

Approved Minutes of the Technical Advisory Committee Meeting

November 16, 2023

Participation by videoconference

Attendees:	Cristin Ashmankas*	Bruce Douglas*
	Sharon Bissell	Sheri Young*
	Roger Thompson*	Craig Jewett*
	Mark Bannon*	Scott Davis
	Ernie Christianson*	Craig Heindel*
	Julia Beaudoin	Cristian Jabolonski
	Frederic Larsen	Evan Bollman
	Kelsey McWilliams	Aaron Brown
	Tom DeBell*	Chris Tomberg

*Technical Advisory Committee members or substitutes

Scheduled meetings:

No meetings are currently scheduled. Bruce would like to meet monthly in 2024 because he expects to be working on an extensive rewrite of the Potable Water Supply and Wastewater Disposal System Rules (WW Rules). Bruce will work on a schedule for the meetings and a list of topics for discussion.

Agenda:

The proposed agenda was accepted with added topics for installer training and the Act 250 statement in the new online application form.

Minutes:

The draft minutes of the September 19, 2023 meeting were revised and approved.

Updates:

The update to the WW Rules became effective on November 6, 2023. No changes were made during the Legislative Committee on Administrative Rules (LCAR) process. Bruce thanked the Technical Advisory Committee (TAC) members and the Regional Office staff for

their work on amending the WW Rules. Bruce will send copies of the undated WW Rules to the TAC members.

Old Business:

FEMA Transportable Housing has been installed on about 20 sites on Country Club Road along with 2 in existing mobile home parks and one on a stand-alone site.

Work continues updating guidance documents related to fees and the definition of an attached dwelling. As of January 1, 2024, only guidance documents registered with the Secretary of State's Office are considered to be part of the WW Rules. There are four documents listed on the Department of Environmental Conservation website that are currently effective. Bruce said there are more topics that need to be added.

There is no update from the Instantaneous Peak Demand work group. Bruce is working on a write-up of the group's recommendations.

The work on the Indirect Discharge Rules is moving forward. The updated rule will add Septic Tank Effluent Pumping (STEP) and drip dispersal systems as conventional systems, rather than their status as experimental. The updates will clarify that the WW Rules apply to the portion of the construction prior to the first treatment component. IDR jurisdiction will start at the septic tank at the beginning of a STEP system.

Work updating fact sheets for food trucks, campgrounds, alternative toilets, and short-term rentals is continuing. Tom said that the Vermont Health Department is updating the water testing package that is needed to meet the requirement that all new water supplies for single family residences be tested.

Wastewater System Installers and Service Providers:

Wastewater system installers and service providers that do the inspections of advanced treatment systems are not licensed by the State of Vermont. Service providers must have approval from the manufacturer/vendor of a particular advanced treatment system to do the annual inspection for that system. The Department of Environmental Conservation (DEC) is considering the possibility of adding a licensing requirement that would require legislative approval and/or creating a certification process that would recognize an installer or a service provider as having demonstrated the knowledge required to work on specific types of water or wastewater systems. A grant from the Lake Champlain Basin Program has been obtained that will allow for training of service providers and installers in the next few months. A licensing or certification program might increase the number of installers and service providers. Roger said that he does not support the creation of additional licensing programs. Tom said that the Vermont Plumbing Board is considering if the increased use of water treatment systems justifies a revision to the plumbing rules such as creating an additional special license. Craig J. recommended

contacting the State of New Hampshire and asking about the pros and cons of their program that licenses installers. Bruce said that he is also reviewing how other states deal with this issue. Bruce noted that installers are currently allowed to certify the installation of simple wastewater systems (those that can be designed by a Class A Licensed Designer) and is considering the possibility of allowing for certifications of some of the more complicated systems. Craig J. commented that most Licensed Designers have insurance that protects the permittee. Bruce said that the Office of Professional Regulation (OPR) now requires that any contractor doing a project for \$10,000 or more have liability insurance with a minimum of \$1,000,000 per occurrence and \$2,000,000 in aggregate. Roger asked about potential conflict between the designer and installer if a system has problems after the installation, Cristin said that an installer that signs the installation certification assumes the liability for design problems though they may not be aware of this liability. Craig H. asked if the OPR insurance requirement applies to installing water treatment systems. Bruce said that interior construction is not covered at this time. Sheri thinks that installers need some Licensed Designer oversight. Ernie noted that a Licensed Designer is usually not onsite during the full construction process and therefore does not see a portion of the construction before it is covered. An installer certification would cover the work that the Licensed Designer did not see. Cristin said one DEC concern is that when an installer does not certify the installation the DEC has no authority directly over the installer. Bruce also noted that Licensed Designers get requests to do after-the-fact inspections and must make judgments on how much digging and camera work to do and how much will they rely on information from the installer that did the work. Sheri said she has done inspections and found that improper materials had been used. Bruce wondered about how many permitted systems have been installed without having an inspection at the time. Bruce also said that he was aware of at least one case where a Licensed Designer was hired but the landowner did not apply for a permit. Sheri has occasionally found a system that was constructed without a permit. There are questions about how many problems are happening, whether there has been an improvement with compliance over time, and how much effort at increasing compliance is justified.

