

**Virginia Department of Health (VDH)
Sewage Handling and Disposal Regulations
Site and Soils – Revisions Subgroup**

Date: May 11, 2022

Time: 10:00 am

Location: 109 Governor Street, 5th Floor Conference Room, Richmond, VA
(with WebEx virtual option)

Attendees:

Lance – VDH

Anne – VDH

Curtis Moore – Virginia Onsite Wastewater Recycling Association (VOWRA)

Danna Revis – VOWRA, Licensed Operator, License Onsite Soil Evaluator (OSE)

Brent McCord – Rappahannock Health District

Joshua Anderson – Loudoun County Health Department (LCHD)

Josh Hepner – LCHD

Todd Lam – Lord Fairfax Health District

Katy Treash – Mt. Rogers Health District

Jeff Walker – Certified Professional Soil Scientist (CPSS), License OSE, Licensed Installer

Tom Ashton – CPSS, Licensed OSE

1. Welcome / Brief Introductions

Lance Gregory welcomed the attendees to the subgroup meeting.

2. Follow-Up from April Meeting (notes posted to Town Hall)

Lance Gregory mentioned the notes from the April meeting have been posted on the Virginia Regulatory Town Hall website. The subgroup members had no comment or questions about the April meeting notes.

3. Discussion of SHDR Sections

Section 450: Lance Gregory reiterated that other subgroup members have suggested to update the term “percolation test” to “saturated hydraulic conductivity test”.

Anne Powell mentioned adding the word “site” at the beginning of the paragraph to make it “Site and Soil Evaluation” and using Site and Soil Evaluation consistently throughout the SHDR

Steve Thomas (through correspondence with Anne Powell) suggested including landform, hill-slope position, slope shape in the list of things to consider in the Site and Soil Evaluation. Mr. Thomas also suggest including horizon nomenclature, consistence, and rock fragment content in the list of things to include in soil profiles.

Danna Revis suggested including the United State Department of Agriculture Natural Resource Conservation Service (USDA NRCS) as the referenced source for Site and Soil Evaluations.

Katy Treash mentioned that the SHDR use the term “subsurface soil absorption area” but not all dispersal methods are subsurface anymore. Ms. Treash suggested changing the wording to reflect current dispersal methods.

Curtis Moore asked the subgroup if the SHDR should be the “how to” for site and soil evaluations or do there should be a guidance document outside of the SHDR. Mr. Moore elaborated that he put a lot of work put into a guidance manual for how to do a site and soil evaluation with other stakeholders about 14

years ago. Lance Gregory added that the - Virginia Site and Soil Evaluation Curriculum is also available as a guidance manual. Both of these documents were created at the request of Don Alexander (then the Director of the Office of Environmental Health Services). Lance Gregory suggested that the SHDR could specify that all site and soil evaluations must be conducted in accordance with “XYZ” Guidance Manual and asked the subgroup if this is the kind of statement the groups want to see in the SHDR.

Jeff Walker stated that the Quality Assurance Quality Control (QAQC) policy is the law of the land as it was signed off on by the attorney general. Mr. Walker suggested that the QAQC policy could be called the standards of practice. Mr. Walker stated that there are aspects of current policy and attorney general findings that ought to be codified so that a standardized review would verify those requirements. Mr. Walker suggested that instead of adding new burdens to the standards of practice, the subgroup should be asking what could be removed from the SHDR since evaluators, installers, and operators are now licensed classes. The protection of public health is meant to come about because the onsite sewage professionals are a licensed class.

Lance Gregory stated that a benefit of having a guidance documents for site and soil evaluations is that as a policy it would go through the required public comment period instead of the arduous regulatory revision process. Mr. Gregory asked the group member if there is any concern about having the technical details in a policy instead of specifically spelled out in regulation. Jeff Walker stated that he does not want anything to get more restrictive in the SHDR without data about the problem and the regulatory approach to how VDH is resolving the issues. Mr. Walker wants to see proof that things have caused failures before VDH introduces new regulations.

Danna Revis mentioned that local building officials refer to a national policy and something similar could work with a Virginia policy for site and soil evaluations. Lance Gregory mentioned that if VDH takes that approach, Section 450 could reference “shall be done in accordance with XYZ Manual.” Curtis Moore mentioned that the SHDR would need to report on what a site and soil evaluation is.

Jeff Walker suggested that anything that is not a “shall” statement should be struck from the SHDR.

Lance Gregory asked the group if the idea is that a guidance manual would cover how to go about identifying things in the site and soil evaluation, but the SHDR would continue to say the site and soil evaluation shall meet these minimum standards. As an example: A guidance manual would include Section 480 (Soil Profiles and Patterns), but Sections 450 (General) and 460 (Site and Structure Identification) would remain in the SHDR.

Jeff Walker mentioned that Section 460 is not being enforced by LHD. Mr. Walker stated there is no reason for anyone to render a site plan that does not include everything in 460.

Lance Gregory referenced the discussion in the subgroup for the impacts of climate change on Hazard Analysis and Critical Control Points (HAACP) planning. The HACCP plan can be utilized in this subgroup by going through the sections of the SHDR that deal with site and soils and identifying the “shall” statements as critical control points. Anything that does not fit within that framework (supporting information to “shall” statements) could be shifted into a guidance manual.

