

Approved Minutes of the Technical Advisory Committee Meeting  
May 24, 2011

**Attendees:** Roger Thompson                      Steve Revell  
Bruce Douglas                                      Craig Heindel  
Justin Willis                                         Scott Stewart  
Rodney Pingree                                   Bill Zabiloski  
Anne Whiteley                                     Ernest Christianson  
John Beauchamp

**Scheduled meetings:**

June 21, 2011	1-4 PM	Lincoln Room, Osgood Building
July 19, 2011	1-4 PM	Lincoln Room, Osgood Building

**Agenda:**

The agenda was reviewed and topics related to groundwater withdrawal permitting, update on response to Rep. Krebs about well isolation distances, wastewater design flows, and the disposal of compost toilet waste were added.

**Minutes:**

The draft minutes of the April 19, 2011 meeting were reviewed. Bruce asked that a sentence be added reflecting that he had contacted Rep. Krebs and had provided background information on how the TAC had reviewed the existing isolation distances between water supplies and wastewater systems which resulted in a recommendation to retain the existing isolation distances. Craig noted that it was Steve who had asked if the update of the Water Supply Rules would include review of technical issues such as peak demand calculations.

**Update on Legislative Feedback:**

During review by the House Fish, Wildlife, and Water Resources Committee Rep. Krebs stated concerns about the apparently quick decision by the TAC to recommend continuing the existing isolation distances between water supplies and wastewater disposal systems. Anne asked if TAC had discussed these concerns. The report submitted to the Legislature indicated a quick decision was made by the TAC to support the existing isolation distances but the report did not fully document all of the work that TAC had done in previous meetings to review this issue. This lack of documentation made it appear that the TAC process might not have been as thorough as it actually was. Bruce said that he had contacted Rep. Krebs and had supplied information about the process used by TAC including consideration of recent studies. Rep. Krebs said he would review this after the end of the legislative session which was drawing to a close at the time Bruce provided this information.

## **S.77 Update:**

Ernie said that he had met with Scott to discuss what revisions would need to be made to the Water Supply Rules in response to S.77 which includes a specific list of contaminant testing. Ernie said that under the proposed bill, the Agency needs to consult with interested parties to determine if testing for other potential contaminants should be added to the list. The list of interested parties includes realtors, attorneys, designers, water treatment specialists, and environmental interest groups.

Anne noted that ANR had submitted proposed revisions to the bill, some of which have been included in the current draft that is under consideration by the House Fish, Wildlife, and Water Resources Committee.

Roger suggested a section by section review and asked if there is an additional laboratory certification. Section 3 of the bill indicates that the Commissioner may certify labs to do the testing required in 10 V.S.A. section 1981 and requires the approved labs to submit test results electronically. Anne said that this does not require a special certification. The filing of test results was added on recommendation of the legislative council.

Steve asked about the section that allows the ANR Secretary to add new contaminants to the list of required testing. Anne indicated that there are no plans at this time to add more contaminants to the list and that it would require a rule revision to do so.

Roger asked about the timing for TAC to submit comments on the Water Supply Rule updates. Ernie said his target is the first of July to get a proposal to Anne for legal review. Ernie needs to provide some information to Scott as well. After Scott does the updates the draft will be circulated and will come to the TAC for comment.

Anne clarified that Scott is working on updating the section of the Water Supply Rules that relate to non-public water systems. The goal is a stand-alone portion of the Water Supply Rules that will eventually be included in the Wastewater System and Potable Water Supply Rules. The goal is to have a smooth transition in the requirements from non-public to public water systems so that when a project grows to the point where the number of users triggers public water supply jurisdiction it will be clear what new requirements will apply.

Roger asked if there will be a different list of required contaminant testing for single family residences than for other non-public systems. Anne said the list would be the same for all non-public systems. Roger asked about the requirement to create a database of test results because the bill does not seem to actually require it. Anne said the database will be at the Health Department even though the bill is not explicit. Bill asked about the section that states that failure to test does not create a title defect. Anne explained that the legislature is trying to collection information about groundwater quality in Vermont and trying to protect public health. Without the title defect language people could end up with a major legal claim if after the fact testing found any violation of the water quality standards.

