

Approved Minutes of the Technical Advisory Committee Meeting  
May 17, 2022

**Participation by videoconference**

<b>Attendees:</b>	Cristin Ashmankas	Bruce Douglas
	Denise Johnson-Terk	Sheri Young
	Michael Mezzacapo	Bryan Harrington
	Chris Tomberg	Lisa Stevens
	Jen Fleckenstein	Karen Adams
	Craig Jewett	Roger Thompson
	Dick Bachelder	Gunner McCain
	Scott Stewart	Terry Shearer
	Brett McCreary	Sille Larsen

**Scheduled meetings:**

June 21, 2022	Virtual
July 19, 2022	TBD
August 16, 2022	TBD
September 20, 2022	TBD
October 18, 2022	TBD
November 15, 2022	TBD
December, 20, 2022	TBD

**Minutes:**

The draft minutes of the March 15, 2022 meeting were reviewed. Sheri asked that the comment about repair of a failed mound system indicate that it applies to previously permitted systems and covers all modes of failure. The draft minutes of the April 19, 2022 meeting were reviewed and accepted.

**Currently proposed Changes to the Wastewater System and Potable Water Supply Rules (WW Rules):**

Bruce updated the TAC on the status of the WW Rule update. This update is limited in scope and includes changes that have been discussed by the TAC and recommended for immediate adoption. He said that Bryan had done a line-by-line review of the Indirect Discharge Rules (IDR) looking for conflicts with the WW Rules and other rules. There are a few conflicts that need to be resolved.

Bruce also reported that, due to a vacancy in the legal section of the Department of Environmental Conservation (DEC), all rule updates will be reviewed and prioritized by how urgently the changes are needed. Bruce spoke with attorney Jordon Gonda who is reviewing the updates to the WW Rules, and she said that there appears to be only a small amount of work left to complete the process. Because the amount of remaining work needed to begin the formal rule adoption process is small, Bruce is hopeful that he will have permission to move forward.

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

Cristin reported that she has not received any applications or information submissions since the April TAC meeting that need a TAC review.

Cristin asked for comments about the need for septic tanks prior to the treatment portion of an advanced treatment system. The designs submitted for approval vary with some specifying the equivalent of a standard septic tank, some using a smaller pretreatment tank, and some not requiring any tankage prior to the treatment portion of the system. She said, for example, that the Jet System, which is an aeration/fixed film treatment system, includes a small primary settling tank while indicating that a standard septic tank is not required before the treatment system. Cristin noted that the existing WW Rules for Innovative/Alternative Systems do not include a clear statement of whether a standard septic tank is required prior to all advanced treatment systems. Gunner suggested that if the applicant proposes an advanced treatment system without a standard septic tank, the applicant should provide information demonstrating successful operation without the septic tank.

### **Prioritization of Topics for future WW Rule updates:**

The TAC reviewed a list of topics that was circulated to the TAC and separately to the Regional Office staff. The discussion was just to outline the topic enough to help decide how to prioritize it.

1. **force main leakage testing:** This topic has been previously discussed by the TAC and the group agreed that it should be included in the currently proposed changes. The standards for doing the testing need to be the same in the WW Rules and the IDR. It may be appropriate to reduce or eliminate the testing for some small systems that serve only a single landowner because of the expense of the testing outweighs any benefits.
2. **graywater system design flows:** these design flows will be reviewed by the TAC to determine if they should be updated. Gunner noted that the graywater term might be misleading because the wastewater flow includes all the same pathogens even if the toilet waste is removed from the flow. Sheri said that there

is a legislative committee that is working on water conservation issues so TAC review will be timely.

3. **continuing education for Licensed Designers:** The WW Rules require that the DEC provide at least one soils based course per year for licensed designers. This was challenging during the pandemic but should be addressed. Terry reported that he is seeing evidence of many substandard installations of wastewater systems and that there is a need for education of installers. The current WW Rules require completion inspection forms to be submitted to the DEC. Many systems must be certified by a Licensed Designer, but a portion of the installations can be certified by the installer who may or may not be a Licensed Designer. He noted that systems that are installed and certified by the landowner are often in compliance with the permit. He said that training, a certification program, and maybe licensing should be considered to ensure that systems are installed as approved. Substandard installations may burden current or future landowners if the system fails to operate properly. Bruce said that he is waiting to see if a USEPA grant application through the Lake Champlain Basin program with \$200,000 for training of installers and service providers (inspectors of advanced treatment systems required by the permit) is approved. Bruce also noted that S.226 which would require contractors doing projects of more than \$10,000 to register with the Office of Professional Regulation and to have liability insurance. This bill is awaiting action by the Governor.
4. **non-soil-based systems and water conservation measures that might reduce the size of the wastewater disposal system:** Some of the potential water conservation measures involve treatment and reuse of the wastewater. Any use of these systems will need to have plans for operation and maintenance along with a process to ensure compliance.
5. **financing failed system upgrades for water and wastewater systems:** Bruce reported that there is an existing state program to help with this. It has an appropriation of \$1,000,000. Once the availability of help was made public, 1,200 applications were filed. These have been screened for compliance with the application requirements with 250 already determined to be eligible. More of the 1,200 are expected to be eligible. Bruce said that the state budget, awaiting the Governor's action, includes an addition \$15,000,000 for failed system upgrades. The DEC estimates that, if the money is approved, there may be up to a 30% increase in total applications and that the DEC proposes to add at least two positions to help with the work. Bruce asked if the Licensed Designers have the capacity to handle the increased workload. Craig said that he believes all the Licensed Designers are already overloaded and adding this much work to the system will result in longer delays for site evaluations and permit application

submissions. Installers are also overloaded, and it can take several months to have a system installed.

