

**Final Minutes**  
**Sewage Handling and Disposal Advisory Committee Meeting**  
**July 11, 2008**

The Sewage Handling and Disposal Advisory Committee met on Friday, July 11, 2008, at the James Madison Building, Main Floor Conference Room in Richmond.

The following committee members were present: Bob Lee, Acting Chairman, Don Alexander, Marcia Degen, Mike Lynn, Joel Pinnix, Pam Pruett and Bill Timmins. Donna Tiller was also present as Secretary to the Committee.

The following visitors were present: John Sawdy, AOSE, Rob Chapman and John Payne, Board na Mona, Scott Currie, VAMAC. From VDH, OEHS, David Tiller, Dwayne Roadcap, Anish Jantrania, and Allen Knapp. Also present was Elizabeth Dietzman, Attorney at Law, Consultant for VDH.

Video Conference sites included Loudoun County and Farmville.

Bob Lee, Acting Chairman in Tom's absence, called the meeting to order at 10:15 am.

Bob started the meeting by adding GMP #146/HB 1166 to the agenda under "New Business". No vote was taken to approve the agenda or minutes due to not having a quorum. The minutes from June 13, 2008 were reviewed by the members and it was noted by Joel Pinnix that the second page, first paragraph, last sentence needed to be revised to read: "Systems would be assigned a rated capacity" Bob suggested we make a note of the correction for the next meeting when the minutes could be approved.

House Bill 1166 Update. The finalized version of GMP 146 was distributed and reviewed. The question "Does this GMP apply to discharging systems <1,000 gallons per day (gpd)? No, per Allen Knapp & Don Alexander. Rick Blackwell disagreed with this interpretation. Bob Lee suggested the VDH publish clarification on this issue.

Bob Lee indicated that treatment requirements for performance must be established by the board—there are performance standards that must be met. Allen Knapp indicated that right now the standards are only qualitative (no sewage on the ground, etc) but with the new regulations, they will become quantitative. Allen Knapp also stated that there is no gallon per day (gpd) maximum for the GMP.

Allen Knapp highlighted that item #4 on page 4 states that the plan submittal process will be the same. He recognized that there are problems with the VDH plan review process now but said that those issues will be handled independently. There is a team working on the plan review process. This application process applies to construction permits only. The engineer must state that the submittal is under this code (HB 1166); if they don't, VDH will review the plan under the current (prescriptive) regulations. VDH EHS's can consult with VDH Engineers prior to approval to the plans if they feel it necessary; however, they are required to consult with VDH engineers prior to denial of the plans.

Item #6 retains certain setbacks.

Item #7 allows engineers to perform their on site characterizations. CPSS's can now also be hired by PE's. Pete Kesecker voiced concerns over engineers who are not familiar with soils or sewage disposal systems now practicing in this field. Allen Knapp & others responded that this issue is really a DPOR/Engineers Code of Ethics problem and it should be addressed in that manner. Pete asked that those engineers who have little or no experience in the realm of sewage disposal should receive more scrutiny during the plan review process. Anish Jantrania stated the GMP does not prohibit a PE from doing soils work and that all plans should be scrutinized. Rick Blackwell stated that the GMP allow PE's to hire other professionals to perform work and be sealed by the PE. Joel Pinnix stated that the PE would now be able to use real data, i.e.  $K_{sat}$  data, for design purposes. Mike Lynn indicated that he felt the PE had a choice of how to use the soils but not how to define it.

Allen Knapp stated that the members of the technical review panel have not been yet appointed but names have been identified.

Item #8 covers application of local ordinances—no comment on this item was offered by the group.

Mike Lynn asked “If we have GMP 146 in effect, then why bother with new regulations for performance based systems?” Bob Lee replied “Because system performance regulations/standards are still required and will be required in the new regulations”

Joel Pinnix indicated that the performance requirements still must be met. Marcia Degen added that GMP146 is an interim policy until the new (performance based) regulations become effective.

Allen Knapp added that there are 2 choices: Get to the level of treatment by prescriptive design from regulations or to get there by PE performance based design.

### Sewage Handling & Disposal Regulations

Parts II & IV of the Draft Regulations were distributed for review. Joel Pinnix asked that the group be advised of particular sections in the new regulations that would be discussed prior to assembling for the meeting.

*Part II, Performance Requirements.* Per Allen Knapp Knapp, all systems would discharge at on of the TS levels.