John asked about what happens if the water is tested and the results are bad. Anne said that this would usually be worked out by the landowner but that if the results are filed with ANR it would be difficult for the Agency to just ignore the results. If the landowner did not take any action the Agency could take action, particularly if anyone other than the landowner is potentially affected such as a multi-family dwelling.

Craig asked if there is one purchase and sales form that all realtors must use which could include all of the information about water testing requirements and the options for buyers. There is no requirement that a particular form be used but there is a standard form that is commonly used.

Craig observed that it appears that the TAC should expect to work on this again in August or September.

Steve asked if TAC would chose a member to participate in the process of formulating a rule determining who can collect the required water sample. Roger observed that with a mandate that allows a homeowner, who clearly has a personal interest in the outcome, to collect a sample it would seem that almost anyone else should be acceptable.

#### **Water Supply Rule Update:**

Ernie said that the proposed update would combine parts 11(Small Scale Rules) and 12 (Well Construction Standards) of the existing rule. There would be a logical progression of requirements from non-public systems into the TNC, NTNC, and Public Community systems. Scott is currently drafting this as 3 new sections but after determining the specifics some combining may be possible. Craig asked if there are references to the Small Scale Rules that need to be updated if the term Small Scale Rules is eliminated.

#### **Wastewater Rule Updates:**

Ernie said that he is working on updating the rules. He will use the notes that Roger had created as a starting point to write a list of things that need changes. Ernie will have his staff draft individual sections and will include work from the TAC subcommittee on groundwater level monitoring.

Roger said that Steve would like to see the rules updated to allow Class B Designers to work on drip dispersal systems.

Anne is going to work on updating the language related to determining which lots have improved lot status. This is important because it determines what requirements are imposed when change in use, such as from seasonal to year-round use, is proposed.

Justin asked about adding clarity for best fix situations, especially about when groundwater mounding calculations are required. Ernie said that he has asked for these calculations but then used his judgment on the specific design of the replacement system.

Justin suggested that there should be staff training so that there is a consistent approach among all of the regional offices. Ernie said that a lot of the decisions are very site specific and the decision is often related to cases where there is room to build a very large system but there is justification under the rules to allow for a system better matched to the particular situation. Craig asked about guidance and Ernie replied Jessanne Wyman, Regional Engineer, had developed a general guide to our thought process and he will ask if she had that document.

Steve asked if the rule update will be just housekeeping and if so, how far can you go and call it housekeeping. Ernie said there are many changes that can be made as housekeeping that would make the rules easier to use and that other than legislative mandates there may not be a need for many other changes.

Ernie said that while working on the updates to the Water Supply Rules he had looked at the revisions proposed to the design flows by the TAC. He noted that many of the proposed numbers were in increments of 11.5 gallons or 13 gallons and asked if they should be rounded up or down to units such as 10 gallons or 15 gallons. The TAC recommends staying with the proposed changes.

#### **UIC (Underground Injection Control) Rule Updates:**

Ernie started with an observation that the existing permitting requirements cost the Agency money because the application fee is \$100 while the minimum cost of posting the required public notice in newspapers is \$270. This reinforces the desire of the Agency to update the UIC Rules with a goal of moving most construction into categories that are exempt or conditionally exempt. This would be consistent with Federal Rules. Catherine Gjessing, ANR attorney, Anne, Ernie, and Christine Thompson developed a list of exemptions based on a draft that Roger wrote.

Anne said that Catherine had a rough draft of a rule update that is based on rules currently in use by the State of Maine. The Maine Rules call out many categories of injection well while Roger's draft grouped things together. Anne said that a list of conditions needs to be made for each category first and that she had identified at least 30 categories including geothermal wells and boiler blow down. She said that quarries will probably need to have their own category and will probably need individual permits. Anne will then try to group types.

