Approved Minutes of the Technical Advisory Committee Meeting

May 21, 2024

Participation by videoconference

Attendees:

Sharon Bissell	Cristin Ashmankas*
Roger Thompson*	Denise Johnson-Terk
Kevin Eaton	Julia Beaudoin
Megan Kane	Gunner McCain*
Jared Willey*	Bruce Douglas*
Ken White*	Tom DeBell*
Steve Revell*	Terry Shearer
Catherina Narigon	Claude Chevalier
Sheri Young*	Eric Deratzian
Sille Larsen*	Jen Fleckenstein*
Frederic Larsen	

*Technical Advisory Committee (TAC) members or substitutes

Scheduled Meetings:

All meetings are scheduled as virtual meetings.

June 18, 2024	2-4 PM
July 16, 2024	2-4 PM
September 17, 2024	2-4 PM
October 15, 2024	2-4 PM
November 19, 2024	2-4 PM
December 17, 2024	2-4 PM

Agenda:

The proposed agenda was accepted as drafted.

Minutes:

The draft minutes of the April 18, 2024 meeting were accepted minor wording changes.

Updates:

The administrative process for correcting minor errors in the 2023 version of the Wastewater System and Potable Water Supply Rules (WW Rules) is continuing. Bruce repeated his comments from previous meetings that a few mistakes that existed in the 2019 version of the WW Rules, that were not proposed for correction in the 2023 version, cannot be corrected using the administrative approach. These will be covered in the next revision to the WW Rules. Bruce said that the legal review is complete, and that he will do his final review in the next week or two. Bruce will see if people who purchased hard copies of the 2023 version of the WW Rules will be able to get free copies of the corrected version once it has been approved.

I/A Technologies:

Sheri asked for a clarification about the approval for the Ecoflo Linear Biofilter. Sheri asked if the non-pressure distribution version of the system can use double the standard application rate. Cristin said that the increased loading rate without pressure distribution is approved, while any reduction in separation to the water table is limited to systems using pressure distribution.

Cristin sent the Chittenden Solid Waste District a draft approval for the use of crushed glass as the filtration media in mound systems.

Proposed WW Rule Revisions:

Bruce led a discussion of the portion of the WW Rules related to the sources of potable water. The distribution requirements will be discussed at the next meeting.

One task is to update the definition in the WW Rules. The existing definition of potable water states: …water used or intended to be used for human consumption, including drinking, washing, bathing, the preparation of food, or laundering. Sheri asked about the requirement that water used for laundering be potable, saying that some people with limited water systems do not use potable water for laundering. Claude supported this comment. This issue has been discussed during previous WW Rule updates. Based on concerns related to exposure to clothing contaminated with pathogens, it was decided during the previous discussions that requiring potable water for laundering is a reasonable requirement.

Sheri asked about using rainwater collection systems for potable water use. Bruce pointed out that this is not currently allowed because of the difficulty of ensuring that the water meets the quality standards for potable water. Roger asked if the use of water storage tanks replenished with trucked water should be considered. Kevin said that getting clean water in a truck is easier than from a rainwater collection system.

Tom asked if it is considered to be a potable water supply if it does not pass a quality test. It would be a failed supply as defined in the WW Rules. Sille noted that lack of sufficient quantity also meets the definition of being a failed supply.

The definitions related to potable water sources were discussed. Julia asked about classifying springs as surface water sources. The group agreed that the definition should be clarified. Ken said the definitions for confined and unconfined aquifers can be improved. Bruce talked about the requirement related to bedrock wells. Ken noted it should be competent bedrock and Claude added that even competent bedrock can have voids that must be dealt with. Julia asked about the definition of bedrock and if it includes soft crumbly materials. The group agreed that the issue of when a material should be considered soil and when it is bedrock should be discussed and better defined in a revised WW Rule.

The use of surface water sources was discussed. §1-1102(d) limits the use of surface water sources for potable water sources subject to the WW Rules. They may serve only one single-family, owner-occupied dwelling. They are also limited to lakes and ponds approved by the Watershed Management Division and Lake Champlain excluding St. Albans Bay, Missisquoi Bay, and portions from the Lake Champlain Bridge south. Streams shall not be used as a potable water source except with a variance for a failed supply.

Water treatment systems are required if the source water quality exceeds the standards in the WW Rules. The WW Rules specify the level of treatment required, but in most cases the design, installation, and operation of the treatment system does not require approval under the WW Rules.

Bruce asked if well points, jetted wells, infiltration galleries, and cisterns should be added to the list of potable water source types. Claude suggested clarifying that drilled wells may or may not be constructed in bedrock. Claude also suggested that the artesian well definition should indicate that the water overflows onto the ground surface. The group discussed this and thinks that the scientific definition only requires that the water level rise above the level where the water is encountered in the ground. The category for driven wells was discussed. Cristin reported that most driven wells that she encountered are not very deep and are hand installed. Claude said that he constructs driven wells with his drilling equipment using special fixtures.

Diagram C-18 was reviewed. One suggestion was that even though this, and other diagrams are labeled as typical examples, clarifying that not all the details in the diagram are always needed.

Surface water intakes were discussed. Bruce noted that all surface water systems with intakes that are less than 20’ below the mean water level of the source require treatment for turbidity and cyanobacteria. Cristin said that the proposed treatment for turbidity and cyanobacteria must be reviewed and approved as part of the permitting process because it is not included in the exemption for water treatment systems.

Gunner said that §1-1102(b) should be revised to allow for an addition well to be constructed when none of its presumptive isolation zones extend onto another person's land, even if the isolation zones for an existing well do.

Bruce said that he would like to clarify items including:

1. The static water level in the well varies over time and with nearby water withdrawals.

2. The process for long-term yield testing should be reviewed.

3. The process for determining whether there is interference between two or more wells and when it is a problem should be reviewed.

4. The section on Instantaneous Peak Demand (IPD) is unclear as to whether the first of the three required flow measurements may be taken at the start of the test or only after 30 minutes of pumping.

Water quality testing was discussed. Tom noted that the WW Rules only require a one-time test, while there is clear evidence that the water quality may change over time, particularly during the early use of a water source. Tom asked if there should be a change in the testing requirements if the initial test found contaminants at or near the regulatory standard. Sille said that in addition to the standards given in the WW Rules, the Vermont Health Department has adopted action standards such as the requirement that all schools act whenever lead levels exceed 4 parts per billion even though the level is set at 15 parts per billion in the WW Rules. Cristin asked that odor be returned to the list of required tests. Sheri objected, saying that it had been a major problem in the past adding to the cost and time of permitting. Cristin said that odor can be a good indicator of a need to test for volatile organic compounds (VOC). The Vermont Department of Health also objected to adding odor to the list of required tests.

Gunner asked about the time requirement in permits for the replacement of failed systems. The standard language says the replacement system must be installed within 3 months during the construction season. He said that finding a contractor to do the installation in less than 6 months is difficult and suggested the standard language should allow one year to complete the repair. Sheri agreed, saying that even 6 months is often not long enough to arrange for construction of the replacement system. Cristin said that a year is a long time to allow the continued operation of a failed system that might be surfacing, discharging into surface waters, or threatening a potable water source. Cristin said that extensions are routinely offered based on case-by-case review. Gunner said that a request for an extension is usually prepared by a Licensed Designer at some cost to the applicant.

Bruce said that he would like to review the section on closure of abandoned wells to see if there are reasonable methods to ensure better compliance.