# Approved Minutes of the Technical Advisory Committee Meeting 

April 19, 2018

Attendees: Roger Thompson<br>Peter Boemig<br>Ernie Christianson<br>Ken White<br>Craig Heindel

Graham Bradley<br>Rich Wilson<br>Steve Revell<br>Gunner McCain<br>Bryan Redmond

## Scheduled meetings:

There are no scheduled meetings. Ernie will schedule when needed.
Minutes: The draft minutes for the prior meeting of April 12, 2018 were accepted with corrections and additions to clarify the Hydrogeologic Subcommittee report and the TAC discussion of that report.

Rule Review: Steve noted that the language related to the continuing education requirements states that the Secretary shall provide enough training opportunities to meet the requirements to maintain a Designer’s license. Graham said that his plan is to provide 2 days of soil related training, with 2 sessions each day, every year. Graham said that finding sites is difficult. There are also new restrictions on finding sites, and new requirements for open bidding when looking for training opportunities, which are difficult to implement when there are few sites and few training providers available. Graham will continue to approve as many training courses offered by others that are appropriate for Licensed Designers. Steve and others think that Graham's plan for soil related training will be adequate as this will create 8 chances for State provided training during the 2-year cycle for continuing education compliance. Peter said that it is appropriate for licensed professionals, such as Engineers and Designers, to pay reasonable fees for training, and therefore programs such as offered by the Vermont Technical College and supported by the Agency are reasonable options for meeting the continuing education requirements.

Ernie discussed the proposed revisions that he circulated by e-mail on April $17^{\text {th }}$. The wording for the definition of "Design Rate" has been slightly altered to match with the Water Supply Rules. He also eliminated manganese from the definition of "Failed Supply" because the Public Water Supply sections considers it to be an advisory item. This will allow the treatment of manganese to be exempt from permitting requirements under the Rules.

Craig commented on the April $17^{\text {th }}$ revisions. The use of the word "unit" in the new 1-805(b) is confusing. Looking at table 8-3 the TAC recommended that a term other than unit be used in the table and then carried forward into 1-805(b). Craig asked about the mention of a Designer adding treatment for projects that may have high-strength wastewater. The group discussed this and recommended removing the language from 1-805(b) if the language is only advisory because of concerns that it might create unintended liability. A note could be added to the design flow table but that might have the same concerns. The TAC had previously recommended that a requirement to consider wastewater strength not be added to the Rules, so the best course may be to not add any statement about it. Craig noted that the "mg/l" could be removed from 1805(d)(2) because that is part of the definition of "standard."

Graham asked if CBOD should be used instead of BOD because at least some testing of advanced treatment systems is done using the process for determining the CBOD. The group also discussed the use of the term "FOG" (fats, oils, and grease). While the tests for BOD and CBOD include the oxygen demand for FOG, there are specific impacts on wastewater systems from FOG that should be considered as part of the system design. The group recommended keeping the existing usage.

Craig asked about the isolation distance for swales upslope of mound systems per section 1912(b) and specifically if the distance can be less than 10 ' to the upslope toe of the mound. Craig said that the closer the drain can be to the mound the more effective it is in protecting the operation of the mound. Ernie said that this is an allowable reduction under the Rules. Craig and Gunner suggested making it explicit that a reduction may be allowed.

Ernie said that he had reviewed the design flows other states use for barbers and thinks that the design flow proposed in the Rules is appropriate. Craig, and others, noted that it is not always clear from the design flow tables when flows from subcategories are cumulative and when they are inclusive. One example is employees are included in restaurant flows and not in doctor's offices.

Ernie said that he had added a definition of impeding layer.
Craig asked about the definition of linear loading rate. When performing a hydrogeologic evaluation, the linear loading rate may be based on the groundwater contours that do not always follow ground surface contours. Ernie said that a design based on a hydrogeologic analysis is acceptable.

Gunner said that the proposed definition of normal high-water table is not useable. Craig suggested asking the Watershed Management Program for assistance. Ernie said that he is also working on the definitions for perennial streams.

The exemption that allows for the addition of bedrooms to a single-family residence (SFR) when the residence is connected to both a public water system and a wastewater treatment facility was discussed. The current draft allows this exemption when the lot contains only one SFR. Ernie said that the limit for only one SFR is because of cumulative impacts on shared components such as pump stations. The group recommendation is to allow for more than one SFR if each is connected separately to the water and wastewater systems.

Executive Committee: Steve Revell, Ernest Christianson, Roger Thompson
Alternates - Claude Chevalier, Craig Heindel

Subcommittees:

## Hydrogeology

Craig Heindel, Bill Zabiloski, Mark Bannon, Scott Stewart, Steve Revell, Mary Clark, Roger Thompson, Peter Boemig, Ernie Christianson

