Technical Advisory Committee Meeting
July 9, 2010
Final Regulations for Alternative Onsite Sewage Systems
12 VAC 5 – 613

Location: 5th floor Conference Room
Madison Building
109 Governor's St.
Richmond VA 23219
804-864-7473

Time: 10 am to 3 pm

Agenda

1. Results of Sticky Dot Session – Priorities for discussion set in last meeting. Each attendee was given 2 green dots and 3 gold dots. The green dots were assigned 5 points and the gold dots assigned 3 points in order to assess the results. Below are the results. The number in parenthesis is the number of points for the topic

I. Groundwater Protection (102)
   A. Pollution of Groundwater – should the Regs make it illegal to pollute groundwater or prohibit pollution of groundwater
   B. Should the replacement regulations expand its authority with respect to the groundwater standards administered by DEQ
   C. Nitrogen loading from smalls and large
   D. Groundwater monitoring for large AOSS

II. Compliance and Enforcement for At Risk Facilities (41)
   Should the regs contain stronger compliance and enforcement for at risk or soft sewage system failures?

III. Modification of Loading Rates (33)
   Table 1 has been a source of confusion for users. Confusion exists that these are maximum rates for a range and are not to be used for all soils with in that range; how do you go from the pressured dosed loading to gravity to area loadings, etc. Consider adding additional columns for area loadings, gravity loadings, expanding the range of rates given; and other ideas such as removing reference to a performance requirement for hydraulic or organic loading rate

IV. Fail Safe Capabilities or Bypass Protection Reliability (26)
   Should VDH consider technology that protects the receiving environment? This would be similar to Reliability Classification provided for discharging systems which rate treatment systems based on their size and receiving environment. The highest Reliability Class, RC I, requires designs for continuous operability and generally includes items such as backup power, standby units for critical systems, etc.

V. Reorganize to create Performance vs Prescriptive Requirements (22)
   Part II has been criticized as having both prescriptive and performance elements to it. Part II has a mix of administrative, general performance, and more specific performance. Question is should the general and specific performance criteria be split into different sections? Should the administrative sections be moved to Part I?

VI. General Approval Protocol (22)
   Should the testing and evaluation protocol for general approval be modified in the regs? How do we verify ongoing treatment efficiency?

VII. O&M status – part of the permit and enforceable (20)
Should the O&M manual be recognized as part of the permit and be enforceable even if the manual exceeds the minimum regulatory requirement?

VIII. Sampling requirements for Small AOSSs (18)
Smalls sample at startup and then once every 5 years for generally approved. Not generally approved units sample more frequently. Sampling is for BOD5 and, if required, disinfection parameter

IX. Bonding for large AOSS (15)
Large AOSS are community sized systems and bonding has been suggested to provide security for the homeowners and community in the case of failure or abandonment of the facility

X. Reuse of Treated wastewater (11)
Should these regs include reuse of wastewater?

XI. Continued Use of TL2 and TL3 (5)
Are TL3 and TL2 appropriate effluent quality standards?

2. Focus of Discussion for July 9th – Groundwater Standards

A. Review of Code of Virginia 32.1-163.6

§ 32.1-163.6. Professional engineering of onsite treatment works.

A. Notwithstanding other provisions of this chapter, for purposes of permit approval, the Board, Commissioner, and Department of Health shall accept treatment works designs from individuals licensed as professional engineers pursuant to Chapter 4 (§ 54.1-400 et seq.) of Title 54.1. The designs shall (i) be compliant with standard engineering practice and performance requirements established by the Board and those horizontal setback requirements necessary to protect the public health and the environment, (ii) reflect that degree of skill and care ordinarily exercised by licensed members of the engineering profession practicing at the time of performance, (iii) be appropriate for the particular soil characteristics of the site, and (iv) ensure that the treatment works will meet or exceed the discharge, effluent, and surface and ground water quality standards for systems otherwise permitted pursuant to the regulations implementing this chapter.

B. Review Current Standards in E. Regs related to Groundwater
1) Effluent Quality: STE, TL2 and TL3 + disinfection
2) Vertical Separation
3) Fecal coliform standard
4) Horizontal setbacks
5) Loading rates

C. Review DEQ Groundwater Standards 9 VAC 25-280

D. Wetlands – DEQ and VPDES Discharge Permits
1) DEQ has stated it's authority to issue discharge permits in wetlands. AOSS's in wetlands would require a VPDES permit and a construction permit (VWP) from DEQ.
2) Discussion
3) Summary – Consensus of approach or more info needed

E. Discharges into the water table
1) Legal opinion on ability to set vertical separations

2) Discussion of designs in ground water table
3) Discussion – should VDH permit systems in the water table? (historically all systems have been above the seasonal high water table)
4) If in the water table what new ground water standards and/or performance standards to consider (Failsafe/reliability provisions?)
5) If desire is to not be in water table, how to modify the regulations to clarify intent.
6) Summary – Consensus of approach or more info needed

F. Nutrient Control for Onsite Systems in the Chesapeake Bay Watershed
1) Current assumptions in Bay model for N & P from Onsite Systems
2) EPA Recommendations for Onsite Systems
3) DEQ requirements for discharging systems (for comparison)
4) Discussion large vs smalls
5) Summary – Consensus of approach or more info needed

3. Next meeting July 14th
A. Review of more info needed from July 9th
B. Next topics:
1) Enforcement and compliance of at risk facilities (smalls and large AOSS)
2) Loading Rate discussion & reorganization of Part II
3) Failsafe/Reliability – should it be considered for Onsite systems?
C. Other?