study analyzing lab analysis through split sampling. The study will require a lot of planning and preparation including a Quality Assurance Plan and a Field Sampling Plan, statistical analysis, etc. Templates for some of these documents are available but it will still take time to design and perform this study using the State Lab, independent labs, and a wastewater treatment plant. This is in its preliminary stages of planning. Tyler Fortunati stated that due to the time it will take to develop and complete the study the information produced will be presented to the Technical Guidance Committee (TGC) instead of the ETPS Subcommittee. This is due to the fact that it is unknown if the ETPS Subcommittee will still be meeting when the study is complete. The TGC will be capable of making any necessary changes based upon the study.

10:51 AM Break

11:02 AM Meeting resumed



OLD BUSINESS:

Resolve discussion on ETPS testing requirements

- Request to members of subcommittee to provide any new input regarding testing. No new information was presented to the subcommittee. Brent Gee would like to see testing go away. James Bell would like to see the testing requirements remain in their current form. Tyler Fortunati asked the subcommittee to make a motion regarding the ETPS testing requirements so that the subcommittee may move forward in the program and have a decisive direction on testing requirements.

Motion: David Loper moved that the ETPS Subcommittee recommend to the TGC that the current values for TSS, CBOD₅, and TN stay as is and continue the testing program as is, with the exception of the recommended changes outlined in the ETPS Subcommittee proposed Section 4.10 of the TGM.

Second: Ryan Spiers.

Voice Vote: Motion carried unanimously.

NEW BUSINESS:

Update on real estate brochure created by the subcommittee

The brochure was mailed to Title Companies and the Real Estate Associations on March 27. In addition, the brochure was posted to DEQ's website and provided to the Health Districts as well.

Review of proposed changes to section 4.2 of the TGM

Review of section 4.2 for amendments to address comments by the Land Title Association's Liaison Committee regarding member agreements.

Discussion on whether these changes to the membership agreements would be retroactive. Tyler Fortunati stated that this will have to be discussed with the Attorney General's office. There was an addition of a new Section 4.2.4. Sampling Plans for Extended Treatment Package Systems which was based on a request by the TGC. See **Appendix C** for the edited version of this TGM section.

The meeting was adjourned for lunch
Lunch 11:51 to 12:56 p.m.



NEW BUSINESS: (continued)

Review of proposed changes to section 4.10 of the TGM

Reviewed Section 4.10 for amendments addressing changes suggested from last meeting and recommendations surrounding maintenance requirements and troubleshooting suggestions gained from examination of Massachusetts's testing requirements.

Discussion was held revolving around what maintenance requirements are currently in place for annual maintenance of ETPS units. Tyler Fortunati stated that there are currently no requirements on what is done during a service visit. PaRee Godsill presented the subcommittee a form that was attached to a DEQ letter sent to her in 2005 outlining maintenance suggestions.

There was discussion about the certification of laboratories for wastewater analysis in Idaho. Tyler Fortunati clarified that there are no "certified" labs for wastewater examination in the State. The only certifications that exist in Idaho are for drinking water standards. The subcommittee discussed the importance of service providers and O&M Entities verifying that the labs they choose to use for wastewater analysis are capable of utilizing an acceptable method as described in the *Standard Methods for the Examination of Water and Wastewater* as recommended by the TGM. One area that may come out of the lab variability study discussed earlier is the designation of specific testing standards that should be utilized in the ETPS reporting program. It was recommended by the subcommittee that service providers and O&M Entities utilize the same standard for effluent constituents for all of their samples.

There was discussion around the recommendation that the TGC evaluate the submission date for the annual report.

Motion: David Loper moved that the annual report submission date remains at July 31, and that the reporting period remains July 1st through June 30th.

Second: Bob Erickson.

Voice Vote: Motion carried unanimously.

An action item for DEQ was given by the subcommittee. The action item is to develop a new flow chart that outlines the enforcement procedures, including the letters developed by the subcommittee, for the refusal of service members that are exempted from the compliance rates of the annual report. DEQ will develop this flowchart for the next meeting.

It was asked that the existing flowcharts in section 4.10 of the TGM be updated to reflect any changes proposed by the subcommittee. In this revision it was asked that clarification



be provided on what must be retested upon failure of a sample (i.e., all constituents or just the failed test).

Brent Gee asked if the O&M Entities could submit the information for refusal of service members prior to the annual report. Tyler Fortunati stated that the intent was to have all of this information submitted with the annual report. The O&M Entity should spend the reporting year trying to work with the members refusing service. It is the documentation of this process that should be included in the annual report as outlined in section 4.10 of the proposed TGM revisions, up to and including the lien documentation for members failing to pay annual dues.

See **Appendix D** for the edited version of this TGM section. See **Appendix E** for a copy of the 2005 DEQ maintenance suggestions provided by PaRee Godsill.

Discussion on O&M Entity transitions

David Loper stated there are 3 or 4 issues of why an O&M is not viable. The out of compliance entities need to start with the proposed new structure and make a good faith effort to create a viable business model.

Tyler Fortunati suggested grouping them into three categories including non-payment of members, non-active O&Ms, and technologies that cannot meet testing requirements.

Discussion ensued that ended in the consensus that the recommended changes the ETPS Subcommittee has developed should make the program work on its own. The subcommittee decided that there should be no reason to develop different subgroups within the ETPS program and address them individually.

Tyler Fortunati stated that DEQ was still waiting on Attorney General review of the proposed materials developed by the ETPS Subcommittee. There is no definitive timeline of when this will be complete. It is hoped that this will be complete before the subcommittee meets again in case there are any necessary revisions to any of the materials.

David Loper noted that currently the ETPS subcommittee is recommending these changes to the TGC and developing enforcement procedures. The hope is that working with the homeowners and getting them to pay for maintenance, sampling, and testing will get the O&M entities back into compliance.

There was discussion on how to handle the O&M Entity representing Southern treatment units since the manufacturer is no longer in business. Tyler Fortunati stated that the Entity's by-laws still allow for the Entity to function and perform the duties it was created to do. In this case the members will have to take control of the Entity to make sure that they are meeting their responsibilities required by the septic permit. O&M Entities cannot dissolve and therefore they will not just go away.



Ray Keating asked what are the options are for suspended Entities to get back into compliance. Tyler Fortunati stated that they must submit annual reports showing that the membership is capable of meeting the 90% compliance rate stipulated for the program. This must be done off of current reporting year data. Testing results from years past will not be used to unsuspend an Entity.

There was discussion on whether or not the suspended Entities could be unsuspended, regardless of current reporting status and results, so they could sell new units and generate some capital to get their program up and running. Tyler Fortunati stated that DEQ is not willing to unsuspend the currently suspended Entities and allow them to place new members under contract without knowing if the Entity is going to be able to perform their necessary function and achieve the testing results needed. This would be placing new homeowners in a position that could be unsuccessful and possibly result in enforcement action. DEQ and the Health Districts are not willing to place individual property owners in this position just to see if the revised ETPS program will be successful. The suspended Entities will need to get themselves unsuspended as described in the ETPS program guidance.

