Approved Minutes of the Technical Advisory Committee Meeting September 25, 2012

Attendees: Roger Thompson Gail Center

Carl Fuller Cindy Parks
Mary Clark Scott Stewart
Steve Revell Claude Chevalier
Craig Heindel Kim Greenwood
Rodney Pingree Spencer Harris
James Ashley Anne Whiteley

Scheduled meetings:

October 23, 2012 1-4 PM Liquor Control Conference Room-Montpelier

Agenda:

The agenda was accepted as proposed.

Minutes:

The draft minutes of the August 21, 2012 meeting were reviewed. Anne said that she did not make the comment related to having the 2000 GPD limit cover public water supplies. Cindy said that she made the comment. Rodney asked if there would be a UIC exemption for discharges from water treatment systems used for public systems. Cindy said that decision has not been made. Craig noted that FAST should all be capital letters.

Update on UIC Rule Revisions:

Cindy said that she did not have an updated draft of the UIC Rules to discuss because the DEC Commissioner and ANR Secretary asked for a presentation by the Drinking Water and Groundwater Protection Division prior to going outside of the Agency.

Roger asked about the draft language related to horizontal isolation distances that Cindy had circulated by e-mail on September 24, 2012, with a draft date of September 21, 2012, that requires dry soil separation to the seasonal high water table and to bedrock. Is the separation needed when there will be no domestic wastewater with pathogens? Cindy said that the Department is taking a conservative approach with the proposed exemptions. Craig said that stormwater, which is proposed for an exemption, can include many non-human pathogens and treatment would be improved with passage through dry soil. One approach might be to have separate exemptions for stormwater and other wastewaters that contain pathogens and another standard for non-pathogenic wastewater such as from water treatment systems. Steve asked if there are any injection wells that would not qualify for one of the proposed exemptions. Cindy replied that there are including large boiler blowdown discharges, large geothermal wells, some sand and gravel pits, quarries, and breweries. Steve asked for a list of existing UIC permits which Cindy will provide.

Kim asked about isolation distances or prohibitions of construction in flood hazard zones. Kim said that there has been a lot of discussion about this issue, particularly since Hurricane Irene last August. There has not been a lot of mapping completed of flood hazard zones and Anne noted that there are limited resources to do the detailed work needed to accurately delineate the zones. Site specific work is expensive for a developer. Craig said that he used the existing delineations whenever possible but noted that Act 250 requires that this issue be addressed in a permit application even if the project area has not been mapped.

There was a recommendation for a general coordination between the UIC and Water Supply Programs on permitting issues.

Moving Day:

Mary said that the DEC staff that had been temporarily located in Winooski after Hurricane Irene is in the process of moving back to Montpelier. People will be reporting to their Montpelier office at the National Life Building on Monday, October 1, 2012. Everyone will have a cell phone and there will be new phone numbers. The space will be low walled cubicles with an expectation that when you get a phone call you will take your cell phone and walk to a room with walls to carry on your conversation if needed for privacy or to not disturb surrounding workers.

Reductions in Water Supply Isolation Distances:

At the previous meeting Ernie Christianson said he would be gathering comments from the regional engineers on the draft from the Hydrogeological Subcommittee. Mary said Ernie is working on this but does not yet have a draft to circulate to the TAC. There was discussion about how any changes would be implemented. Anne said that the Wastewater System and Potable Water Supply Rules have portions that are rules, which can only be changed by a revision of the rules, and portions which are guidance. The Department can issue guidance documents that supplement the information in the guidance section that designers can start using immediately. The TAC asked that Ernie provide a list of specific questions that TAC should consider. The TAC also discussed source protection zones and the use of well pumping information in defining the zones. The TAC also discussed the issue of well interference. Roger noted that under the current definition a new user can take all the water they want out of neighboring well as long they leave enough for the existing use of the well. This may need to be reconsidered now that the public trust concept has been applied to groundwater.

Overflowing Wells:

This has been a point of discussion at recent TAC meetings with an attempt to recommend some language for the Water Supply Rules. Claude said the requiring all wells of a certain amount of flow to be closed in would be excessive and that in most areas in Vermont there has not been much evidence of an adverse impact on the groundwater levels. Scott said that the current approach used by the Water Supply

Section is based on discussions with those involved, including well drillers. Claude said that the difficulty in closing in a well may be more related to the pressure developed when the overflow is closed off than the amount of the overflow. Jim Ashley concurred that there is not an automatic relationship between the amount of overflow and the pressure in the well.

