Approved Minutes of the Technical Advisory Committee Meeting

March 10, 2020

**Attendees:** Roger Thompson Cristin Ashmankas Justin Willis Carl Fuller

Gunner McCain Sheri Young

Brian Tremback Bryan Harrington Nathan Kie Ernest Christianson

Sille Larsen Rich Wilson

**Scheduled meetings:**

April 21, 2020 1-4 PM The Catamount Room

**Technical Advisory Committee Annual Report for 2019**

Some minor edits were suggested for typos and page references. There was also discussion about the phrase “if there are application methods not currently allowed that should be approved,” The question was whether this referred to a better understanding of soil adsorption capacity or a different method of application. Both issues will be considered.

Sheri asked if the increase in average review times and reduction in compliance with the performance standards was related to staff reductions. Ernie said that the reduction of 9 Regional Office staff has been mostly covered by changes in permit processing including electronic application procedures. There have been recent staff vacancies that did have some effect on permit review, but the positions have been filled and the numbers should improve.

**Proposed Revisions to the 2019 Wastewater System and Potable Water Supply Rules (Rules):**

Ernie said he hoped to have the proposed revisions ready to start the adoption process by June. The proposed revisions will have to go through the full rule adoption process because there are substantive changes as well as typographic errors.

Justin asked about the percolation test and whether to allow landowners with permitted projects, which had designs based on application rates determined by percolation tests, to amend the basis of design using the application rates in the permit file. The TAC recommends not to reinstate the use of percolation test for determining the maximum allowable application rate. The group noted that in the new Rules the use of percolation test results can only result in lower application rates and therefore are only useful when a designer is concerned that the soil description method might result in too high of an application rate. The decision was to remove all reference to the percolation test because designers can use lower application rates than determined by soil texture whenever, in their judgment, it would be wise to do so.

Brian asked about the sieve specifications for mound sand. The 2007 version of the Rules used a 3/8” screen for the control on the coarse end of the sand specification for two of the three specifications, while the 2005 Rules used the #10 sieve. Brian said that the 2007 specifications allow for too much coarse material to the point where the material should be described as gravel rather than soil. While no problems caused by the 2007 specifications have been identified (the systems are being constructed using material meeting the definition of sand) and all agree that the amount of fine material is most important, there is support to adjust the specification. Adding a #10 sieve would ensure that the material would be classified as soil rather than gravel. Ernie will look for information about why sand specifications were changed in 2007.

Ernie circulated the List of Changes below and the TAC responses are added in bold.

**List of Changes (Draft 2/13/2020)**

Page iv - Table of Contents: Add § 1-909 Grease Traps…97. **Agreed**

Page 25 - § 1-304(13): Delete “or in a manner that modifies any operational requirements of such a sanitary sewer service line, and any associated sanitary sewer collection line” and add a new (B) the modification or change in use does not modify operational requirements that need to be applied to the building or structure or campground, the sanitary sewer service line, and any associated sanitary sewer collection line;. **Agreed**

Page 26 - § 1-304(14): Delete “or in a manner that modifies any operational requirements of a water service line,” and add a new (B) the modification or change in use does not modify operational requirements that need to be applied to the building or structure or campground, and water service line;. **Agreed**

Page 46 - § 1-405(10)(A): Delete “Design cost estimates” and replace with Retail costs. **Agreed**

Page 46 - § 1-405(10)(C): Add based on a projected 20-year life of the system or component. **Agreed**

Page 46 - § 1-406: Add (8) A recalculation of the operation and maintenance costs based on a projected 20-year life of the system or component. **Agreed**

Page 85 - § 1-903(k)(1): Delete “24”, replace with 18. **Agreed**

Page 96 - § 1-908(a)(2): Delete “one”, replace with two to be consistent with the sizing of septic tanks in Table 9-1. Add an s to day. **Agreed**

Page 100 - § 1-910(f): Delete “on or after January 1, 2007 and completed”. **Agreed**

Page 100 - § 1-910(f): Add (3) For soil descriptions and recordings completed prior to January 1, 2007, the Secretary will require one or more soil excavations to confirm the accuracy of the previous soil descriptions. When determining the number of soil excavations, the Secretary shall consider the consistency of the soil texture, recorded depth to the seasonal high groundwater table, depth to bedrock, depth of soil over a soil with a consistence of firm or denser, and number of existing excavations. **Agreed**

Page 108 - Table 9-5 (continued): Row “Foundation, footing, or perimeter of a building or structure with a drain (located upslope of a leachfield)”, 3rd column, delete 10 and replace with 20; 6th column, delete 10 and replace with 20. **Agreed**

Page 108 - Table 9-5 (continued): Row “Foundation, footing, or perimeter of a building or structure without a drain (located upslope of a leachfield)”, 3rd column, delete 20 and replace with 10; 6th column, delete 20 and replace with 10. **Agreed**

Page 148 - § 1-928(a)(1)(B): Add “is existing or proposed and owned by a charitable, religious, or nonprofit organization.” (statutory change 2019 Legislative session) **Agreed**