The DEC would like to create a category of service providers called Operation and Maintenance Specialists. This group would do the inspections required for advanced treatment systems and other systems when required as a condition of the Wastewater Permit. Craig J. asked if they would be allowed to do the site examinations sometimes required such as checking for surfacing of effluent, slumping of the fill material, or maintenance of proper surface drainage. Cristin said that they would. Bruce thought this might be helpful to some Licensed Designers who are overloaded with work. Roger asked if the manufacturer/vendor of a system would also need to agree that the Operation and Maintenance Specialist could inspect their system. Cristin said that the goal is to have a group of people who could cover many different systems so that individual manufacturers/vendors would not have to certify a person for their particular system. Ernie strongly supports this approach saying that in the past there were times when a manufacturer/vendor had no approved service provider in Vermont. Sheri asked how the DEC would be able to train and monitor the service providers and Bruce said that a position would need to be added. The creation of a program for Operation and Maintenance Specialists might also bring down the cost to the homeowner for the inspections because a service provider could

inspect many systems in a small area, rather than having only a few systems they are approved to inspect that are scattered all over Vermont.

Boundary Line Adjustments

Bruce said there is some DEC discussion about exemption §1-304(9) of the WW Rules. This exemption applies when a boundary line between two pieces of land is moved and applies when several conditions are met. One of the conditions states that “the lot is reduced in size by no more than 2 percent.” The question is whether the 2 percent limitation applies to the lot being reduced in size or the total area of the two lots between which the boundary is being relocated. Craig said it applies to the lot being reduced in size. Roger and Ernie agree and said that the language seems clear because it starts with “each lot being adjusted . . .” and then applies the 2 percent reduction to “the lot being reduced in size . . .”.

Innovative/Alternative Systems:

Cristin said that Premier Tech is asking for review of its new Ecoflo Linear Biofilter system. The system combines the treatment and dispersal functions into one area using coco fiber as the treatment medium installed on a 12” bed of sand. The system can be pressure dosed with various methods including an approach similar to the Flout® which does not require an electrical connection. The design includes a sampling port that must be flushed and then operated for 24 hours before collecting the sample. The system can be renovated by replacing the coco fiber. The system has been tested using low strength wastewater at various loading rates and temperatures and passed with average results of 3-9 mg/l BOD and 1-7 mg/l TSS. The minimum sizing of the dispersal area is based on the sand characteristics with increases in size when required by the receiving soil capacity. The dosing devices show acceptable distribution. Careful construction is required for good distribution and there are concerns about the need to replace the coco fiber and the limited crush resistance of the distribution system. Use of machinery over the system must be strictly limited. There are concerns about the installation process which requires the sand to be placed in two layers with compaction after the placement of each layer. Bruce said he is not concerned, and Craig J. supported the use of compaction for consistency in the sand layers under the coco fiber. There are two locations that have approved use of the system with about 20 installations so far. Sheri asked about disposal of the used coco fiber and Cristin said it would go to a landfill. Roger asked if there would be separate approvals for use with gravity or pressure distribution. Ernie asked if the treatment occurs in the coco fiber or in the sand fill underneath the system. The system was tested and approved by NSF using 12” of sand and is currently being tested using NSF requirements with an installation on 6” of sand. Cristin said that the current approval of the Geomatrix® system relies on the 12” of sand under the dispersal system. Ernie asked if the requirement to replace the coco fiber after 20 years of use required replacing the sand as well as the coco fiber. Cristin said that in most cases it should be only the coco fiber. Craig H. said if the system is essentially similar to the Geomatrix® it should be approvable. Craig J. commented that the Flout distribution works well, and Roger agreed. Cristin will ask for modifications to the installation manual to match the Vermont requirements. Bruce

asked about permitting requirements for the replacement of the coco fiber at 20 years and Cristin said an evaluation by a Licensed Designer would be needed to ensure that all aspects of the reconstructed system would be up to standards.

New Items:

Jared Willey reported that 2 towns have voted to support bonds for large scale Indirect Discharge Systems. Craig H. said there are concerns about the growth impact for the project in Westford. Bruce said that there might be impacts on drinking water supplies that must be addressed as part of the project in West Burke. Craig J. said that West Burke has been working on wastewater issues for 10 years and there are several villages currently interested because money may be available. He noted that there is political interest, but the process has not moved into technical work yet. He also notes that just because there is money, not all citizens may be interested in expanding development. Bruce said that no one has proposed a fire district approach where a system might be implemented to serve a specific portion of a town. Craig J. said that the fire district approach can reduce the bonding capacity and that some existing fire district-based water supply systems are looking at asking the town to take over the system.