

Minutes of the June 19, 2001 Meeting of the Sewage Advisory Committee  
**Revised 8-17-2001**  
Changes are underlined

**Review of Previous Minutes**

The minutes were reviewed and approved as submitted. Chris Recchia said that he would be arranging for the minutes and other documents related to the Sewage Committee to be on the web.

**Meeting Scheduled for June 5, 2001**

It was noted that the meeting scheduled for June 5, 2001 had been cancelled.

**Rhode Island Trip**

Chris reviewed the situation. The bus will pick people in front of the statehouse on Tuesday, June 26 at 5 AM. It will also stop at the Randolph and Hartland exits. There will be a morning classroom presentation followed by an afternoon field trip to look at installed systems. A box lunch will be provided and a fast food stop is planned for the trip home. The return to Montpelier should be about 11 PM. We have reserved 20 spots for legislators and 20 for sewage committee members. Regional office staff will be solicited for any unused spaces. Roger Thompson will contact regional office staff and Chris will have a staff person call the other people for confirmations.

**Framework**

Roger Thompson made the minor editing changes requested by the committee at the last meeting and sent the document to David Cotton. David had responded saying that he supported adoption as is. Roger will send electronic copies with the changes to committee members. The committee agreed to adopt the Framework as is, subject to one last review of the minor changes. Members were to contact Roger Thompson with any comments or concerns, otherwise the Framework would be considered final.

**Interim Policy for Innovative Systems**

Chris reviewed the draft of the policy that was enclosed in the recent mailing to the committee and explained how it will be used. The minimum site conditions that currently exist will be followed so no additional lots will be created under the interim policy. The site limitations are not reduced at this time because the ongoing interactive process of rule revisions is addressing proposed site limitation modifications based on the cooperative efforts on S.27 by ANR and the Technical Advisory Committee. Chris expects the interim policy to be replaced fairly soon, because the rule making process is moving forward on a rapid schedule. The pathogen issue will be dealt with by ensuring there will be at least a two year time of travel from the leachfield to any water supply. The rest of the issues related to a particular technology will still need to be resolved such

as for reliability, meeting the 30/30 BOD/TSS standards, operation, and maintenance requirements.

### **Department Decision on Rules for Innovative Systems**

Chris reviewed his decision process. The available information related to virus removals was considered by looking at what can be expected in the septic tank, a treatment system, and the soil. What happens in each of these systems is not well defined and there is a range of possible efficiencies for each. We know little of what happens in conventional systems, or in the currently approved sand filter effluent disposal systems. Limited information indicates that the expected range of treatments in various treatment systems is not large enough to justify imposing different conditions on different systems. The Department will continue to monitor this issue and if at some point in time the level of knowledge justifies changes in loading rates, depths to water table, or other factors, the Department will revise the conditions for approval of specific treatment systems as needed.

In the meantime, Chris said that the Department would not ask for information related to pathogen removals of the different systems. Any system that the Department determines can reliably meet the 30/30 BOD/TSS standard that currently exists for sand filters will be allowed to use the filtrate disposal system rules. There will be no increases in loading rates or reductions in depth to SHWT beyond the 1' reduction in depth to SHWT and the doubling of the loading rate allowed for filtrate disposal systems, until there is sufficient information to justify a change in these factors. This issue will be examined again, as soon as next year, if the currently planned ongoing rule revision process is approved.

In addition to the treatment issues, any innovative system will also be reviewed for reliability, need for operation and maintenance, factory support, and other factors that will ensure that any system can be installed, operated, and maintained so that the required performance of the system will be maintained.

Blair Enman noted that better distribution requirements are needed, probably with less area per hole and smaller doses than currently allowed. Roger said that distribution in leaching chamber should be addressed and there was agreement that leaching chambers should have a distribution system and not depend on just gravity flow or pumping a dose of effluent into a chamber and letting it spread out.

Richard Czaplinski said that the Department should be cautious in approving systems because it would be hard to withdraw approvals in the future. Roger said that it might not be too difficult to withdraw approvals when there is clear evidence supporting the withdrawal.

Rodney Pingree asked about whether nitrate treatment levels were being examined. While there are wells that have high nitrate levels from contamination by septic systems, there is little evidence that nitrate from septic systems is causing general aquifer pollution in Vermont. The current proposal is to continue with the current

approach that systems installed in accord with the sewage rules are acceptable uses in Class 3 groundwater areas. As density of development increases, this may become an issue and the Department will examine the issue in future rule revisions.