Josh Hepner stated that by taking those parts of the SHDR and creating the policy as the standard and expectation for conducting (and reporting) these site and soil evaluations, everyone conducting site and soil evaluations would follow these standards.

Curtis Moore offered the example of Site and Soil Evaluations would still require paying attention to water table and landscape position, but how someone arrived at the description would not be included. Lance Gregory suggested walking through Section 470.D of the SHDR as an example. Currently, Section 470.D simply explains what the minimum depth to seasonal water table is. In this example the SHDR could be revised to say, “Licensed Onsite Soil Evaluators shall indicate in the Site and Soil Evaluation at what depth the seasonal water table is observed, but the guidance document would cover what seasonal water table indicators are and how to document them. Lance Gregory reiterated that this subgroup should identify what the critical control points of these site and soil sections are, make sure each critical control point is a “shall” statement, and specify who the “shall” statement is directed to.

Danna Revis mentioned that the site and soil evaluation follows the scientific method. Each evaluation starts by creating the hypothesis, “This site is suitable for an OSS.” From there, the evaluation either

proves or disproves this hypothesis. Jeff Walker agreed with Danna's comment about the scientific method and stated that site plans are crucial and very important.

Critical Control Point Identification

Lance Gregory suggested the group walk through the SHDR to start identifying the critical control points (shall statements) and brainstorming how these statements should be phrased.

450 The designer SHALL conduct a site and soil evaluation in accordance with "XYZ Policy".

The site and soil evaluation SHALL document (insert language for minimum documentation).

460 The designer SHALL document x, y, and z on a site plan (sketch).

Curtis Moore asked if this would include all features in the separation distance tables of the SHDR.

Danna Revis suggested using the specifics found in GMP 2017-01 specs. Jeff Walker stated that GMP 2017-01 is an extremely controversial document and is widely interpreted across LHDs. Mr. Walker suggested that the 200 feet radius is the right way to regulate sanitary surveys. Mr. Walker reiterated that the designer is responsible for characterizing the site. Todd Lam mentioned that he pays careful attention to what the designer OSE identifies features in closer proximity to wells and septic systems, rather than the 200 feet radius. Katy Treash suggested including some type of declaration that a sanitary survey was conducted and all features effecting well and septic are identified.

Lance Gregory asked the groups who they think the "shall" refers to in regards to staking the boundary of the lot and the building site (in new construction). Mr. Gregory also mentioned the "shall" statement for surveyed plats and the need for consistency across LHDs. Danna Revis mentioned the need for VDH to update the survey plat waiver form. Ms. Revis has seen surveyed site plans that say, "based on research" and the surveyors did not go out to the site; the surveyors just used historical documents to create the drawing.

470 Lance Gregory suggested that Section 470 is a list of critical control points.

Curtis Moore mentioned there is very little use for texture groups and this information can probably be omitted. Lance Gregory stated that VDH would need to find everywhere texture groups are used in the SHDR and make sure the language is changed appropriately. Brent McCord suggested replacing texture groups with permeability rates.

Jeff Walker suggested a subgroup discussion on how to convert permeability rates into a loading rates.

Mr. Walker stated he is in agreement with getting rid of texture groups. As an example, Mr. Walker stated that some consultants design drainfields in sapolite without assessing the mineralogy and structure.

Katy Treash mentioned that she uses the texture groups in her work as a regulator when texture groups are involved with another aspect of the SHDR (proximity to stream, gravelless material). Ms. Treash stated that removing texture groups from the SHDR would not have much impact on her work as a regulator.

Jeff Walker suggested codifying when it should be required to provide a permeability assessment.

Josh Hepner suggested the SHDR providing a range of permeability within the texture groups.

Lance Gregory suggested using texture group as a mechanism to decide when a permeability test is required. For example, using a 45 minute per inch percolation rate for a Clay Loam soil would require the designer to run a permeability test.

Jeff Walker mentioned the need for mathematical conversions for taking a permeability rate to a loading rate. Mr. Walker stated that the "Peacock tables" are just estimations.

4. Next Steps for Subgroup / Preparation for Next Meeting(s)

In preparation for the next meeting, Lance Gregory stated that he will send Curtis Moore's guidance document to the subgroup members via email. The group members should review this document, as well as the tables of separation distances, and the other sections of the SHDR involving sites and soils in preparation for the next meeting. Anne Powell stated that she intends to review the "shall" statements regarding sites and soils to identify the critical control points in preparation for the next meeting. From there, the subgroup members can determine what needs to be in the guidance document versus the SHDR.

Anne Powell concluded the meeting with the mention of the next meeting date on Wednesday, June 15, 2022 at 10:00am.

AGENDA

1. Welcome / Brief Introductions (5 minutes)
2. Follow-Up from April Meeting (notes posted to Town Hall) (10 minutes)
3. Discussion of SHDR Sections (90 minutes)
 - a. Part III, Article 1, Sections 450, 460, 470, 480, 490, and 500
4. Next Steps for Subgroup / Preparation for Next Meeting(s) (15 minutes)
 - a. Part IV, Article, 1, Sections 591, 592, and 593
 - b. Part IV, Article 2, Sections 594 and 596
 - c. Part IV, Article 3, Sections 597