

Minutes of the Technical Advisory Committee
Draft 3-28-2001

The Technical Advisory Committee met on March 27, 2001 to begin the process of revising the soil based wastewater disposal rules. The Committee reviewed the topic list that was dated 3-13-2001 and added several items resulting in the current topic list dated 3-27-2001.

Deputy Commissioner Chris Recchia gave an opening statement outlining a plan to implement the new rules based on the current draft of S.27 which includes an August deadline for innovative systems for failed systems and a February, 2002 deadline for a major rule revision including innovative systems, changes in site limitations, and review of design flow and loading rates.

David Cotton asked about taking some time to develop an overall perspective on where we wanted to go. The group reviewed a NOWRA handout provided by David. One issue is whether the Department would adopt a policy that all systems would be under active management under state authority. The Committee agreed to work on an overall statement some more at the next meeting. David will send around some thoughts on what he would like to see included.

Roger reviewed process to follow. After the Committee reviews an issue the Department will decide on how to implement it in rules and Roger will draft language. Committee members suggested getting it on the web, along with minutes of the meetings, which seems possible. Roger discussed that the changes proposed would reduce safety margins. Blair Enman wanted it to be clear that we would not eliminate all safety margins, as they are important in ensuring that most systems work as designed. In deciding how far the safety margin would be reduced, a decision on whether an increase in failed systems or unacceptable sites must be made as a guide to planning the changes.

Viral treatment

Roger reviewed the information that led to the original concerns about viral treatment in systems using advanced wastewater treatment technology. Several handouts with references to concerns about high loading rates and the absence of a biomat in the leachfield were briefly discussed, along with information related to the Septic System Test Center at Buzzard's Bay. Several references in the draft EPA Technical Design Manual were reviewed which continued reference to concerns about high loading rates.

The group discussed the state of knowledge related to the virus issue and agreed that there are no definitive answers. Some members were satisfied that, based on other states' usage of the systems without apparent health problems, even if viruses are not as well treated they don't cause significant problems. Systems in Ohio were discussed. The systems are operated with chlorination and surface discharge and even when the chlorination doesn't work no one is saying there has been an outbreak of disease. Others

discussed ways to minimize the impact by improving distribution systems. It was agreed that design concepts that would tend to increase viral treatment, such as loading rates and dosing frequency would be explored as ways to evaluate and control risks. Questions related to coarse soils were discussed and will be considered as part of the site limitations. What would happen with existing systems was discussed and Chris indicated it was intended that existing systems would not be upgraded until they fail. It was agreed that Roger would work with Chris to develop a list of questions Chris would need answered in making a decision of how to proceed. Bruce Douglas said he would provide some information from testing in Colorado that could be helpful. The concept of different standards for failed system repair usage was raised as an issue.

It was agreed that each member would review the handouts and any other information they could locate. New information would be circulated by e-mail or by Roger. The topic will be continued at the next meeting.

Chris wrapped up with a statement that we would not know the absolute risks but should work on quantifying them as best we can.

Innovative system review and approval process

The committee discussed issues related to what the NEIWPC (New England Interstate Water Pollution Control Commission) approval process mentioned in S.27 means. It means that a manufacturer brings a product to NEWIPCC for review and makes one or more performance claims. The committee reviews the data submitted and agrees or disagrees with the claims. Claims agreed upon are accepted by all New England States. This is not approval for use as each state has many unreviewed issues related to use of innovative systems. The use of other approvals such as NSF was discussed and it was determined that no state relied exclusively on such approval but did use the approval as part of any review.

In the interest of not inventing something from scratch the committee agreed to have Roger review procedures from New Hampshire and Rhode Island, a proposed procedure from New Jersey and Vermont's existing procedure and identify the overlapping issues which probably are needed in any document. Roger will assemble the information in some format for discussion at the next meeting and will circulate ahead of time.

The issues of classes of approval were covered. There could be general, provisional, pilot, experimental, and remedial categories based on what others have done. The committee discussed how remedial situations might have different standards because of the need to deal with existing systems. The difference between experimental and pilot systems was discussed. Pilot systems are where there is an expected performance based on some testing and similar designs. Experimental might have fewer expectations and would be tested to see what actually occurs but might need different site limitations for safety.

Blair said that the most important change to the rules was to get the changes to site limitations for conventional systems established because without them, any changes related to innovative systems would be marginally effective. Chris and Roger agreed with this and indicated a strong commitment to make these changes. Site limitations and the need to change was raised at several points and it was agreed to revisit the 1997 report and see if changes in knowledge and technology would allow for changes to move even further than the previous consensus.

Other topics

There was brief discussion of site limitations and design flow. Roger asked everyone to review the section in the draft EPA manual related to design flows. Roger will flag sections in the manual that bear on the upcoming topics.

Marilyn Davis indicated that she wanted to review the proposal of using 6” of “free board” as the basis of approval for systems using a site specific hydrogeological analysis. She was concerned that it might allow too little of a safety factor.

Chris agreed to check out the use of interactive TV to see if it would be useful in lieu of face to face meetings.

David asked about getting a list server operation going for round robin discussions.

Bruce mentioned a desire to review hydrogeological work to find the least expensive testing methods.

Meeting schedule

It was agreed to meet every other Tuesday for the next six weeks. Meetings on 4-10-2001 and 5-8-2001 will be held in the Mad Tom Notch Room and the meeting on 4-24-2001 will be in the Appalachian Gap Room, which is nearby.

People attending

Allision Lowry
Richard Deso
Pat Camp
Blair Enman
Justin Willis
Bruce Douglas

Andrew Flagg
Richard Czaplinski
Chris Recchia
Alan Huizenga
David Cotton
Roger Thompson

Gail Center
Jeff Williams
Rodney Pingree
Bonnie Loomer-Hostetler
Marilyn Davis