Chris also reviewed his preliminary thoughts related to the use of disinfection in lieu of treatment in the soils. Chris felt that disinfection could be used in situations with a sufficient level of management. This would include having an operating permit, be limited to use for municipally managed or business/commercial operations of a larger size, and require 24/7 monitoring and repair services. Blair agreed with this and said disinfection would be a poor choice for single family use. Rich said that any disinfection system would need to be fail safe because you can't deal with untreated effluent that has already been discharged and that the systems are not fail safe. Blair and Rodney said that dealing with untreated discharges is a concern, which should be addressed. Roger said that one role for disinfection might be for a failed system replacement when anything that can be installed will have a problem maintaining the effluent below the surface of the ground. In these situations the disinfection isn't really a substitute for getting as much treatment as possible in the soil but is rather an extra level of protection that might be considered in a difficult and high risk site. A holding tank might be a better choice in some cases.

### **Minimum Site Limitations**

Chris reviewed DEC's current thinking on making changes to the site limitations. He suggested that the minimum depth to SHWT be the proposal supported by the committee (as discussed in previous minutes) which proposed that sites be eligible for as little as 18" of naturally occurring soil over bedrock, and that the slope limitations be set at 30%, as supported by the committee.

### **Other Issues**

Blair raised the issue of conversion of seasonal use to year around use. The question is whether conversion to year around use requires fully complying primary and replacement areas to be available. Blair suggested that a best fix system be used as the basis for conversion. Blair also noted that all of the towns he works with do not allow an increase in the number of bedrooms, even if they allow conversion to year around use, unless there are fully complying sewage areas available. Chris said that DEC would review the issue.

The issue of replacement areas was raised. Blair and Justin Willis felt that a replacement area was seldom used for mound systems and questioned whether they were necessary. Roger reviewed the issues of mis-identification of soils and construction violations as reasons for maintaining replacement areas. Blair asked about the old concept of installing an original system that is 150% of a standard system in lieu of the replacement area. Chris will consider this issue.

## **Design Flows**

Design flows were also discussed. The information in the draft EPA manual was reviewed which supported a per person design flow of about 69 GPD. This is very close to the current 75 GPD with a 10% low flow credit. The general consensus was to keep the design flow at 450 GPD for a SFR, which would allow for three bedrooms and then develop a curve for lesser flows for additional bedrooms. This might require a permit condition that limits the occupancy of the building to deal with the “ski house” issues of renting with very high occupancies. The 500 GPD per washing machine in laundromats should be retained, but there should be a curve that reduces the design flow for larger numbers of machines. Campgrounds should have the design flow reduced when occupied by tents and normal RV units when there are multiple units connected to one water or wastewater system. Park model RVs (which are similar living units to mobile homes) and mobile home units should have a higher flow. The Water Supply Division is looking into requiring NTNC or Public Community status on the water supply if there are ten or more units that remain onsite for more than 6 months of the year. Blair stated that wastewater and water supply flows should be the same numbers.

The design flows should have a significant curve related to large numbers of interconnected units. There should be a reduction for projects connected to municipal systems for the same reason.

Loading rates were not discussed, but must be part of the design flow revision process.

## **Committee Involvement in Public Rule Process**

Chris asked about how to best deal with the public meetings needed to tell people about the proposed rules and to get feedback. There was a round of meetings a few years ago hosted by the regional planning commissions. Some meetings had lots of people and were pretty “hot” and others had very few or no people attending. These meetings are likely to be highly attended in comparison because there will actually be a rule proposal on the table and the Governor has said the ten acre exemption will be closed. It was agreed that the feelings of the audience about closing the exemption would have to be addressed, while finding a way to keep focused on the site limitations and other issues that need to be resolved. Roger said that involvement of respected consultants in their home areas would be helpful, as some people would be more accepting of the proposed rules if consultants that they know also supported the rules.

## **Future Meetings**

The next meeting will be on the bus on June 26, 2001 on the way to Rhode Island. After that meetings are scheduled for July 10 + 24 and August 7 + 21. All meetings will be at Stanley Hall from 8:30 AM until noon.

**People Attending**

Roger Thompson  
Blair Enman  
Richard Czaplinski  
Rodney Pingree

Alan Huizenga  
Bonnie Loomer-Hostetler  
Richard Deso

Justin Willis  
Andrew Flagg  
Allison Lowry