Motion: David Loper motioned to have ETPS Subcommittee recommendations for TGM revisions into action. Move the developed materials on to the TGC and dismiss the ETPS Subcommittee.

Discussion: Bob Erickson

Discussion ensued about where the subcommittee is currently at in the program revision. It was decided by the subcommittee that they were ready to review the revisions that they have developed in order to vote to pass them on to the TGC. Tyler Fortunati stated that the materials should complete the Attorney General's review prior to ETPS Subcommittee review and/or revision based upon the AG's input.

Motion: David Loper rescinded his previous motion.

Tyler Fortunati will forward the ETPS subcommittee recommendations to the Attorney General's office for review and guidance. At the next ETPS Subcommittee meeting the subcommittee will review all of the proposed materials that have been developed including the flowchart development/revision that was requested previously for section 4.10 of the TGM. Tyler Fortunati stated that at this time it is not known when the AG's office will be able to complete its review of the subcommittee materials. Without that information the next ETPS Subcommittee meeting cannot be scheduled at this time. When the AG's review is complete Tyler Fortunati will poll the subcommittee members on the next meeting date. This approach was acceptable to the subcommittee.

Motion: Ryan Spiers moved to adjourn the meeting.



Second: Bob Erickson.

Voice Vote: Motion carried unanimously.

Meeting adjourned at 2:44 p.m.

ETPS Parking Lot: This is an area reserved for subcommittee meeting topics for future agendas.

List of Appendices

Appendix A:

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Appendix B:

Sampling Port Information, Massachusetts Sampling and Lab Variability Study

Appendix C:

TGM 4.2 Nonprofit Corporations

Appendix D:

TGM 4.10 Extend Treatment Package System

Appendix E:

Copy of February 1, 2005 O&M Annual Report "Outline for Operation and Maintenance Annual Reports"



Appendix A

Extended Treatment Package System Subcommittee Meeting

Minutes

Thursday, February 21, 2013

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

TGC-ETPS ATTENDEES:

Tyler Fortunati, R.E.H.S., On-Site Wastewater Coordinator, DEQ
Bob Erickson, Senior Environmental Health Specialist, South Central Public Health District
Ryan Spiers, Alternative Wastewater Systems, LLC
David Loper, Environmental Health Director, Southwest District Health Department
James Bell, Bio-Microbics, Inc.
Raymond Keating, Environmental Health Specialist, Eastern Idaho Public Health District (via telephone and GoToMeeting)
Jay Loveland, Senior Environmental Health Specialist, Panhandle Health District (via telephone and GoToMeeting)
Brent Gee, Effluent Technologies, Inc. (via telephone and GoToMeeting)
Kim Walker, Simple Septic Solutions, LLC (via telephone and GoToMeeting)

GUESTS:

Chas Ariss, P.E., Wastewater Engineering Manager, DEQ
A.J. Maupin, P.E., Wastewater Program Engineering Lead, DEQ
PaRee Godsill, Everlasting Extended Treatment, Inc.
Kellye Eager, Environmental Health Director, Eastern Idaho Public Health Department (via telephone and GoToMeeting)
Ed Schloss, Jet, Inc. (via telephone and GoToMeeting)
Scott Hendrick, Norweco, Inc. (via telephone and GoToMeeting)
Nathan Taylor, Environmental Health Supervisor, Eastern Idaho Public Health District (via telephone and GoToMeeting)
Janette Young, Administrative Assistant, DEQ

CALL TO ORDER/ROLL CALL:

Meeting called to order at 9:15 a.m.
Committee members and guests introduced themselves.

MEETING MINUTES:

January 17, 2013 Draft ETPS Subcommittee Minutes: Review, Amend, or Approve



No public comment was received.

Motion: Bob Erickson moved to accept minutes as presented.

Second: Ryan Spiers.

Voice Vote: Motion carried unanimously.

Minutes will post as final. See DEQ webpage and **Appendix A**.

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

No public comments were submitted during the allotted agenda timeframe.

OLD BUSINESS:

Update on Action Items from January 17, 2013 ETPS Subcommittee Meeting

• **Delivery of Real Estate Transaction Brochure**

The brochure is still being worked on by DEQ State Office Technical Publication Department and is not yet ready for distribution. Tyler Fortunati stated that as soon as the brochure is ready for distribution DEQ will get it out to the realtor and title company association as well as the health districts.

Tyler Fortunati met with the Liaison Committee of the Land Title Association. This association represents approximately 95% of the Title companies in Idaho. This meeting occurred on February 8, 2013 for the purpose of seeking their input on how to make homeowners aware of the member agreement that is recorded to their property.

The Liaison Committee recommended the following:

- Work with the real estate commission to amend their forms regarding a structure's sewer system to include an ETPS option.
- Have the agreement specifically state that there are annual fees associated with it.
- Include the O&M Entity's contact information on the member agreement.
- Try to develop a consistent format for the member agreement so it is recognizable to the title company agents.

In the future Tyler plans to speak to or meet with some of the real estate associations when the brochure is ready for distribution. This is a more difficult task in that there are 20 or more associations of realtors around the State.

David Loper suggested meeting with Home Inspectors or their association so they are capable of identifying when a home has an ETPS system installed.



- **Review of sampling port information and design from Ohio and Bio-Microbics**
James Bell presented a review of sampling port information and design requirements from the State of Ohio and Bio-Microbics, Inc. James Bell's presentation included the history of the Ohio Technical Committee and why they have the sampling port requirements. The requirements for the sampling port are linked to surface discharge units and NPDES permits.

Bob Erickson asked James Bell if NSF requires that samples be pulled from a sampling port after the treatment unit. Bob Erickson noted that if this is what NSF is requiring for testing then Idaho should be too. If a service provider in Idaho is not sampling the effluent following NSF's methods then the sample does not make sense.

James Bell will provide photos and information on the NSF sampling procedures for review at the next subcommittee meeting.

See **Appendix B** for the sampling port presentation.

- **Update from James Bell regarding nonprofits and their operations**
James Bell presented information provided by Bio-Microbics, Inc. legal counsel and financial staff regarding the legality of a nonprofit maintaining a balance related to its operations specified in the Articles of Incorporation and Bylaws (i.e., reserve fund for maintaining and sampling units where members have refused to pay). James Bell stated that a nonprofit incorporates as a nonprofit under Idaho Code but that they are looked at as a for-profit entity under the IRS tax code based on the opinion of Bio-Microbics' accountants. This means that there is no reason a Nonprofit Operation and Maintenance Entity cannot keep a reserve balance from year to year. See **Appendix C** for the information presented on this discussion.

