

**Sewage Handling and Disposal Regulations  
Site and Soils Subgroup  
Tuesday, July 23, 2024 – 10:00 am to 2:00 pm  
Meeting Notes**

**Meeting Location:**

5<sup>th</sup> Floor Main Conference Room, 109 Governor Street, Richmond, Virginia, 23219

**Virtual Participation Available Via Webex:**

Join from the meeting link:

<https://vdhoep.webex.com/vdhoep/j.php?MTID=mb670aafd17057a7817997f189b84976a>

**In Attendance:**

Adam Day, Adam Feris, Andrew Carter, Anne Powell, Anthony Creech, Brent McCord, Curtis Moore, Derek Hunt, Greg Garber, Jamie Pritchett, Jay LeReche, Jermaine Niblett, Joey Hutchens, John Dickson, Josh Hepner, Joshua Anderson, Kelli Greenstreet, Kevin Wastler, Maher Akremi, Megan Webb, Mike Callahan, Mike Lynn, Mike Thomas, Mitch Rieley, Paul Shannon, Ryan Fincham, Ryder Bunce, Shawn Carman, Steve Thomas, Steve Valentine, Travis Holt, Vickie Vaughn, Wesley Marshall

**Agenda:**

1. Welcome / brief introductions (15 min.)
2. Follow-up from 2022 subgroup meetings (15 min.)
  - a. Critical Control Points established for site and soil evaluations
  - b. General Criteria for Site and Soil Evaluations (drafted in 2006) introduced as a baseline for a Document Incorporated by Reference to outline the expectations of onsite sewage professionals
3. Draft regulation concerning conducting site and soil evaluations (45 min.)
  - a. Section 120
    - i. “Saturated Hydraulic Conductivity” (Ksat)
    - ii. “Limiting Feature”
      1. Should mounding calculations be included in SHDR for COSS when there is a Permeability Limiting Feature?
      2. Steve Thomas does not think mounding calculations would be necessary if the site met the requirements for a conventional system.
      3. Adam Feris asked about requiring water mounding calculations for large (>1,000 gpd) COSS.
      4. Curtis Moore pointed out that these large COSS would require a Professional Engineer, but also mentions that there is a big difference between a church and a large commercial facility.
    - iii. “Permeability Limiting Feature”
    - iv. “Shallow Placed”
  - b. Section 450
    - i. Include licensure requirement
    - ii. Striking the systematic approach statement to add DIBR
    - iii. Clear expectations on the documentation of topography, available area, seasonal water table, drinking water supplies, bodies of water, shellfish

growing areas, soil horizon, depth, rate of absorption, or combination of any of the above

- iv. Percolation test swapped out for Ksat testing? Is anyone still doing Percolation tests? Should VDH only accept Ksat testing results?
  - 1. Kevin Wastler said yes, occasionally Fairfax HD still received perc test results
  - 2. Curtis Moore does not see a value in maintaining percolation tests in the regs as it's no longer the industry standard
  - 3. Steve Thomas mentioned that the falling head perc tests still resemble how an onsite sewage system act in the soil. Phrasing it like perc tests are okay, but Ksat's are better.
  - 4. Curtis Moore mentioned the need to make the conversion official between centimeters per day and minutes per inch
- c. Section 460
  - i. Andy Carter and Adam Feris – 200 feet sanitary survey – from all components of the onsite sewage system
  - ii. Curtis Moore – recommended wordsmithing to make sure it is the property owner's responsibility to have the property boundary and building site marked
  - iii. Mike Lynn – mentioned that he does not see the value in requiring the property to be marked/staked. Some properties are so large that the boundaries of the property do not play into the location of the OSS.
  - iv. Revisions to mirror the policy for the surveyed plat waiver – Andy Carter – include exemptions/waiver possibilities, example: septic tank replacement
  - v. Survey Plat Waiver –
    - 1. Curtis Moore proposed striking certification letters from survey plat waiver or make more stringent requirements for waiving survey plat on certification letters
    - 2. Megan Webb mentioned that Rappahannock Area HD only waives survey plats on repairs/Voluntary Upgrades and she agrees with Curtis about not waiving survey plat on a cert letter. RAHD does not waive on new construction either, especially since local building/zoning requires the owner to provide one anyway.
    - 3. Mike Lynn and Paul Shannon suggested changing the Code of Virginia to reflect that the responsibility is on the property owner to make sure their OSS in on their property
- d. Section 470
  - i. Redoximorphic Features added (needs to be defined; maybe use NCRS definition)
- e. Section 480
  - i. Changes to Number and Location of Profile Holes
    - 1. Active voice directive to OSE/PE for minimum of five holes?
    - 2. Consistent design added to uniform topo and profiles for reduction to three holes required?
    - 3. Entire "area under consideration for certification"?
    - 4. Located on the property?
    - 5. Located only in acceptable landscape position?
    - 6. From DIBR – "reasonable assurance" for number and location of soil profile holes – puts the onus on the licensed OSE
  - ii. Depth of Profile Holes – Paul Shannon recommends changing required depth of profile holes to 24 inches below the installation