6. **tracking reasons for failed systems:** Cristin said that the new application form asks why the system failed. In most cases, the designer checks for some common causes of failure that might affect a replacement system, such as too many users, large amounts of grease discharged into the system, maybe whether there is a garbage disposal, or poor drainage around the leachfield area. Gunner said that once he determines the system is failed, he moves on to designing a replacement system. Sheri said that usually some exploratory digging is done related to the failed system. Sheri said that there should be a simplified permitting process with an application that could be submitted and approved online so that the repair work could start quickly.
7. **tiny houses:** there is interest in this topic as a partial solution to the lack of available housing. Bruce said that one issue that does not always come up in tiny house discussions is the wastewater disposal issues. Bruce said that the current requirement for a minimum of a two-bedroom capacity for water and wastewater systems could be a limitation for tiny houses and could be reviewed.
8. **establishing inspection intervals for systems within buffer zones of potable surface water sources:** There are concerns that failed wastewater systems are contaminating surface water that is used as a potable water source. The process might include periodic site evaluations, and/or septic tank pumping of all wastewater systems within a specified distance around any lake or pond. Sheri suggested that a one-mile radius might be appropriate. Sille asked if the process would protect all water supplies or only newly permitted ones. Sheri said her concept is that it would cover a specified area around a lake or pond so it would help protect any existing or future surface water supply.
9. **sewer line requirements from the septic tank to the leachfield:** This was discussed at the previous TAC meeting and a recommendation was made to return to the language in the 2007 WW Rules. Bruce said that this is included in the currently proposed changes to the WW Rules.
10. **sieve-size requirement for mound sand and testing frequency for certification:**  
Bruce said that Mary O'leary is reviewing this topic and will provide a report. The TAC will review the information and make a recommendation.
11. **boundary line adjustments:** Bruce is working on a process that would allow Licensed Designers to approve boundary line adjustments, based on requirements in the WW Rules, without requiring that the documents be submitted to the DEC.

This change would save time for the applicant and reduce the Regional Office staff workload. The language will need careful drafting.

12. **adding an occupancy limit to wastewater permits:** There are concerns that some buildings are being over occupied, particularly those subject to short term rental. The DEC has seen buildings advertised with sleeping capacities much larger than what the water and wastewater systems are designed to handle. One current approach is, based on the advertisement, sending a letter to the permittee stating that this is a permit violation and filing the letter on the land records. Filing on the land records ensures that any future owner of the property is also notified of the issue. Roger and Sheri said that putting an occupancy limit in the permit is not a good idea. Roger said that enforcement would be difficult in that evidence would need to be collected to support any claim of permit violation. There would be issues of what happens if once in awhile a large group spends the night and how do you respond to a neighbor's complaint.
13. **installing a composting toilet in an existing single-family residence:** The TAC during discussions in 2020 supported an exemption for such an installation. The proposed language would be inserted in the WW Rules as §1-301(g)(6).
14. **energy efficiency for wastewater systems:** There should be discussion of the energy requirements of wastewater disposal systems. The permit applicant should be informed about the estimated cost of electricity if a system involves mechanical treatment.
15. **designing for climate change:** The potential for damage to water and wastewater systems that may occur as the climate changes should be reviewed.
16. **permit navigator:** Cristin discussed the permit navigator system. This is an online tool that uses a series of questions to point a designer or landowner towards the next steps in resolving their problems. The system is being updated and Cristin recommends that Licensed Designers use it prior to visiting a site.
17. **variance process:** Bruce said that he is concerned that the existing process for deciding when a variance allowing construction of a replacement wastewater disposal system versus requiring the installation of a holding tank system is not clear. Mary O'Leary will be evaluating other state regulations and Vermont's variance process. One approach that may be worth considering is to develop a system that would utilize a ranking/risk management system to different variances from a specific requirement in the WW Rules. An example would be a situation where the variance request is a reduction in the size of a leachfield versus a situation where the variance request is for a reduction in separation to the seasonal high-water table.

18. **seasonal use versus year-round use:** Sheri asked that consideration of basing approval on the site conditions, primarily depth to seasonal high-water table, that occur during the proposed period of occupancy.

**Other Topics:**

Sheri asked if the Governor had approved the TAC membership recommendations. Bruce said that he had and that he had an electronic copy of all of the approvals in a single PDF. Bruce will have the document divided into separate pages and will send each members approval to them.