

Approved Minutes of the Technical Advisory Committee Meeting  
December 10, 2013

**Attendees:** Roger Thompson  
Kim Greenwood  
Gunner McCain  
Ernie Christianson  
Mary Clark  
Peter Boemig  
Claude Chevalier  
Chris Russo  
Rodney Pingree

Justin Willis  
G. J. Garrow  
Bill Zabiloski  
Steve Revell  
Craig Heindel  
Ken White  
Mark Bannon  
Steve Rebillard  
Scott Stewart

**Scheduled meetings:**

January 14, 2014	1-4 PM	Catamount Con. Rm., National Life – Montpelier
February 25, 2014	1-4 PM	Winooski Con. Rm., National Life – Montpelier
March 18, 2014	1-4 PM	Winooski Con. Rm., National Life – Montpelier

**Agenda:**

Accepted

**Minutes:**

The minutes of the November 12, 2013 meeting were reviewed. Craig clarified that his concern is that the public have searchable online access to records. Craig also suggested clarifying language related to the potential reduction in isolation distances when a confining soil layer creates artesian conditions that protect a water source.

**Compliance Update:**

Chris said the rewrite of the computerized tracking system is facing a short delay as the person selected to do the work has accepted a job in Colorado. The Department of Environmental Conservation (DEC) is moving rapidly to fill the position and the task of upgrading the computer system remains the number one priority of the programming section.

The DEC had a meeting to which all of the service providers (those who do maintenance and inspections of wastewater treatment systems, including Innovative/Alternative systems,) were invited. Almost all of those invited did attend with a total of 13 providers, 3 Regional Office staff, and 3 central office staff in attendance. Chris will send the TAC

copies of the minutes, a draft inspection form cover sheet, and a draft informational handout that will be aimed at homeowners.

The meeting was greatly appreciated by the service providers who had many comments about how to improve the permitting, oversight, and maintenance of wastewater treatment systems, particularly those used for advanced treatment of the wastewater. The group requested that Colchester and Charlotte, the two towns that have been delegated the authority to issue permits at the town level, be required to submit information for the state permit tracking system. A cover sheet that will be included with all submissions of required operation and maintenance reports was discussed. The goal is to have a uniform cover sheet that allows the Regional Office staff to quickly see that either the system is operational and meets vendor and permit requirements, the system is operational but needs minor repairs, or the system does not meet vendor and/or permit requirements.

The Regional Office staff can use this information to identify problems that require some form of compliance action. The problem might be associated with just one installation or might indicate a problem with a specific technology or a group of similar technologies. Most service providers support the use of a uniform cover sheet and they made suggestions on how to make it easier to use and be more informative. Steve said that the School Parcel Account Number (SPAN) should be used for tracking purposes. Chris said that this is the goal but towns in some cases do not assign SPAN numbers at the time DEC issues a subdivision permit and instead assign the SPAN when portions of the parent parcel are transferred. Therefore, it will take time to get all permits indexed with a span number. One plus is that once a span number is assigned the state maintains a data base with names and addresses for all span numbers. This can be used to find contact information after the properties have been transferred from the original permittee. Peter said that the town should have assigned a span number by the time of the first inspection so that could be part of the information included on the cover sheet.

The service providers said that there should be at least an annual meeting to share information. They suggested that whether a project is for year-round use, seasonal use, or commercial use is a factor that should be included in the approval and operational requirements. The service providers would also like to provide comments in the renewal of specific I/A technologies.

The service providers discussed some problems they routinely encounter. They also discussed the transition currently underway that allows operational inspections to be done by those who are not licensed designers once the initial installation inspection and the first operational inspection have been completed by a licensed designer. The service provider does need to be approved by the product manufacturer, both because of the state approval requirements, and because the manufacturer is likely to require this to ensure that the warranty will remain valid.

The existing state approvals require that a maintenance contract be in effect at all times with a copy of the contract on file with the state. Some service providers are concerned about revealing confidential information that competitors could use to recruit customers.

The TAC suggested that instead of filing the actual contract, a statement that there is a contract in effect could be used. It is legitimate for people to search public records to find business opportunities and things such as contact information are public records.

Under general discussion the service providers said:

1. The state should do field audits of systems and service providers.
2. Flushing assemblies for the pressure distribution network in mound systems are not always being installed or accessible for use. The Regional Office staff report that the plans they approve show the flushing assemblies and because the permits require the construction of what is shown on the plans, the assemblies should be installed.
3. There should be better access to the inlets as well as the outlets of tanks for inspection and service.
4. There are concerns about outlet effluent filters. One brand seems to need service more frequently, possibly due to the use of 1/16" holes rather than the minimum required 1/8" holes. Suggestions included using both in series with the 1/8" holes first.
5. Mary asked the service providers if they should be licensed.
6. Ernie asked the service provider if the state should sponsor some effluent monitoring to determine if the systems are meeting the standards under which they are approved.
7. The span number and/or ww permit number should be posted in the control panel of the system.
8. The service providers asked how does the homeowner association responsibility works when there are several individually owned treatment systems that discharge into a shared leachfield which is controlled by the association?
9. The service providers would like to be able to consolidate on the time of inspections. If there are several systems in one neighborhood it would be very helpful if all of them could be inspected at the same time.
10. The service providers would like to have a handout to give to the system owners that explains the importance of ongoing maintenance.

