

* * * * * **D R A F T** * * * * * * **Minutes**
Sewage Handling and Disposal Advisory Committee Meeting
June 13, 2008

The Sewage Handling and Disposal Advisory Committee met on Friday, June 13, 2008, at the James Madison Building, Main Floor Conference Room in Richmond.

The following committee members were present: Tom Basham, Chairman, Don Alexander, John Harper, Robert Lee, Mike Lynn, Joel Pinnix, Pam Pruett and Robert Wadsworth. Donna Tiller was also present as Secretary to the Committee.

The following visitors were present: Chris Beatley, Delmarva Septic, J.T. Frazier, Mark Burrus, Scott Currie, VAMAC, Pete Kesecker, AOSE, Advantex, Rob Chapman, Bord na Mona. From VDH, OEHS, David Tiller, Jim Bowles, and Allen Knapp. Also present was Elizabeth Dietzman, Attorney at Law, Consultant for VDH.

Video Conference sites included Loudoun County and Farmville.

The meeting was called to order at 10:15 am.

Bob Lee made a motion to approve the agenda, Robert Wadsworth seconded, no opposed. Agenda approved.

The minutes from May 16, 2008 required one correction: Under New Business, first paragraph, last sentence, strike the text after the word "feasible". Tom Basham brought up a comment on the minutes from Carl Parry. One comment was whether the second EZ-set motion was for "Advanced" Secondary approval, or just Secondary approval. No members thoughts the word "Advanced" was part of that motion, including Bob Lee who made the motion – so the minutes in that area remained as written.

Bob Lee made the motion to approve minutes as corrected. John Harper seconded. No opposed. Minutes approved.

Jim Bowles and David Tiller gave a presentation on the Quality Assurance Program followed by a question and answer session.

Allen Knapp gave an update on the Sewage Regulations. Mr. Knapp discussed performance standards and design components for the new regulations. He emphasized that the information presented would be conceptual only and that there is no hard detail or numbers as of yet.

Conceptually, a sewage disposal system will consist of a treatment box + treatment soil will produce a desired outcome. 4 treatment standards may exist. The desired outcome would be 100% treatment. Treatment Standard 4 (TS4) would treat to the highest level. Treatment parameters would include BOD₅, TSS, Total N, P, and fecal coliform. A dispersal standard would also be set and would be defined as the effluent should be kept underground, no nuisance should be created, and the discharge of effluent may not result in a point source discharge. Normal operating conditions for various systems would also be defined.

The question arose as to whether VDH should list approval of treatment devices, and, if yes, how? It was decided that listing the devices would be important in relation to prescriptive design of systems but not important for performance based system design. Per Bob Lee, the treatment device approval process would need to include review for robustness (i.e. reliability and performance over time) in addition to testing data.

Another aspect of the regulation concept would be to create a technical review committee consisting of 4 professional engineers. The technical committee would review processes/treatment devices. Third party testing data would be accepted for review the technical review committee. Non-third party testing data would also be accepted for review but a minimum number of systems and data points would be required. Systems would be assign a rated capacity with a 95% confidence level.

Under the new regulatory concept, prescriptive sewage disposal system design monitoring requirements would be much simpler. Performance system design monitoring requirements would be more complex and based upon deviations from the prescriptive standards. Sites would be assigned loading rates based upon both hydraulic loading and organic loading potential.

Loading rates would be also be based on the project area nitrogen limits, soil absorption area, and trench bottom (instantaneous loading). The most limiting feature will dictate the loading rate.

Four categories of receiving environments would exist and be classified as Receiving Environment 1 (RE1) through RE4. The RE classification would be based upon the limiting feature of the environment.

Bob Lee expressed it is important to consider carbon, oxygen, phosphorous, and nitrogen.

An Adjustment matrix—multiplier according to receiving environment and treatment standard—is also proposed. A sample matrix was projected for illustration.

“Installation conditions” as a K_{sat} and landscape element was discussed. This is a poor choice of words according to Tom Basham. There potentially will be 6 classes of K_{sat} values.

The question arose, with significant subsequent discussion, as to whether AOSE’s would have veto power of PE designs. Members of the group had differing opinions on the matter,

There was considerable discussion as to how certification letters would be handled with the new regulations if engineers would be allowed to proceed with a design without the approval of the original soils consultant on the design – ala the “veto” term.

Fees— A handout illustrating the most recent VDH fees was distributed to the group.

John Harper moved to adjourn the meeting. Robert Wadsworth seconded the motion. Meeting adjourned at 1:20 p.m.