Marcia Degen asked if for TS4, the BOD/SS level is 5 mg/l, then what is the 10 mg/l at the compliance boundary for. Allen Knapp indicated it should really read 5 mg/l.

Allen Knapp also stated the most controversial requirements would be the nitrogen numbers.

Joel Pinnix asked what the compliance boundary is and how will it be measured? End of Pipe measurement should be ok.

Per both Allen Knapp & Anish Jantrania, the compliance boundary will have to be some distance from the property line. An easement on to another lot may also be permitted for the compliance boundary.

Bob Lee asked what would happen if the constituent is compliant at the end of the pipe but is out of compliance at the compliance boundary? What then?

Rick Blackwell replied that he thought the compliance boundary must be the end of the pipe for that reason.

Up and down gradient background sample collection was discussed—Joel Pinnix stated that this aspect is part of the site characterization process.

Marcia stated all this should be based on a size based, risk managed approach.

Joel Pinnix asked if the nitrogen numbers would have to be demonstrated analytically or analytically with field testing (for design).

It was stated that nitrogen numbers would have to be calculated whether the system design was performance based or prescriptive.

Allen Knapp stated that VDH would publish a manual of examples for acceptable prescriptive designs.

The subject of new versus existing systems was brought up and still will need to be addressed by regulation.

Bob Lee stated that he felt, for TS1, phosphorus and nitrogen numbers should be N/A. Anish Jantrania replied that it is important to look at the subject from a mass loading perspective—10 lbs. N/unit/acre as a starting point. The area loading would then be tied to a number.

Joel Pinnix wondered where/how the TS levels would fit in the prescriptive part of the regulations.

Don Alexander stated that we should wait until we get to the prescriptive part of the regulations to address that. That may be tied to the AOSE/LSE site characterization.

The question: “How will treatment units be classified? NSF doesn’t even test to the limits required in Part II.” was asked. Per Don, VDH is not there yet in the process.

Bob Lee recommended that *E. coli* and enterococcus bacteria be used in lieu of the fecal coliform parameter. These bacteria are becoming the industry standard. He further recommended looking at the use of the number “200” and align standards with that. He was concerned about the legitimacy of the number in terms of reuse.

Bob Lee also stressed the robustness of the system/longevity of the system be evaluated. He feels a design life should be specified. He feels this should be in the regulations

Anish Jantrania commented on the use of robustness as it relates to effluent quality.

Rick Blackwell stated that a design life should be specified for the components, not the system as a whole. Marcia Degen commented that maybe a design life cost should be stated.

Elizabeth Deitzman cautioned about the use of design life. This may be beyond the scope of VDH's authority.

A lengthy discussion ensued on robustness. It needs to be addressed, but how? This needs to be looked at from the perspectives of Industry standards vs. regulatory standards. Pete Keseker stated that with regular monitoring & maintenance, the "bad" units will com to light. He cautioned that an implied warranty may come with required robustness.

*Part IV, Performance Requirements.*

This will be a big change, per Don. VDH will ask the evaluator to submit application package with a specific information set. VDH may not require the full report as it is today. The report will be a summary report submission.

The regulations currently specify how an evaluation is to be conducted. Since evaluators will now become licensed through DPOR, VDH will not dictate how the evaluation is to be performed. VDH will provide a best practice manual but it will be mandatory to follow the manual. Complaints about licensed evaluators would be filed directly with DPOR.

Marcia Degen stated that when the new regulation becomes active, the GMP site criteria should match the regulations.

There is currently a manual of practice posted on the VDH website for interested parties.

Allen Knapp posed the following question to the group: What should VDH's role be in the regulatory capacity if an unauthorized practice of a profession, i.e. the practice of engineering or on site evaluating? Per Allen Knapp & Dwayne Roadcap, VDH does not have purview over case decisions that are not under VDH regulation. They cannot render a case decision. The group avidly discussed the question but came to no conclusion. Joel Pinnix suggested VDH speak with general counsel on the matter. Marcia recommended the group invite David Dick with DPOR to discuss the issue. All pretty much agreed that at a minimum, a complaint be refereed to DPOR by VDH.

Next meeting is scheduled for August 8, 2008.

Joel Pinnix believes we will discuss rules of the committee at the meeting.

Meeting adjourned a 1:15 p.m.