Page 148 - § 1-928(a)(4): Add “The design flows do not exceed 600 gallons per day or the existing or proposed building or structure shall not be used to host events on more than 28 days in any calendar year.” (statutory change 2019 Legislative session) **Agreed**

Page 165 - § 1-1007(a)(1)(A): Correct typo, change C-900 to C900. **Agreed**

Page 165 - § 1-1007(a)(1)(B): Correct typo, change C-900 to C900. **Agreed**

Page 165 - § 1-1007(b)(1)(B)(i): Delete “water works grade 50 pounds per square inch pressure rated pipe meeting AWWA standard C-600”, replace with water works grade 150 pounds per square inch pressure rated pipe meeting AWWA standard C900. This will now align § 1-1007(a)(1)(A), § 1-1007(a)(2)(B)(ii), § 1-1204(a)(1)(B)(ii), and § 1-1204(b)(1)(C)(ii). **TAC recommends keeping at 50 PSI. Ernie will review with the Public Water Supply Section.**

Page 166 - § 1-1007(b)(2)(A): Delete “AWWA standard C-600 or equivalent pipe and pressure tested to 50 pounds per square inch to assure watertightness” and replace with AWWA standard C900 or equivalent pipe and be pressure tested to 150 pounds per square inch. This will now align § 1-1007(a)(1)(A), § 1-1007(a)(2)(B)(ii), § 1-1204(a)(1)(B)(ii), and § 1-1204(b)(1)(C)(ii). **TAC recommends keeping at 50 PSI. Ernie will review with the Public Water Supply Section.**

Page 166 - § 1-1007(b)(2)(A): Delete the colon after “shall”. **Agreed**

Page 203 - § 1-1204(a)(1)(B)(ii): Correct typo, change C-900 to C900. **Agreed**

Page 204- § 1-1204(b)(1)(C)(ii): Correct typo, change C-900 to C900. **Agreed**

Page 214 - Appendix A: Add a new (c) When the application includes a wastewater system presumptive isolation zone or potable water supply presumptive isolation zone that requires notification under § 1-307(a), the application shall include:

* 1. a copy of the certified mail receipt;
  2. the completed ANR Form 1 and ANR Form 4 provided by the Secretary for notification of presumptive isolation zones; and
  3. the site plan sent to a landowner affected by the presumptive isolation zone.

**Agreed**

Page 214 - Appendix A: Add a new (d) When the application includes a wastewater system presumptive isolation zone or potable water supply presumptive isolation zone that does not require notification under § 1-307(e)(1) and (2), the application shall include the completed ANR Form 5 provided by the Secretary for certification no notification is required. **Agreed**

Page 240 - Appendix C: Add to Figure C-18 6 inches to indicate the vertical separation between the Overflow Pipe outlet and the Splash Plate. **Agreed**

**Should These be Included ( Draft 2/13/2020)**

1. § 1-201 Modifies Operational Requirements – add installation of a composting or incinerator toilet. The definition of a wastewater system includes storage tanks and toilets that are located inside a building or structure that are integral to the operation of a wastewater system. Would this be a permit requirement under § 1-301(3), the physical modification or replacement of a potable water supply or wastewater system? Or, should we not review until a landowner comes in to either dispose of the contents on site or request a change to the design flow based on the use of a composting toilet? **The TAC recommends that installation of a composting toilet for a single-family residence be exempt. Disposal of the waste would be regulated under the existing Rules.**
2. Table 8-3 Fueling Stations – a pump with two fueling lines (2 different grades) or has two pumps side-by-side where only one car per side can fuel. Should we do this by guidance to interpret the Rules so it’s a document that can be changed? **Guidance**
3. Table 9-14 – remove linear loading rates for Sandy Clay, Silty Clay, Clay. One reason to maintain is for failed systems or statutory changes so we have a basis in the Rules. **Keep**

**Indirect Discharge Rules (IDR):** Bryan Harrington gave an update on his work in preparation for proposing changes to the IDR. One question is if all high-strength wastewater disposal systems should be subject to the IDR. The TAC recommends keeping the division point between the Rules and the IDR at 6,500 GPD. One suggestion is to add monitoring requirements in the Rules for high-strength wastewater disposal systems. Bryan said that the proposed changes for the IDR will include requirements for non-sewage wastewater, such as dairy wastewater, that is not subject to regulation by the Department of Agriculture. One concern is when two or more wastewater systems, each less than 6,500 GPD design flow, should be reviewed as a single unit relative to hydraulic and inground treatment issues. An example would be a lot containing two wastewater systems serving unrelated off-lot building, each with a design flow of 4,000 GPD. If the two systems are in proximity and in the same hydraulic flow path, they might have the same impact on groundwater and surface water quality as a single 8,000 GPD system and therefore should be subject to the IDR.

**Meeting Date:** The next meeting is scheduled for April 22, 2020, from 1-4 PM, in the Catamount Room at the National Life Building in Montpelier.