

Approved Minutes of the Technical Advisory Committee Meeting  
October 18, 2022

**Participation by videoconference**

<b>Attendees:</b>	Bruce Douglas*	Steve Revell*
	Claude Chevallier*	Craig Heindel*
	Gunner McCain*	Sheri Young*
	Mark Bannon*	Ernie Christianson*
	Roger Thompson*	Cristin Ashmankas*
	Bryan Harrington*	Sille Larsen*
	Karen Adams*	Craig Jewett*
	Jen Fleckenstein*	Tom DeBell*
	Terry Shearer	Bryan Redmond

\*Technical Advisory Committee members or substitutes

**Scheduled meetings:**

November 15, 2022: The meeting will be a combination of in-person meeting at the ANR Annex Building at 190 Junction Road in Berlin and online. An email with the information for connecting online will be sent. The in-person meeting will begin at 1 PM and will be an informal gathering. The formal meeting will begin at 2 PM.

December, 20, 2022 Virtual

**Agenda:**

Steve asked that the restrictions placed on single-family residences in seasonal use be discussed. Sille noted that Scott Stewart is not present and that the discussion on closing shallow wells might wait until he can participate.

**Minutes:**

The draft minutes of September 20, 2022 meeting were reviewed and revised to state that Tom DeBell, VDH Environmental Health Engineer, will be replacing Anna Gallagher as a Vermont Health Department representative.

**Updates:**

Bruce said he has drafted the new revisions to the list of proposed updates to the WW Rules. He will prepare a summary of the changes and circulate them to the Technical Advisory Committee (TAC).

Bruce reported that there has been an increase in permit applications at the Regional Offices. After a period when applications for replacement wastewater systems hovered around 500 per year, the numbers have increased to between 650 and 700. With the passage of the American Recovery Act Plan (ARPA), Vermont now has about \$15,000,000 to help fund replacement water and wastewater system. The Department of Environmental Conservation (DEC) expects an increase of at least 150 additional permit requests for replacement systems. There will be an increase in DEC staff to administer the ARPA funds.

Sillie reported on the DEC receipt of well completion reports. There is some reduction in the number of reports filed during 2020 and 2021. Claude said that the drillers are very busy, so it is not a lack of wells to report. The DEC is moving to online reporting and the DEC will be working with the drillers to get the system up to date. Having the information in the DEC system is important because it is used by Licensed Designers for information on wells near properties they are working on.

Claude noted an issue with figure C-17 in the WW Rules. The figure gives details of a typical driven well in unconsolidated material. The diagram specifies a well screen. Claude said that he asked other well drillers if they were routinely installing the screen and learned that they were not. This presents problems in completing a well installation report which asks if the well as installed complies with the WW Rules. Ernie said that these diagrams are in the Flexible Technical Standards portion of the WW Rules and the DEC can accept an alternative design. Cristin explained this could be covered with an as-built plan that is filed with the DEC Compliance Section who would accept it. If the original approval was for a well drilled into bedrock, the installation report would also need to deal with the isolation distance. If the well met the distance required for a well in consolidated material no other action is needed. If not, the report would need to request a reduction in isolation distance based on hydrogeologic conditions, that sometimes are satisfied if the well is completed in a confined aquifer that prevents contamination from moving towards the well. The TAC suggested that figure C-17 be updated to cover the screen issue and the different isolation distances for confined and unconfined aquifers.

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

The DEC did not have any systems needing TAC review.

## Recent Legislative Discussions:

Bruce noted that in the past legislative session a bill was proposed that would deal with low impact water and wastewater systems. The legislation was not discussed during the past session though an ad hoc study committee was formed which met a few times during the year. Sheri was a member of the committee. Also interested were the Rich Earth Institute; Clivus Multrum, Inc.; and the Vermont Department of Forest and Parks (VDFP). The VDFP has about 80 moldering toilet installations. Moldering toilets are structures built above ground directly on the soil. The liquid seeps downward into the soil while the solid materials are allowed to compost. The systems in use by the VDFP have a toilet structure on top of cribbing that can be moved from side to side so that fresh material is deposited into one side while the other side is undergoing composting. An evaluation of the systems determined that the liquid being infiltrated into the naturally occurring soil was being applied at a gallons per square foot rate approximating that of a conventional leachfield. Bruce said there is a lot of interest in the use of moldering toilets at trail huts and other remote locations. Sheri said that the committee will likely reach agreement on the best practices for composting and the use or disposal of the composted material. The group has not made any decisions about how to dispose of the wastewater after the toilet waste is treated.