NEW BUSINESS:

Review of two enforcement letters related to refusal of service

- **Letter 1 (and enclosure) – It Has Come to Our Attention**
This letter is designed to go out after the health district overseeing the O&M Entity receives verification in the annual report of those members refusing service for the ETPS units. Refusal of service can occur through several avenues (e.g., failure to pay annual dues, refusal of property access, etc.). This letter is meant to remind the property owner of their responsibilities and provides them with the contact information for their O&M Entity and service provider. The enclosure is an informational letter that was developed for the use by O&M Entities to provide to their members in annual statements. The enclosure provides educational information relating to the ETPS program including where an O&M member can find additional information about the program. The subcommittee provided some edits to this letter. See **Appendix D** for the edited version of this letter and the enclosure.



- **Letter 2 – Voluntary Deadline to Comply**

There was discussion on whether DEQ or the health districts would issue these letters. Tyler Fortunati stated that there is an understanding that the health districts would want DEQ to perform the initial enforcement for this program, but that it is also expected that the health districts take over the enforcement at some point. The enforcement structure is something that will have to be worked out at a later date between DEQ and the health districts and is not something that the subcommittee should tackle.

James Bell suggested including a copy of the septic permit for each member with Letter 2.

Tyler Fortunati stated that if there is no response from the O&M member after the date provided in this letter the regulatory agency would issue a Notice of Violation (NOV) to that member. See **Appendix E** for the edited version of this letter.

Motion: James Bell moved for preliminary approval of both letters pending any future changes.

Second: Bob Erickson.

Voice Vote: Motion carried unanimously.

11:10 AM Break

11:20 AM Meeting resumed.

Review of Sections 4.10.4 and 4.10.6 of the Technical Guidance Manual (TGM)

Reviewed and discussed edits to sections 4.10.4 and 4.10.6 of the TGM. These new additions were added to relay reporting and enforcement letter requirements in relation to Letters 1 and 2 discussed earlier.

David Loper requested that 4.10.4 relate to a specific subsection of section 4.10 of the TGM.

There was discussion on best place to keep the enforcement letters for future reference once implemented in the program. David Loper and Tyler Fortunati agreed that they would best be provided through a DEQ program directive and not included in the TGM or the health district's Subsurface Sewage Disposal Standard Operating Procedures manual. The reference

of the enforcement letters in the SSD SOP will be amended to reference a DEQ program directive.

See **Appendix F** for the amendments to section 4.10 of the TGM.



Motion: Bob Erickson moved to table Section 4.10 for further review by the ETPS subcommittee.

Second: Ryan Spiers.

Voice Vote: Motion carried unanimously.

The meeting was adjourned for lunch
Lunch 12:10 - 1:10 p.m.

Effluent Quality Testing Discussion (TSS, CBOD, and Total Nitrogen)

Donna Archibald was unable to address the subcommittee.

Tyler Fortunati presented on why the various effluent quality constituents are tested and the importance of testing these constituents to ensure proper ETPS unit operation. Total Suspended Solids (TSS) of 45 mg/l, Carbonaceous biochemical oxygen demand (CBOD) of 40 mg/l and Total Nitrogen (site specific) have been used as an indicator on how well the ETPS is functioning. Testing is done to check the functionality of the system and verify that the ETPS achieves the reductions that the manufacturer has claimed they can achieve and DEQ has approved the units to operate at.

James Bell of Bio-Microbics, Inc., who has been a member of the Joint Council for Wastewater for NSF since 1992 and is currently the Vice-Chairman on the Council, added some information on why NSF looks at TSS and BOD level in standard 40 certification. James Bell stated that TSS and BOD are evaluated for the reduction in drainfield area.

Brent Gee relayed concern that Idaho is determining compliance on one grab sample when NSF is performing 6 months of consecutive sampling. Discussion was held on testing methods in the NSF lab setting versus units in the field. James Bell stated that the samples are pulled over 6 periods of 30 days each at NSF, and that these is also a weekly average during each period which is where the 40 mg/L BOD and 45 mg/L TSS are utilized. James Bell stated that it is critical for service providers to not waste time sampling a unit if they know it will not pass. Field indicators are useful for this and Massachusetts was provided as an example for utilizing turbidity, dissolved oxygen, and pH as indicators that the treatment unit is functioning properly. James Bell also cautioned that studies by George Hofelder indicate that pH and turbidity measurements alone are not adequate to measure the chemistry of the effluent from an ETPS and ensure adequate treatment has occurred. Bob Erickson stated that service providers should be trouble shooting units prior to testing.

Scott Hendrick asked for clarification on the 90% passing level. Tyler Fortunati provided an explanation that at least 90% of the units in operation under an O&M Entity must meet or exceed the effluent quality standards of their septic permit or the O&M Entity is suspended until they can bring 90% of the units into compliance.



Discussion on different labs results for split samples ensued.

Brent Gee shared his concern that he would like to see more manufacturer involvement with their service providers on how samples should be collected from their systems. Require that manufacturers visit systems and work with service providers to see how samples are done in the field.

3:13 PM Break

3:27 PM Meeting resumed.

Effluent Quality Testing Discussion (TSS, CBOD, and Total Nitrogen) (Continued)

David Loper requested that DEQ determine what removal of those members refusing service (and placed into a regulatory track) from the 90/10 split would do for compliance rates, look at potentially lowering the 90% compliance rate to 80% or 85%, and look into if there is a way to look at the lab variability in sampling results.

Kim Walker asked if there is a way to tier the compliance standings for the O&M Entities such as in compliance, on warning, and out of compliance.

Bob Erickson does not want to relax the limits any further than they already are.

Tyler Fortunati stated that it is important that there is an element of the program that provides verification that the ETPS units are treating effluent to the levels claimed possible by the manufacturer and approved by DEQ. It is the subcommittee's job to propose any changes to the current system. At this time there is no changes proposed to current methods of sampling or current TSS and CBOD₅ compliance levels. This discussion will be resumed at the next meeting after the action items requested of DEQ by the subcommittee are discussed. See **Appendix G** for presentation on testing.

NEXT MEETING:

The next ETPS subcommittee meeting is scheduled to be on March 27, 2013 from 9:15 a.m. – 4:30 p.m., at the DEQ State Office building.

Motion: James Bell moved to adjourn the meeting.

Second: David Loper.

Voice Vote: Motion carried unanimously.

Meeting adjourned at 3:55 pm



ETPS Parking Lot: This is an area reserved for subcommittee meeting topics for future agendas.

- How will existing O&M entities be handled
- Variability of sampling results between labs

List of Appendices

Appendix A:

January 17, 2013 Minutes FINAL

Appendix B:

Sampling Port Information

Appendix C:

Homeowners' Associations under IRC 501(c)(4), 501(c)(7) and 528 and HOA Taxes: What's Exempt Under the 90-Percent Rule?