- f. Section 490
    - i. Strike language about color because it does not include a regulatory requirement
  - g. Section 490.C.2 – Ksat Testing
    - i. Requirements for when it is to be conducted pulled in from draft policy on permeability limiting features
    - ii. Requirements for how it is to be conducted references “Measuring Saturated Hydraulic Conductivity” publication from Virginia Cooperative Extension
    - iii. Requires the use of only devices approved by VDH (or VT Cooperative Extension – Dr. Brown?) and in accordance with the approved user manual (NC guidance document referencing ASTM Standard D)
  - h. Section 500 – no regulatory requirement
  - i. Section 591 – no regulatory requirement
  - j. Table 4.1 and Table 4.2
    - i. Adding a feature requiring a separation distance – Cut Bank / Retaining Wall / In-Ground Swimming Pool = 20 feet minimum
    - ii. Curtis Moore recommended adding footnotes (or definitions) about where to take the measurements from for minimum separation distance.
    - iii. Jamie Pritchett asked if the separation distance from utility lines include irrigation
    - iv. Brent McCord pointed out that horizontal separation should take into consider the elevation of the excavation relative to the infiltrative surface and whether the excavation is upslope or downslope.
    - v. Paul Shannon pointed out that adding a 20-ft separation to cutbanks somewhat contradicts the footnote reduction in separation for streams.
    - vi. Steve Thomas recommended including a maximum ratio for rise:run to call it a “cut bank”
    - vii. Paul Shannon recommended looking at DEQ’s stormwater management BMPs and including separation distances in 4.1 and 4.2 where necessary.
4. Draft regulation concerning reserve area requirement (45 min.)
- a. Section 710
    - i. 100% reserve areas for all new OSS; no perc rate involved
      - 1. Steve Thomas asked if that is 100% of the required square footage or gallons per day
      - 2. Adam Feris pointed out that if the soil is heavier in the reserve area, a 100% reserve may actually be 75% of the designed primary
      - 3. Curtis Moore recommended including a reference date for moving forward with this requirement; recommends the requirement only for new construction
5. Draft regulation concerning Documents Incorporated by Reference (45 min.)
- a. Appendix F – Field Guide to Soil Texture Classes – omit because no regulatory requirement
  - b. Appendix G – Perc Test Procedure – omit because no regulatory requirement
  - c. General Criteria for Conducting Site Evaluations
    - i. Preliminary Documentation
    - ii. Surface Characterization
    - iii. Subsurface Characterization
    - iv. Testing Procedures for Specific Subsurface Properties
    - v. Interpretation of Information and Design Recommendations
    - vi. Reporting Results
6. Additional discussion (60 min.)

7. Next steps / meeting conclusion (15 min.)
  - a. Anne will send the DIBR in an email to the attendees of this meeting
  - b. Next meeting on August 28 from 10am to 2pm