Craig suggested that any resulting language should not result in an blanket requirement that all wells be closed in and that the language should include a provision allowing the Secretary, on a case by case basis, to require any particular well to be closed in that might create an adverse impact on the environment. This proposal was discussed by the TAC and the TAC voted unanimously to recommend this approach to the Secretary. The draft proposal from the Hydrogeological Subcommittee recommends grouting of all wells and the Water Supply Rules would need to be updated.

Draft Approval of GeoFlow Pipe:

Cindy circulated a draft approval for comment. The TAC was supportive of the approval with a few editorial comments.

Roger asked Cindy if she had gotten any feedback on problems related to the EnviroSeptic Pipe. She said that she had talked to a counterpart in Maine and there are no reports of major problems. Steve asked what issues have been discussed and there are concerns about poor venting and root intrusions into the pipe. The GeoFlow product requires the venting system to be installed at the leachfield while the EnviroSeptic product can use the house plumbing vent for the outlet. Steve said he thinks venting at the system is more likely to give good flow. Spencer said that many folks object to the high vent that is required by the EnviroSeptic product, which must be at least 10' above the low vent.

The EcoFlow Biofilter System was also discussed. The reports in Vermont found that 17% of the systems using fiberglass tanks have some cracking issues, many of which have not yet been repaired. The Department has met with the company but not all issues have been resolved. The Department will approve the use of the EcoFlow system when installed in a concrete tank. Roger asked if there are any service providers. New England Biofilter and the parent company in Canada can provide service.

High Strength Wastewater:

Mary will send out an updated draft next week.

ACEC Soil Training:

Steve said that ACEC is running two soil training sessions at his place in Lincoln, Vermont on November 2nd and November 9th. These sessions are for engineers and for licensed designers who can obtain continuing education credits for their participation.

Other Issues:

Steve said that he often gets requests to evaluate existing wastewater systems as part of home purchase. He said that he often finds systems that are not surfacing at the moment but feels that this is related to much lower use by the seller than would be expected by the purchaser or in some cases the house is not even occupied. Steve would like the regional offices to have a standardized approach for issuing a permit for a replacement system with a provision that requires an updating of the permit at the time the replacement system is constructed. The updating would assure that changes in site conditions, rules, and technology would be incorporated into those situations where the replacement system might not be constructed for many years after the purchase of the house. Even with a requirement to update the permit the purchaser would have an assurance that the replacement system of some type could be installed.

Items prioritized for discussion with high, low, and medium ranking

- 1. Soil identification vs. perc test **medium**
- 2. Curtain drain with presumption of effectiveness **high**
- 3. Revisions to desktop hydro chart **medium**
- 4. Minimum amount of sand under a mound **high**
- 5. Water Supply Rule update **high**
- 6. Seasonal High Water Table determination for performance based systems high
- 7. Wastewater Strength

Executive Committee

Steve Revell, Ernest Christianson, Roger Thompson Alternates – Chris Thompson, Spencer Harris, Claude Chevalier, Craig Heindel

Subcommittees

Hydrogeology –

Craig Heindel, Bill Zabiloski, Mark Bannon, Scott Stewart, Steve Revell, Mary Clark

Overshadowing of Isolation Distance Issues –

Anne Whiteley, Ernie Christianson, Roger Thompson, John Beauchamp, Gail Center, Chris Thompson

UIC Rules and Geothermal Wells -

Craig Heindel, Steve Revell, Roger Thompson, Ernie Christianson, Scott Stewart, Rodney Pingree, Kim Greenwood, Cindy Parks

SHWT Monitoring –

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

UIC Rules and Disposal of Wastewater from Water Treatment Systems -

John Beauchamp, Gary Adams, Roger Thompson, Ernie Christianson, Gail Center, Cindy Parks

Wastewater Strength -

Mary Clark, Cindy Parks, Peter Boemig, Bill Zabiloski, Roger Thompson, John Akielaszek,

Bottomless Sand Filters-

Peter Boemig, Mark Bannon, Cindy Parks, Mary Clark, Denise Johnson-Terk