Appendix D:

Letter 1 with enclosure

Refusal of Service for Extended Treatment Package Systems with enclosure of initial letter sent to Extended Treatment Package Systems Owner.

Appendix E:

Letter 2

Voluntary Deadline to Comply with ETPS Maintenance and Effluent testing Requirements

Appendix F:

Sections 4.10.4 Annual Report and

4.10.6 Member Refusal of Maintenance of Testing Requirements of the TGM

Appendix G:

ETPS Program Testing Requirements (PowerPoint slides)



Appendix B

Update on Action Items from February 21, 2013



NSF Sampling Port Photos



NSF Sampling Port Photos



Effect of Exemption for Refusal of Service on O&M Entity Compliance

- ▶ 8 of 12 O&M Entities suspended
 - Southeast Idaho Environmental Treatment Services, Inc.
 - Tricounty Wastewater Management, Inc.
 - Valley Environmental Protection, Inc.
 - Northern Extended Treatment Systems, Inc. (2)
 - Septic Systems, Inc.
 - Effluent Technologies, Inc.
 - Everlasting Extended Treatment, Inc.



Effect of Exemption for Refusal of Service on O&M Entity Compliance

2012	HO 1	HO 2	HO 3	HO 4	HO 5	HO 6	HO 7	Total
Southeast Idaho Environmental Treatment Services (Southeast Treatment Services)					0	0	171	171
Tricounty Wastewater Management (Delta Environmental)	25							25
Valley Environmental Protection (Delta Environmental)	7						28	35
Northern Extended Treatment Systems (2)						0	48	48
Northern Extended Treatment Systems (Southern)						0	58	58
Septic Systems (2)		177	82					259
Effluent Technologies (Northern)						0	221	221
Everlasting Extended Treatment (Northern)		87	1					88

O&M Entity Status if Compliance Rate was Lowered from 90%

- ▶ This would need to be based on valid information
 - Last full year of testing
 - More years of data would add value to the discussion
- ▶ The O&Ms are already being provided a break in the medical, vacant, and refusal of service properties
- ▶ Without data to discuss surrounding this DEQ does not support lowering compliance at this time



Massachusetts Sampling

- ▶ Multiple levels of certification:
 - Pilot
 - Requires TSS, BOD, pH, and TN testing monthly for 18 months
 - 30 mg/L for TSS and BOD, TN varies from 19 mg/L for residential to 25 mg/L for commercial or large systems
 - Provisional
 - Requires TSS, BOD, pH, and TN testing quarterly for at least 3 years
 - Manufacturer must have 50+ units installed in State, then submit a performance evaluation report showing that 90% of the units are reliably treating effluent to the required standards

Massachusetts Sampling

- ▶ Multiple levels of certification:
 - General Use
 - Still test for TN and pH (6-9) twice per year
 - Perform field test for DO (> 2 mg/L), turbidity (<40 NTU)
 - If field test show any of these indicators failing they require sampling of TSS and BOD
 - BOD and TSS are suggested to be field tested every time
 - <http://www.mass.gov/dep/water/wastewater/standrem.pdf>
 - <http://www.mass.gov/dep/water/laws/testsamp.pdf>
 - <http://www.mass.gov/dep/water/laws/2kgpdpol.pdf>
 - <http://www.mass.gov/dep/water/laws/policies.htm#t5pol>

Lab Variability Study

- ▶ DEQ is willing to support a study analyzing lab analysis through split sampling
 - Study will require a lot of planning and preparation
 - QAPP, FSP, etc.
 - DEQ will follow through with this if recommended by the ETPS subcommittee and supported by the TGC
- ▶ Study will not be able to be designed, developed, performed, and analyzed in the timeframe of the subcommittee



Appendix C

4.2 Nonprofit Corporations

Revision: ~~January 17~~ March 27, 2013

Entities to manage large soil absorption systems, extended treatment or experimental systems, clustered systems, or other more complex systems must guarantee that they will be responsible for the system and be available to provide operation and maintenance (O&M). The following guidance provides for a nonprofit corporation which can do that.

4.2.1 Required Incorporation Elements

The following elements must be included within the Entity's Articles of Incorporation or Bylaws:

1. The Nonprofit Entity 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 the Department of Environmental Quality's Water Quality Division Administrator (Director) or his/her designee per Idaho Code 30-3-99.
 - a. 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 4.2 of the Technical Guidance Manual
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.
 - a. Exception to this is allowed in the event that an extended treatment package system is disconnected and removed from the property as approved by the Director.
7. Purposes of the Nonprofit Entity 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.



- a. Annual financial reports should be made available to the membership upon request by individual members and through the annual membership meeting.
10. Multiple-purpose Nonprofit Entity funds generated are to be separately maintained, and funds from one account should not be available for another account's use.
11. The Nonprofit Entity should either own the system(s) it intends to maintain or have an access easement in place.
 - a. Access easements for extended treatment package systems should be executed through a membership agreement as outlined in section 4.2.3.
12. 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).
13. The purchaser and any new member should be provided by the Nonprofit Entity with a copy of the Articles of Incorporation, Bylaws, Covenants, and Contracts (i.e., membership agreement, etc.) with the Entity.
 - a. Any membership agreements for Extended Treatment Package Systems should contain the elements listed in section 4.2.3 of the Technical Guidance Manual.
14. There should be no provisions restricting ownership of improved property.
15. The Nonprofit Entity should be capable of raising revenue by setting and collecting user charges.
16. Board of Director Requirements:
 - a. For Extended Treatment Package System Nonprofit Operation and Maintenance 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.
 - i. 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 item 16.b is fulfilled.
 - b. The Board of Directors should include a minimum of three Board Member positions.



17. The Board of Directors should be able to raise revenue for emergency operation and maintenance of community owned systems without majority vote.
18. 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.
19. The Nonprofit Entity should provide an operation and maintenance manual that shall be approved by the Director.
 - a. The operation and maintenance manual should be provided to all new members for extended treatment package systems and shall include the monitoring requirements as outlined in the Section 4.10.2 "Extended Treatment Package System" Operation, Maintenance and Monitoring Conditions for Approval.
20. Conditions for dissolution of the organization should be specified. Dissolution should be limited to connection to a municipal wastewater treatment facility or merger with another approved nonprofit corporation having management capability.
21. Except as provided in item 20, the Nonprofit Entity should not be able to vote itself out of existence.
22. For Nonprofit Entities a third party (i.e., maintenance entity, service provider, etc.) should be identified to execute the specified operation and maintenance functions.
 - a. Service providers for Nonprofit Entities overseeing extended treatment package systems 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.
23. The Nonprofit Entity should be able to plan and control how and at what time additional service functions will be extended or added.
24. The Articles of Incorporation and/or Bylaws should provide for proxy voting.
25. Proxies should not be binding on new purchasers.
26. For community systems the developer of the project should be required to contribute to the operation and maintenance until such time as the nonprofit



corporation is self-sustaining. Consider either a specified period of time or when a specified number of lots have been sold.