Rodney asked if wells are grouped by the type of disposal system or by the type of contaminants that might be present. Roger asked if there is a request for TAC input. Anne said that after Ernie looks for categories and gets input from staff on proposed conditions for specific exemptions, Anne will clean up the list to be just a list of categories. At that point a TAC subcommittee would be helpful. Ernie would like a couple of regional office staff members and maybe some other designers, such as Peter Boemig, to be on the subcommittee.

### **Groundwater Withdrawal Permitting Rules:**

Scott said that the proposed rules were presented to LCAR (Legislative Committee on Administrative Rules). The rules were accepted and will be effective as soon as the filing is completed with the Secretary of State. Any withdrawal with an average daily rate of more than 40 GPM will require a special permit unless it qualifies for an exemption.

Anne was asked about the public trust issues and said there is a draft out for public comment. The comment period has been extended. The Commissioner wants to have an interim guidance until the Rule can be adopted. Judge Meredith Wright has said that compliance with the Groundwater Protection Rule and Strategies may not by itself meet the public trust requirement because these are old rules that were adopted prior to the creation of the public trust requirement for groundwater. Craig asked about the working committee that will advise the Commissioner. Rodney said it would probably be led by an attorney and be similar to the group that worked on the Groundwater Withdrawal Rules.

### **Wetland Rules:**

Ernie said that he had met with Alan Quackenbush and had sent a summary of the meeting for Alan to review. Alan has not responded and Ernie will follow-up. Ernie is looking to get a memo of understanding signed so it can be posted for general use. Justin asked about the general permit approach but it probably will not answer the questions about how replacement wastewater systems will be reviewed under the wetland rules. Based on the meeting between Alan and Ernie it appears this will not be a major change from past practice which has worked well.

### **Water Treatment Systems and Radioactivity:**

John said that he is concerned about the concentration of radioactive contaminants in water treatment systems and that he has discussed the issue with officials in New Jersey. There is a common filtration media (BIRM) used for iron removal that also collects radioactive particles which may be unknown to the designers and users of the systems. The level of radioactivity can be high enough to be detected by monitors along the highway and can exceed safe levels for human contact. Carbon filters may also collect radioactive particles. This may be an emerging issue with a lot of consequences for the design and maintenance of water treatment systems.

### **Issues for TAC Review:**

Rodney asked if we are ready to go to soil identification instead of percolation tests. There is a table in the Indirect Discharge Rules that includes soil morphology as part of the site evaluation process. Apparently most states using a soil method do not use morphology but rather use the USDA methods related to grain size, structure, and consistence. This issue should be a TAC discussion.

Justin asked about licensing of installers. He said that all of those he deals with would like to be licensed. Roger reviewed the history of licensing and said that this had been proposed and widely supported in the 2002 Rule update but there was last minute concern by a legislator and it was removed. Craig said that some states started with voluntary certifications. Roger said that licensed installers would have an advantage if they could do write the installation certifications because there would be a time and expense saving for the customer.

Ernie asked about the thinking related to giving an automatic 6” of credit for installing a curtain drain. Steve reviewed his observations of how drains worked. Roger said this might work with the correct design factors which might include minimum slope, minimum hydraulic contrast between soil layers, maximum depth, and minimum upslope drainage area.

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. Grandfathered design flow and conversion of use policy **high**
6. Updating of design flow chart **high**
7. Water Supply Rule update **high**
8. Seasonal High Water Table determination for performance based systems **high**

### **Executive Committee**

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

### **Subcommittees**

Hydrogeology - Craig Heindel, Dave Cotton and Steve Revell.

S.77 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

SHWT Monitoring - Craig Heindel, Steve Revell, Roger Thompson, Ernie Christianson,  
Bill Zabiloski, Dan Wilcox

UIC Rules and Disposal of Wastewater from Water Treatment Systems –  
John Beauchamp, Gary Adams, Roger Thompson, Ernie Christianson,  
Gail Center, Jeff Fehrs