

Approved Minutes of the Technical Advisory Committee Meeting

April 3, 2018

Attendees:	Roger Thompson	Graham Bradley
	Gunner McCain	Carl Fuller
	Jessanne Wyman	Denise Johnson-Terk
	Ken White	Justin Willis
	Mary Clark	Rich Wilson
	Claude Chevalier	Ernie Christianson

Scheduled meetings:

April 12, 2018	1-4 PM	Essex Act 250 Conference Room
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Minutes: The minutes for the prior meeting of March 27, 2018 were accepted as drafted.

Rule Review: Gunner asked about when high-strength wastewater is subject to rule requirements rather than just a recommendation that designers consider. There is a requirement to monitor waste strength when there is no specific design flow stated in the Wastewater System and Potable Water Supply Rules (Rules) or when there is a request to approve a smaller design flow for a project with a specified design flow in the Rules. In addition, wastewater strength information may be required as part of an application to replace a failed wastewater system. The group also recommended that any proposal to treat high-strength wastewater be designed by a Professional Engineer.

Gunner said that section 1-903(c) needs some rewording and that 1-903 should specify a maximum slope of 20% and then give the exceptions rather than specifying 30% and then giving the limitations. Justin and Gunner sections (o) and (r) need consistent language.

Mary raised concerns about using the proposed new section for bottomless sand filters for new projects with large flows. Under the proposed language a bottomless sand filter could be approved for up to 6499 GPD. The group discussed this with Ernie noting that an application using bottomless sand filters must have a replacement area while the same site with a mound system would not require a replacement area which might provide some safety factor. If the bottomless sand filter was overloading the primary disposal area the replacement system could be constructed and both operated at the same time which would reduce the loading rate on each disposal area by 50%. The group noted that a large system would require a design by a professional engineer based on a detailed hydrogeologic analysis. The group recommended keeping the draft language.

The group discussed proposed increases in septic tank sizing. Justin supported the proposed increases based on his observation of existing systems. Ernie said that literature on the subject supports a septic tank capacity of twice the daily design flow. Justin asked about the triggers that might require replacement or addition to an existing system. Ernie replied that things such as adding a single up-flush toilet, or a laundry tray would not require an upgrade. Ernie proposes to leave it up to the designer to decide if systems that pump to the septic tank need to have a large tank.

Roger asked about the leakage testing language which appears to require that every tank be leakage tested in place. This would likely be a significant increase in cost with the designers in the group agreeing that it would be at least a few hundred dollars of additional expense. The existing rules require leakage testing for a small number of systems. Ernie will amend the proposed new requirements to limit testing to when required by a permit.

Justin and Gunner objected to the proposed requirement that an outlet filter be installed in grease traps. They noted that this is not part of standard designs and in practice would clog so quickly they would just be removed from the system. Ernie will delete this proposed requirement.

Gunner asked about the proposed increases in pipe strength in section 1-910(b). The existing Rules require Class 160 or SDR 26. The proposed Rules require Class 200 or SDR 35. The group supported keeping the existing requirements which Ernie will do.

Roger asked about the section related to soil descriptions. The proposed language gives an example of 10yr^{4/3} brown. Roger asked that the term brown be deleted because the Munsell Color Chart does not add the term brown. Graham recommended keeping this because the soil identification method based on using the Munsell Color Chart is new and not all designers would be well qualified in its use at the beginning.

Justin noticed a typo in the section on at-grade systems. The loading rate should be 1.0 gallons/sqft/day, not 1.2 gallons/sqft/day.

Gunner asked about the reasoning on why a drain must be at least 75' downslope of a leachfield while the distance to surface water is only 50'. Ernie responded that there are concerns that the discharge from a drain is concentrated at the discharge point while the discharge to surface water is more diffused.

Ernie said that Scott Stewart, Rodney Pingree, Graham, and he would be meeting with people from the Agency of Agriculture next week to review the isolation distances related to agricultural uses. Ken said that the differences between shallow and drilled wells should be covered. Ken and Claude volunteered to provide any information that would help with the discussion.

Ernie said that phrase continuous impermeable layer will be removed from the proposed Rules. The concept can still be proposed as part of a hydrogeologic analysis, but the concept is so site specific that trying to write a generic description for use by non-hydrogeologists is not workable.

Gunner recommended that section 1-915 include a requirement that orifice shields be included for downward facing orifices as well as upward facing ones. The group recommended leaving it up to the designer.

Gunner noted that in a previous meeting there was discussion about crushed stone and that there was agreement that the specification should also allow for stone that has not been crushed but is screened to the proper size. He remembered that some other term, possibly leachfield stone was proposed. Denise confirmed that her notes said leachfield stone. Ernie will make the change.

Gunner asked if the Rules should clearly state that a distribution box is required for distribution within a seepage bed. The proposed Rules require use of flow regulation devices but the need for a distribution box will be added to the proposed Rules.

Gunner noted that in section 1-921(d) the language should be at-grade trenches rather than at-grade beds.

Ernie asked for another meeting to complete the review of the proposed Rules which will be on April 12th, from 1-4 PM at the Essex Regional Office.

The review will continue after section 1-921

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

Bottomless Sand Filters

Peter Boemig, Mark Bannon, Mary Clark, Denise Johnson-Terk, Craig Heindel, Ernie Christianson

Seasonal High-Water Table Monitoring

Craig Heindel, Steve Revell, Roger Thompson, Ernie Christianson, Bill Zabiloski, Mary Clark

Well Driller's Reporting Form

Rodney Pingree, Craig Heindel, Claude Chevalier, Peter Boemig, Mary Clark, Ernie Christianson

Surface Water Sources

Tim Raymond, John Beauchamp, Ray Soloman, Peter Boemig, Mark Bannon, Claude Chevalier,
Perry Thomas, Mark Clark, Scott Stewart, Rodney Pingree, Chris Russo, Ernie Christianson