27. The Nonprofit Entity should have a defined service area boundary.

4.2.2 Notification Requirements

The Nonprofit Entity shall notify the Director for any of the following reasons:

1. Any content changes that occur 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 their implementation. Any changes that conflict with any portion of section 4.2.1 should not be approved.
2. Changes occur to Board of Directors.
3. Service provider(s) are changed.
4. Sampling plan changes or adjustments are necessary.

4.2.3 Membership Agreements for Extended Treatment Package Systems

The membership agreement is separate from the Article of Incorporation and Bylaws for the Nonprofit Corporation but is a required element for membership in the Nonprofit Corporation. Membership agreements should contain the following elements:

1. Title of the membership agreement should include the words lien notice, and access easement, member agreement, and the name of the Nonprofit Corporation (e.g., Operation & Maintenance Lien Notice, Access Easement, and Member Agreement with Nonprofit Corporation).
2. Contact information for the Nonprofit Corporation shall be listed including a mailing address and phone number.
3. A statement that annual fees will be assessed for services rendered by the Nonprofit Corporation shall 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, etc.).
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 understand its requirements.
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.



4.2.4 Sampling Plans for Extended Treatment Package Systems

Nonprofit Corporations formed for the purpose of maintaining, servicing, and testing Extended Treatment Package Systems shall develop a sampling plan for the testing of effluent. Sampling plans should contain the following elements:

1. A signed letter from the manufacturer of the treatment technology certifying that the sampling method provided is acceptable for their technology.
2. A sampling location that is located after the secondary treatment unit for both gravity and pressurized systems.
3. Sample collection, preservation, and transportation techniques and methods that are in conformance with the latest edition of *Standard Methods for the Examination of Water and Wastewater*.
4. A way to collect all samples from a free flowing effluent pipe. Hose or portable water sources may be used to induce a flowing condition 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.
5. Sample point cleaning and flushing procedures prior to sample collection.
6. Any necessary sampling device calibration techniques, equipment, and reagents.
- 4.7. Effluent field sample indicators that may be recommended for evaluation prior to collection of a grab sample. These indicators should provide indication that the treatment unit is operating properly.



Appendix D

4.10 Extended Treatment Package System

Revision: ~~January 17~~ March 27, 2013

4.10.1 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.

4.10.2 Conditions for Approval

1. A maintenance entity will be available to provide continued device operation and maintenance (O&M). Approval of the O&M entity will be made by the Director prior to the issuance of a permit. Approvable entities may include the following:

- a. Municipal wastewater treatment departments

Water or sewer districts

Nonprofit Corporations

An O&M membership agreement and an accompanying general access easement should be entered into between the property owner and the nonprofit O&M entity, as a necessary condition prior to issuing an installation permit. This agreement and the easement will be recorded with the County as a condition for issuing an installation permit.

Extended Treatment Package Systems (ETPS) may be used for single-family dwellings without an approved maintenance entity **only under all of the following conditions:**

- b. The site is acceptable for a standard system. All separation distances from ground water and surface waters, limiting layers and soil types shall be met.

Enough land is available, and suitable, for two full-size drainfields. One complete full-size drainfield shall be installed.

Final effluent disposal will meet the following criteria:

- c. Surface discharge:

- i. System owner will apply for a National Pollution Discharge Elimination System Permit (NPDES) from the United States Environmental Protection Agency (EPA).
- ii. Effluent quality will meet the applicable requirements of the "Water Quality Standards" (IDAPA 58.01.02), "Wastewater Treatment Requirements" (IDAPA 58.01.16), and all other applicable regulations.



Ground water discharge:

- i. Effluent quality will meet the applicable requirements of the “Ground Water Quality Rule” (IDAPA 58.01.11), “Wastewater Rules” (IDAPA 58.01.16), and all other applicable regulations.
- ii. Total Nitrogen discharge shall not exceed that specified in the development’s Nutrient–Pathogen (NP) Evaluation in order to prevent the ground water from exceeding the “Ground Water Quality Standard” for nitrates (IDAPA 58.01.11.200.01.a) and to maintain and protect the existing and projected future beneficial ground water uses (IDAPA 58.01.11.006.02).

Subsurface discharge:

- i. If an 85% reduction or better in Carbonaceous Biological Oxygen Demand (CBOD₅) and Total Suspended Solids (TSS) can be achieved, then the effluent may be discharged to a drainfield satisfying the Intermittent Sand Filter (section 4.23.5) application rate criteria.
 1. Otherwise, the effluent must be discharged to a standard drainfield, sized as directed in IDAPA 58.01.03.008 (section 8.1).
- ii. Additional drainfield reduction granted for use of gravelless trench products is not allowed.
 1. The 85% reduction will be accepted as being met if the effluent exhibits a quantitative value obtained from laboratory analysis not to exceed 40 milligrams per liter (mg/L) (40 parts per million [ppm]) CBOD₅ and 45 mg/L (45 ppm) TSS.

4.10.3 Operation, Maintenance, and Monitoring

Procedures relating to operation, maintenance, and monitoring are required by IDAPA 58.01.03 (section 8.1) or may be required as a condition of issuing a permit, per IDAPA 58.01.03.005.14 (section 8.1) to ensure protection of public health and the environment.

1. Operation and Maintenance

- a. Annual maintenance shall be performed on the ETPS unit as described in the ETPS manufacturer’s operation and maintenance manual for the ETPS model and as submitted under 4.2.19.
- b. Additional maintenance not specified in the operation and maintenance manual may be required to ensure the ETPS functions properly.
- ~~b.c.~~ Records of each maintenance visit shall be kept and should include the following information for the primary maintenance visit:



- i) Date, time, air temperature, and weather conditions.
 - ii) Observations for objectionable odors.
 - iii) Observation for surfacing of effluent from the treatment unit or drainfield.
 - iv) Notation as to whether the system was pumped since the last maintenance visit including the portions of the system pumped, pumping date, and volume.
 - v) Sludge depth and scum layer thickness in the primary septic tank and treatment unit.
 - vi) If responding to an alarm event provide the cause of the alarm and any maintenance necessary to address the alarm situation.
 - vii) Field testing results for any system effluent quality indicators included in the approved sampling plan or as recommended in section 4.10.3.2.b.
 - viii) Record of any cleaning and lubrication.
 - ix) Notation of any adjustments to control settings or equipment.
 - x) Test results for pumps, switches, alarms, blowers, etc.
 - xi) Notation of any equipment or component failures.
 - xii) Equipment or component replacement including reason for replacement.
 - xiii) Any recommendations for future service or maintenance and reasoning.
- e.d. Any maintenance visit occurring after the primary annual maintenance visit should only record and address the reason for the visit and the associated activities that occurred.

