

## Minutes of the 5-22-2001 Meeting of the Sewage Advisory Committee

### **Review of previous minutes**

Pat Camp pointed out that his name and that of Craig Heindel should be added to the list of attendees.

### **S.27**

Chris Recchia talked about S.27 and indicated that it was unlikely that a bill would be passed this year. Chris indicated that we would go ahead with writing rules in any case and the Governor was asking for a July 1 draft. It is not clear what the Governor would want the rules to do relative to the timing of closing the ten acre exemption. Choices include as soon as the rules are adopted or a year or two after adoption to allow for towns to update zoning and plans to deal with possible changes in development patterns as more land becomes approvable for sewage disposal. Chris thinks the House Natural Resources Committee is moving towards wanting to do a bill and might be ready in January to move forward, particularly if there are good rules adopted or ready to go. Chris still wants to model the rules after what has been accepted in the current draft of S.27.

### **Proposed rules**

Andy Flagg asked about the time frame for implementation. Chris said he wanted to allow for a period of time for towns to update rules and would suggest that the rules phase in. A proposed rule would make changes to deal with failed systems first and then gradually extend jurisdiction and allow for more changes in site limitations. Chris and Roger are working on an interim policy to deal with use of innovative systems for a limited number of sites that meet the current site limitations and could qualify for a sand filter system.

Pat asked about permits for replacement systems on lots where the original construction was exempt. Chris said that when all systems are under state jurisdiction a permit would be required. There would be a best fix allowance and cost would be a factor. Pat asked about whether ability to pay was a factor and Chris replied that it would not be a factor in the design. The Department supports creation of funding programs that could provide grants and loans to help people deal with the cost. The cost factor is related to the price of achieving the next increment of protection.

Gail Center asked about the time line for licensing of designers and installers. Chris said S.27 was based on two years for designers and 3 years for installers. Pat said producers should also be licensed and that everyone should have insurance. Rich Czaplinski asked about the expense of insurance. Pat and Jeff Williams thought requiring insurance was needed to level the playing field because the "good" practitioners were already bearing the cost of insurance and because it would be impossible to get people to

be responsible for their mistakes if they did not have insurance. Rich said that unless it was no fault insurance it would be difficult to administer.

### **Rhode Island Trip**

Chris said that he had not had time to make much progress on plans for the trip. Bruce Douglas affirmed that June 26<sup>th</sup> was reserved for us. Bruce thought that we needed a minimum of 25 people in order to have a presentation just for us. This appears easy to achieve. Chris will check with legislators. Everyone seemed to think a one day trip was better than an overnight trip and so we will ask for a program that fits in the available time.

### **Radioactivity in drinking water**

There was a limited discussion about the issues related to the problem of drinking water wells that have high levels of radioactivity. There isn't a current requirement for most wells to test for radioactivity. Roger said that he had been asking for testing for years in some situations and that he thought it would be perceived as a poor decision to ignore information we have about some sites being likely sources of water above the standards for drinking water. There was some discussion about the disposal of treatment waste. There was agreement that funding should be available to help with water supplies as well as wastewater systems.

### **Framework**

The current draft of the framework was reviewed. The group identified some minor changes, which were agreed to. The group was willing to adopt the framework but agreed to wait until David Cotton had a chance to comment because he had made the original recommendation to have a framework.

Roger will make the revisions and send to David. The framework will be on the next agenda with a goal of final adoption.

### **Replacement of failed water systems**

Jeff asked what the Department policy was going to be. Chris said that he and his staff were working on an outline of how to do this with a goal that the well be properly located while having a minimum of paperwork or delay. Jeff asked if this could be done in time for him to present it to the well driller's meeting in a couple of weeks and Chris agreed to try to have something done as a draft.

### **Site limitations – bedrock**

Roger outlined the existing situation that requires at least 24" of naturally occurring soils over bedrock and at least 4' of soil between the bottom of the system and bedrock for septic tank effluent. A total of 2' is required for sand filter effluent. Bruce

said that the distances are based on treatment and protection for the groundwater. Bruce indicated that there is a split with some states requiring an extra foot of soil between the system and bedrock in comparison to the required separation of the system from the SHWT while some states treated both limitations the same way. Pat asked if we should just pick a standard and use that, because there is no good information for what is happening now in the soil under the system. If there is an acceptable level of treatment for a particular situation, any system that met that performance should be ok. Roger raised the issues of offsets, such as requiring more fill if there is less naturally occurring soil or requiring pressure distribution, or soil type with more credit for silt loam than coarse sand. It was decided that Roger would draft some language that would allow for less naturally occurring soils over bedrock in certain situations that the committee could review at the next meeting.

The percolation test vs. soil identification was raised as part of deciding how much soil should be naturally occurring and for the sizing of the leachfield. Bruce and Alan Huizenga agreed that percolation tests could give an inaccurate answer of site capacity. There is support for changing the system away from percolation testing to soil identification. Roger asked that this be held for a second round of revision because of the time required getting people trained to implement a new system. Roger also said that everyone doing this should be licensed by the Department as a designer.

### **Separation to SHWT based on level of effluent treatment**

Roger raised the issue of whether there should be more than the two current levels of 3' for septic tank effluent and 2' for sand filter effluent with a maximum of 30 mg/l of BOD or TSS. Roger reviewed what other states were using with some having more separation than Vermont and some allowing discharge of treated effluent directly into the groundwater. The question was raised of whether disinfection should be used as part of a reduction in isolation distance. The issues of whether disinfection systems can be made fail-safe were considered with Pat saying that any system can fail. Bruce suggested leaving the isolation distances as is for septic tank effluent and sand filter effluent but consider use of disinfection. Roger talked about the consequences of discharging improperly treated effluent with a concern that if drinking water sources were being protected by use of disinfection they might not be useable for two years after a failure of the treatment system and that a failure might not be apparent and could go undetected.

It was suggested that because we are trying to get rules done as quickly as possible we should leave the 24" minimum as is for now, and return to the issue in the following revision when there might be more information on which to base a decision.

### **Reduction in well isolation distances**

Roger reviewed the 1997 report findings which called for a process to allow for reductions based on site specific hydrogeologic information and noted that this change has already been made in the current water supply rules. The most common reasons for a reduction are the presence of a thick layer of clay or an artesian component to flow in the

well that demonstrates the source of the water cannot be from the area of the leachfield. Chris and Jeff asked if extra casing depth or grouting would be equivalent. Rodney Pingree indicated that these techniques are useful for best fix situations but are not suitable for new projects because they do not protect against contamination that penetrates the bedrock at a distance from the well and moves through fractures in the bedrock and into the well below the bottom of the extra casing and grout.

### **Using filled sites for wastewater disposal**

There was brief discussion about using filled sites for wastewater disposal. There was agreement that if the soils below the fill were suitable for a system, then the concept of using filled sites would depend on being able to ensure the quality of the fill (no stumps, cars, etc.) and to determine that the filling did not change the drainage characteristics of the site. The issues of mottle formation (it is not clear how long it takes mottles to form but it is site specific) and the affect of placing fill over suitable soils were reviewed. The group will work on this issue in following meetings to try and shape a response.

### **Next meeting**

The next meeting will be June 5, 2001 at the Church.

### **People attending**

Allison Lowry

Alan Huizenga

Richard Czaplinski

Jeffery Williams

Andy Flagg

Richard Deso

Pat Camp

Rodney Pingree

Chris Recchia

Bruce Douglas

Bonnie Loomer-Hostetler

Gail Center

Roger Thompson

Justin Willis