Bruce learned that there are more complaints about the DEC's overshadowing requirements than any other State program. The current statute requires that a neighboring property owner be notified if any portion of the isolation distance around a water source or wastewater disposal system extends across a property line. Because the notice is sent prior to filing the application with the DEC, the Regional Office staff does not have any site-specific information when a neighbor calls with questions. The Licensed Designer is usually the person contacted by a neighbor with concerns about the impact on their property and can explain the basis of design and that the application complies with the WW Rules. The WW Rules do not allow a neighbor's concerns to affect the issuance of a permit unless the neighbor demonstrates that the isolation distances are not met. The current WW Rules are based on the first in time concept. Craig Heindel and Craig Jewett said that with the passage of a statute declaring that groundwater is held in public trust, as surface water has been treated from the beginning, it is not clear that the first in time position will be sustained in the future. An Environmental Court decision from about six months ago dismissed an appeal of a WW Permit related to the overshadowing requirements. Bruce suggested that maybe Licensed Designers could be asked to design with the minimum over shadowing. Roger said that this issue was extensively discussed by the TAC in the past and it became very complex. The DEC could protect Licensed Designers by creating specific steps they must take, but that leads to complaints that the DEC is not doing enough to protect the neighboring property owner. The question comes down to how much money must the permit applicant spend to reduce the overshadowing. Sheri said that there are other issues related to public trust concepts that she keeps in mind whenever doing design work.

A time of sale inspection requirement is also under discussion. Craig Heindel recalled that Massachusetts found it difficult to implement. Ernie said that he had worked on the issue

and outlined some approaches, but it was not pursued. Craig Jewett said that he had performed time of sale inspections in Massachusetts and that the process had become workable. He strongly supports a time of sale inspection with a focus on whether the system is failed at the time of inspection. A short checklist can be the basis of the inspection. If the client wants, a more complete inspection can be made to help forecast likely problems and the cost of repair. Gunner supported the pass/fail concept, but said it is hard to account for past performance. Ernie noted that a pass/fail approach does not forecast successful operation of the system because the occupancy at the time of inspection might be low compared to the use of the new purchaser. There is also the question of liability. An inexpensive evaluation would limit what a Licensed Designer could say about the system while a more comprehensive evaluation that would allow for a detailed analysis by the Licensed Designer could be quite expensive. Cristin said that most sales that involve a mortgage have some sort of inspection because the bank requires it. Cash sales, where immediate action by the buyer is sometimes required, may not have an inspection. Terry said that he gets calls from Licensed Designers who want to know what they should do. He tells them that there are no rules, so they need to discuss the options with their clients. Roger said that the TAC had done an in-depth analysis of this issue a few years ago and found that it quickly became complex. The TAC did not support a time of sale inspection at that time.

The DEC said they are working on a licensing system for installers and service providers.

### **Seasonal Definition and its Effect in the WW Rules:**

The term seasonal is applied to the use of a single-family residence when the residence is occupied for 180 days or less in each calendar use. This definition takes effect if the single-family residence is converted from seasonal use to year-round use and requires that the technical standards for new water and wastewater systems be followed because it is considered to modify the operational requirements per §1-201(65) of the WW Rules. These requirements were added to the WW Rules because of concerns that some lots with seasonal camps are so limited in wastewater disposal capacity that a conversion to year-round use would result in failed wastewater systems with no possible replacement. Exemption §1-802(a)(2) was added in the 2019 version of the WW Rules that allows for a seasonal conversion, using a wastewater system design that may include variances with the limitation that a holding tank system may not be permitted.

### **Subcommittee on Peak Instantaneous Demand:**

Bruce said that Sheri Young, Craig Jewett, Steve Revell, Justin Willis, Mark Bannon, Jeff Williams, and Sillie Larsen have asked to be on the committee. The committee is open to anyone who would like to participate.

**Replacement of Existing Systems that have not Failed:**

Craig asked about replacement of existing systems that have not failed when full compliance with the WW Rules is not possible. Cristin and others noted that the variance section explicitly allows for this. Gunner said that he often obtains permits for replacement of non-failed systems without a specific date for the installation. This allows a property owner to know what will be required when their existing system fails.

**Clarification of Section §1-1102(b)(2):**

Gunner asked if this section could be clarified so that when a person is using the exemption for adding a second water supply, the requirement to not have any overshadowing applies only to the new well, not an existing well.