2. Monitoring

- a. Annual effluent monitoring will be required for all ETPS that discharge to a reduced size drainfield, to a drainfield with a reduced separation distance to ~~ground~~ water limiting layers, and/or to a drainfield located in an environmentally sensitive area (area of concern).
 - i. Annual monitoring included in the Annual Report must occur within the reporting period.
 - b. It is recommended that prior to collecting effluent samples from the treatment unit that effluent quality indicators be field tested as described in the approved sampling plan for the O&M Entity. All recommendations included in 4.10.3.2.b are recommendations only and should be verified with the treatment technology manufacturer 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:
 - i. Visual examination for wastewater color, odor, and effluent solids.



ii. The following constituents:

<u>Constituent</u>	<u>Acceptable Range</u>
<u>pH</u>	<u>6 to 9</u>
<u>Dissolved Oxygen (DO)</u>	<u>≥ 2 mg/L</u>
<u>Turbidity</u>	<u>≤ 40 NTU</u>

Table 4-4. Recommended field testing constituents for effluent quality indication.

b.c. Monitoring samples provided to a laboratory will analytically quantify that the units are operating in compliance, provided samples do not exceed 40 mg/L (40 ppm) for CBOD₅ and 45 mg/L (45 ppm) for TSS.

- i. Results for CBOD₅ and TSS that exceed these levels indicate the ETPS is not achieving the required reduction levels.

e.d. For those systems installed in areas of concern, including nitrogen sensitive areas, or are used to fulfill NP Evaluation results and requirements, the following additional constituents may be monitored as stipulated on the permit:

- i. Total Kjeldahl Nitrogen (TKN)
- ii. Nitrate-Nitrite nitrogen (NO₃+NO₂-N)
- iii. Results for Total Nitrogen (TN = TKN + [NO₃+NO₂-N]) that exceed the levels stipulated on the installation permit, in the subdivision approval for sanitary restrictions release, or the approved NP Evaluation, indicate that the device is failing to achieve the required reductions

d.e. 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.

- i. Each sample will have a Chain-of-Custody sheet, 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(s).
- ii. The Chain-of-Custody sheet should also specify the laboratory analyses to be performed on the sample(s).
- iii. Sample storage and transport will take place in appropriate containers under appropriate temperature control.

e.f. Samples will be required to be analyzed by a certified laboratory capable of analyzing wastewater according to acceptable standards, and the monitoring results will be submitted as part of the Annual Report to the local health district.

f.g. Samples failing to achieve the required effluent constituent levels shall require:

- i. Additional operations and maintenance for devices that fail to achieve the above reductions.



- ii. Additional sampling to demonstrate the operation and maintenance performed successfully restored the treatment system to proper operation.
 - a. Sample extraction and analysis should occur within 30 days after servicing the system.
 - b. A maximum of three sampling events, within 90 days, 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* (Figure).

4.10.4 Annual Report

The reporting period is from July 1 of the preceding year through June 30 of the reporting year. The Nonprofit O&M Entity shall meet the following annual reporting requirements for each member of the Entity:

1. The Annual Report shall include the following items for each member of the Entity:
 - a. A copy of all service-maintenance records for the reporting period as required under section 4.10.3.1.
 - b. A copy of all certified laboratory records for effluent sampling.
 - c. A copy of each Chain-of-Custody record associated with each effluent sample.
 - d. A current list of all members of the Nonprofit O&M Entity within the health district to which the Annual Report was submitted.
 - i. The member list shall clearly identify the status of each member in regards to completion of Annual Reporting requirements.
 - ii. If Annual Reporting requirements are not complete for any given member an explanation shall be included with that member's records within the Annual Report.
2. Annual Report Exemptions:
 - a. A member may be exempt from effluent testing based on extreme medical conditions.
 - i. The member's record in the Annual Report must include a doctor's note indicating that a resident of the property has been prescribed medication for the reporting period that will prevent the ETPS unit from testing correctly.
 - ii. Annual service and maintenance on the member's ETPS unit shall not be exempt due to medical conditions and record of annual service and maintenance shall still be submitted with the Annual Report.
 - b. An O&M Entity may be exempt from reporting annual service and testing results for individual members if that member's activities fall under section 4.10.6 of this manual.



- i. The O&M Entity is still required to report the activities described under section 4.10.6 of this manual for each member exempt from annual reporting through this section.
3. The annual reporting process:
 - a. The Annual Report shall be submitted by the Nonprofit O&M Entity no later than July 31 of each year for the preceding 12-month period to the local health district.
 - i. The Nonprofit O&M Entity shall submit Annual Reports to each local health district that the Entity has member agreements within which shall only include reporting records for the member agreements within the local health district jurisdiction.
 - b. The local health district shall provide the Nonprofit O&M Entity a written response within 30 days of receipt of the Annual Report detailing the Entity's compliance or non-compliance with their member's septic permit requirements.
 - i. All correspondence from the health districts to the Nonprofit O&M Entity regarding the Annual Report shall be copied to DEQ.
4. Delinquent Annual Reports:
 - a. If the Nonprofit O&M Entity does not submit the Annual Report by July 31 of the reporting year the local health district shall send the Entity a reminder letter providing a secondary deadline for report submission of August 31st of the reporting year detailing the report requirements and that failure to submit the Annual Report by this date will result in the district forwarding a notice of non-report to DEQ for the suspension of the Nonprofit O&M Entity.
 - i. All correspondence from the health district to the Nonprofit O&M Entity regarding delinquent Annual Reports shall be copied to DEQ.

4.10.5 Nonprofit O&M Entity Suspension

Nonprofit O&M Entities may be suspended by DEQ. Suspensions will be detailed in writing and sent to both the Nonprofit Entity and the health districts. Upon suspension the health districts shall not issue septic system permits on new applications for ETPS systems from the suspended Nonprofit O&M Entity. Existing system monitoring, reporting, and servicing requirements will not be affected by a suspension (**Figure**). Suspensions of Nonprofit O&M Entities may be issued, but may not be limited to, the following reasons:

1. Failure to submit an Annual Report by the secondary deadline of August 31st.
2. If an O&M Entity's Annual Report identifies malfunctioning system rates of 10% or more.
 - a. Malfunctioning systems are defined as any system that fails to receive annual maintenance or exceeds the effluent reduction levels for any constituent required as part of the septic permit (i.e., TSS, CBOD₅, or TN).



Upon suspension DEQ will require that the Nonprofit O&M Entity, affected member homeowners, and approved service provider, in cooperation with the local health district, enter into a Corrective Action Plan (CAP). The CAP should establish the time frame to return the noncomplying systems to proper operation or a time frame for the submission of a complete Annual Report. The suspension will remain in effect until the malfunctioning system rate is below 10% or the Annual Report is received and approved.