Justin asked if any system vendors attended the meeting. I/A vendors were made aware of the meeting and encouraged to have their approved service providers attend, however the meeting invitation only went out to the vendor approved service providers. One

vendor's service provider did attend. Justin said that the manufacturers should be required to provide better and more complete information about the operation of the systems. In particular, the amount of electricity used is either not covered or the information does not reflect what users claim actually occurs. Mary also mentioned developing life cycle costs to capture all of the initial and ongoing costs over the expected life of the system which might be as much as 30 years.

Roger said that DEC could require this information as part of the technology approval process under the current rules. Kim suggested that the Energy Star program might be one approach. Mary said that the State of Maryland has a program (Best Available Technologies) related to energy use and performance of I/A wastewater treatment systems. Peter suggested that Efficiency Vermont might be interested in this issue. Justin urged that as much as possible be done soon rather than wait for a perfect solution.

Bill asked about what material goes into the compliance folder in the electronic "Document Search" database system. Documents and plans associated with approved permits can be viewed by the public using the Regional Office Permit Search document search tool on the web site. Ongoing correspondence currently goes into a different section. Clarification on what documents will be placed in the folder that is publically viewed is needed. Chris felt that at a minimum Installation Certifications, Inspection and Maintenance Reports with the cover sheet, and Maintenance Contract verification need to be in the folder. The documents are frequently requested by homeowners, Realtors, and attorneys and should be available and easy to find. This would save Regional Office staff time because they routinely have requests for the documents.

### **Innovative/Alternative Systems:**

Mary reviewed the current approvals of septic tank outlet effluent filters. The current rules only mandate that the filter not have openings larger than 1/8". Some of the approved filters restrict particles larger than 1/16" and it is up to the designer to choose the particular filter they wish to use. Mary said that there is a NSF International (NSF) Standard 46 for various components used for wastewater treatment but that it may not deal with how frequently a filter needs to be cleaned. There was a suggestion to ask the septic tank pumpers for their opinions related to effluent filters.

Mary also discussed some thoughts about asking for more information from manufacturers as part of the renewal process. Up to this point, a renewal is granted upon request if the technology has not been revised and DEC is not aware of any ongoing problems. Roger said that DEC can ask for additional information but the manufacturer should be informed well in advance.

Craig asked how an I/A technology moves from the General Use Approval to approved within the Wastewater System and Potable Water Supply Rules. Mary said that Maine and Pennsylvania incorporate them into their rules and we may want to consider this during the current rule revision process.

Mary said that she is continuing to review the Oakson Perc-Rite request for a drip dispersal system using septic tank effluent rather than filtrate effluent. Mary suggested adding Mark and Ernieto the existing subcommittee.

The reviews of the Eljen Mantis System and the Presby Simple Septic systems are continuing. These are both disposal methods rather than treatment methods.

Mary asked about the development of the Simplified Method for Prescriptive Desktop Mounding Analysis which is part of the current rules. Craig said that Allison Lowry would be the best contact on the history of this because she was reviewing the hydrogeologic reports for DEC at that time. Mary asked if the simplified method can be used when the transmission zone for the effluent under the leachfield has two or more layers of different permeabilities. Craig, Steve, and Roger said that the method was intended for use with only one soil layer. Sites with multiple soil layers, or varying soil conditions are inherently more complicated and dependent on site specific judgments and should be analyzed by qualified hydrogeologists. The simplified method was developed specifically for use by those who are not qualified hydrogeologists. Gunner mentioned that he uses the most limiting soil for the method and Roger says to use the representative soils receiving the wastewater discharge. This issue should be clarified. Steve, Craig, Ernie, and Roger said that the simplified method should continue to be based on concepts suitable for use by those who are not qualified hydrogeologists.

**Water Supply Rules:**

Various items were discussed with most of the focus on wording, clarifications such as updating the numbering system used for appendices, and the shallow well diagram. Ernie will work with the River Corridor Section to standardize the use of terms such as floodway, fluvial erosion hazard area, and special flood hazard area. Claude and Ken will provide language for non-steel casing materials used in well drilling.

**Next Meeting Dates:**

The group decided to meet on January 14, 2013, February 18, 2013 (rescheduled to February 25, 2013), and March 18, 2013.

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**Executive Committee:** Steve Revell, Ernest Christianson, Roger Thompson

Alternates – Chris Thompson, Spencer Harris, Claude Chevalier, Craig Heindel

**Subcommittees:**

**Hydrogeology**

Craig Heindel, Bill Zabiloski, Mark Bannon, Scott Stewart, Steve Revell, Mary Clark, Roger Thompson, Peter Boemig, Ernie Christianson, Spencer Harris

**UIC Rules**

Craig Heindel, Steve Revell, Roger Thompson, Ernie Christianson, Scott Stewart, Rodney Pingree, Kim Greenwood, Cindy Parks, John Beauchamp, Gail Center

**Wastewater Strength**

Mary Clark, Cindy Parks, Peter Boemig, Bill Zabiloski, Roger Thompson, John Akielaszek,

**Bottomless Sand Filters**

Peter Boemig, Mark Bannon, Cindy Parks, Mary Clark, Denise Johnson-Terk, Craig Heindel, Ernie Christianson

**Seasonal High Water Table Monitoring**

Craig Heindel, Steve Revell, Roger Thompson, Ernie Christianson, Bill Zabiloski, Dan Wilcox, Mary Clark