4.10.6 Member Refusal of Maintenance or Testing Requirements

It is the responsibility of the individual O&M Entity members to ensure the O&M Entity is capable of performing the necessary annual maintenance and effluent testing required for their ETPS unit. Failure of an individual member to permit the O&M Entity from carrying out the required services, as designated within their member agreement, is considered a violation of *IDAPA 58.01.03.012.01 Failure to Comply*. The following activities from a homeowner towards their O&M Entity may be considered as refusal of service actions by a member, and may not be limited to:

1. Refusal to allow annual maintenance or effluent quality testing (e.g., refusal to pay annual dues preventing the financial capability of service, denial of property access, etc.)
2. Refusal to maintain the ETPS unit in operating condition (e.g., refusal to replace broken components, refusal to provide electricity to the unit, etc.)
3. If the refusal of service continues through the Annual Reporting Period the O&M Entity shall substitute the following documents in the Annual Report for members refusing service:
 - 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 member through non-payment should include documentation of a lien being placed on the member's property.
 - i. Failure to include this documentation within the annual report will void the property owner's exemption from the annual report and will count against the O&M Entity's overall compliance rate.

Upon receipt of an Annual Report that contains individual O&M Entity members exempt under section 4.10.6 of this guidance the reviewing regulatory authority and respective O&M Entity shall adhere to the following guidelines:

1. The regulatory authority shall issue Letter 1 and the associated ~~enclosure that is found within section 3.3.11 of the Idaho Subsurface Sewage Disposal Standard Operating Procedures (SSD SOP)~~ that was provided in the DEQ Program Directive dated xxxx.
 - i. This letter shall be sent to the property owner via certified mail and copied to the associated O&M Entity.



- ii. The O&M Entity shall provide notice to the regulatory authority and associated property owner 30 days after receipt of Letter 1 informing the regulatory authority of the property owner's voluntary compliance status.
2. If the property owner fails to voluntarily comply within the 30 day timeframe the regulatory authority shall issue Letter 2 ~~found within section 3.3.11 of the SSD SOP~~ that was provided in the DEQ Program Directive dated xxxx.
 - i. This letter shall be sent to the property owner via certified mail and copied to the associated O&M Entity.
 - ii. The O&M Entity shall provide notice to the regulatory authority and associated property owner by the voluntary compliance date provided within Letter 2 informing 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 step 2 of this process the regulatory authority shall issue a Notice of Violation to the property owner to ensure compliance with the property owner's septic permit requirements in regards to the ETPS unit.

4.10.7 Design

Procedures relating to design are required by IDAPA 53.01.03 (section 8.1) 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 Bureau.
3. Design for each specific application should be provided by a Professional Engineer (PE) licensed in the State of Idaho specializing in environmental or sanitary engineering.
4. The system's aerobic treatment section will be preceded by an appropriately sized septic tank. 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. 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 hydraulic residence time (HRT) as stipulated in IDAPA 58.01.03.007.07.b. Timed dosing from the septic tank to the aerobic treatment unit is preferred, and highly recommended, to maintain a constant source of nutrients for the system's aerobic microbes.
5. A sample port will be installed in the effluent line after the aerobic treatment unit.



6. Manufactured and *packaged* mechanical treatment devices will be required to prove that the specified equipment model:
 - a. Has successfully completed National Sanitary Foundation (NSF) standard 40 testing, or
 - b. Has successfully completed an EPA sanctioned Environmental Technology Verification (ETV) test, or
 - c. Was designed by a PE licensed in the State of Idaho specializing in sanitary or environmental engineering.

4.10.8 Construction

Procedures relating to construction are required by IDAPA 58.01.03 (section 8.1) or may be required as permit conditions, as appropriate, to ensure the protection of public health and the environment.

1. Installation
 - a. The system shall be installed by an appropriately qualified installer. IDAPA 58.01.03.003.35 defines system as “Beginning at the point of entry physically connected piping, treatment devices, receptacles, structures, or areas of land designed, used or dedicated to convey, store, stabilize, neutralize, treat, or dispose of blackwaste or wastewater.” Consequently, the system includes the drainfield.
 - b. A licensed complex system installer shall be required to install ETPS (IDAPA 58.01.03.006.01.b).
 - c. A public works contractor may install an ETPS if they are under the direct supervision of a PE licensed in the State of Idaho.
 - d. 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.
2. The design or certifying engineer should provide a written statement, within 90 days of completing the installation that the system has been installed and is operating in accordance with design and/or the manufacturer’s recommendations.

Note: If a health district has questions regarding application of this guidance document to a proposed system, contact DEQ. **Figure** shows the ETPS sampling process for an individual system, and **Figure** shows the reporting process for an O&M Entity.

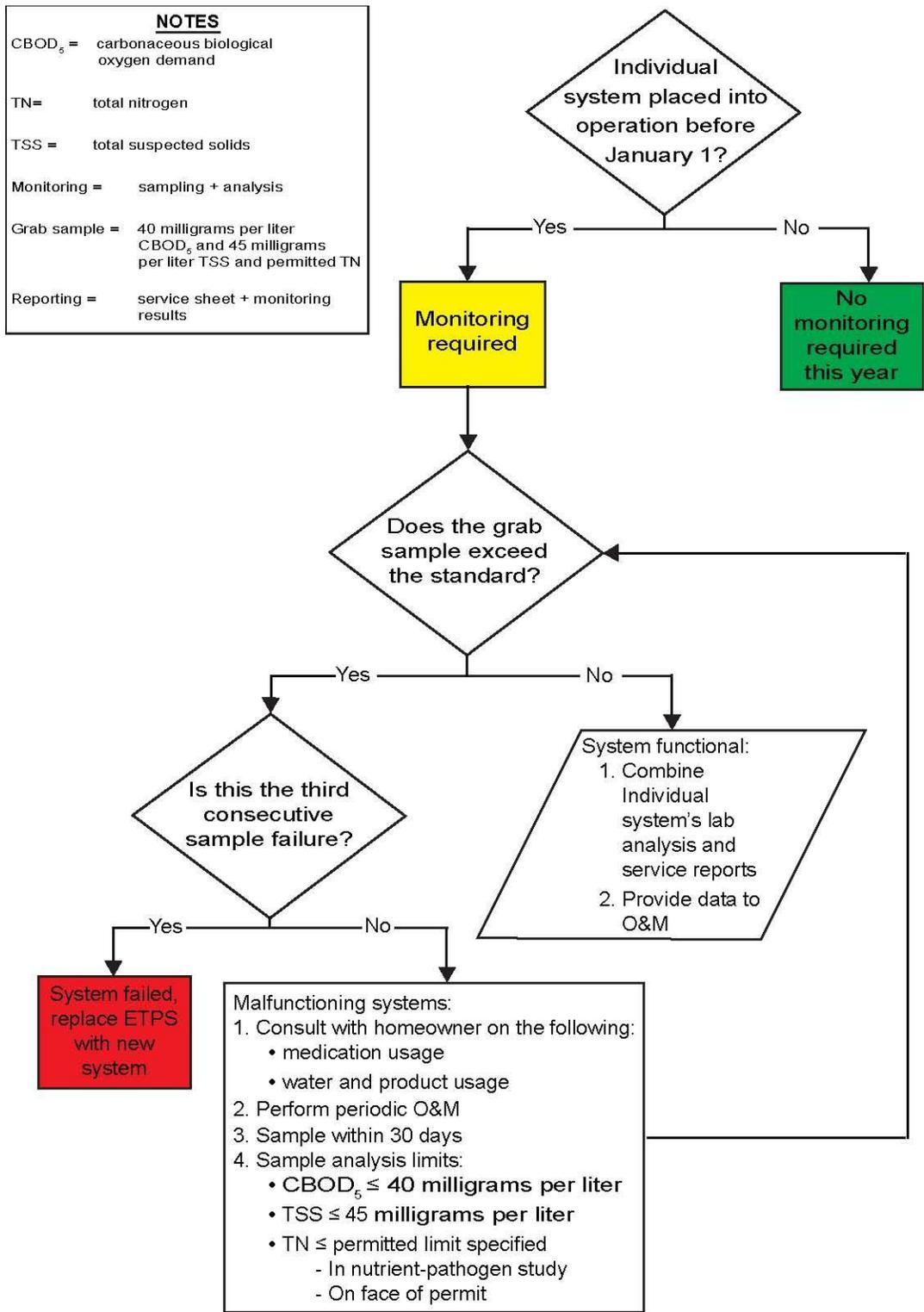


Figure 4-8. Extended treatment package system individual system sampling process.

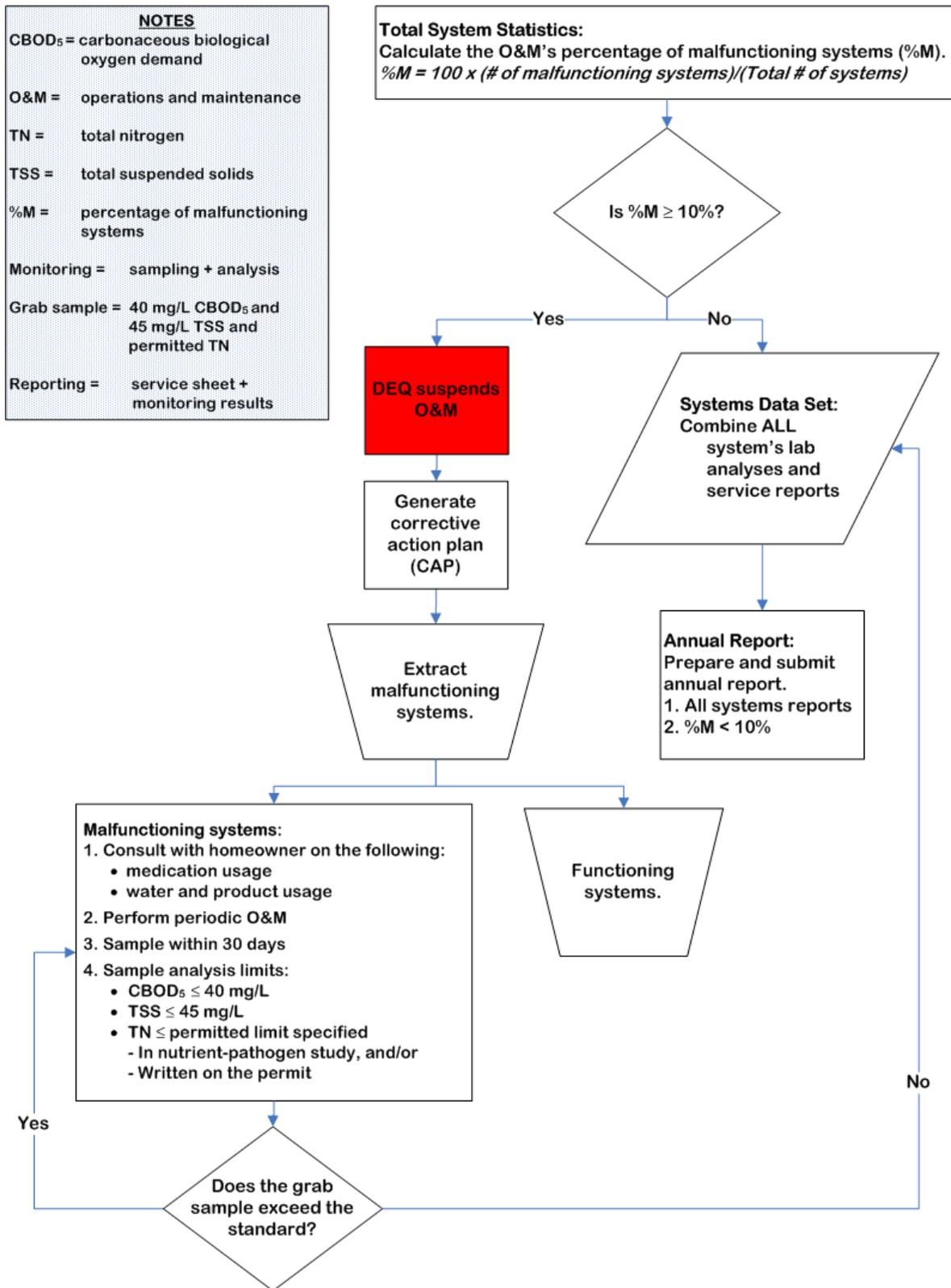


Figure 4-9. Operations and maintenance entity reporting process.



Appendix E

Outline for Operation and Maintenance Annual Reports

Annual reports are due January 31 of each year for the previous year's operation.

Basic Information

Property Owner Name: _____
Address: _____
Legal Description of Property: _____
Installation Date: _____

O&M Service Dates

Routine Service Date: _____ **Time:** _____
Special Service Date: _____ **Time:** _____

System Conditions (This section is to be completed for each service date)

Aerator Operation Condition: _____
Settleable Solids: _____ %
Pump Operation Condition: _____
Controls Operation Condition: _____
Filter Condition: _____
Alarm Operation Condition: _____
Water Level in Tanks: _____
System (plant) Odor: _____
Vent/Screen Systems Condition: _____
Corrective actions: _____

Pretreatment Chamber Inspection

Sludge Depth: _____
Scum Depth: _____
Scum Surface Condition: _____
Date tank pumped: _____

- Tank should be pumped if sludge level exceeds 40% of liquid depth.

Sample Results

Sample Date(s): _____
Certified Laboratory Name: _____
Certified Laboratory Address: _____
Sampled By: _____

Sample Results

BOD: _____ **mg/l**
TSS: _____ **mg/l**

If required

TKN: _____ **mg/l**
NO2+NO3-N: _____ **mg/l**

Corrective actions: _____

