Virginia Department of Health (VDH)
Sewage Handling and Disposal Regulations
Programmatic Changes – Revisions Subgroup

Date: May 10, 2022

Time: 10:00 am

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

Attendees:
Lance Gregory – VDH
Anne Powell – VDH
Anthony Creech - VDH
Tom Ashton – Soil Scientist, Onsite Soil Evaluator (OSE)
John Sawdy – Licensed Installer & Operator
Curtis Moore – Virginia Onsite Wastewater Recycling Association (VOWRA)
Mike Lynn – Sewage Handling and Disposal Advisory Committee (SHADAC)
Joshua Anderson – Loudoun County Health Department
Katherine Merten – Rappahannock Rapidan Health District
Tanya Pettus – Department of Professional and Occupational Regulation (DPOR)

1. Welcome
Anne Powell welcomed the group to the meeting.

2. Follow-Up from April Meeting
Anne Powell announced the notes from the April meeting are posted on the Virginia Regulatory Town Hall website.

3. Topics from Other Subgroup Meetings

a. Renewable Operation Permits (ROP)
Anne Powell explained that Operation Permits are issued by local health districts (LHD) for onsite sewage systems upon approval of the installation. The Impacts of Climate Change subgroup has discussed the possibility of requiring Renewable Operation Permits in high-risk areas that may be more likely to see the impacts of climate change.

Lance Gregory further explained that VDH currently has some Renewable Operation Permits with certain Alternative Onsite Sewage Systems (AOSS) and direct dispersal systems. Requiring a ROP for all systems would add a level of follow-up to observe the status of an onsite sewage system after it has been put into use. ROP was discussed in the Impacts of Climate Change subgroup in regards to high risk flooding areas and areas where sea level rise is effecting groundwater.

Curtis Moore remarked that Renewable Operation Permits are needed in many circumstances. Mr. Moore also think ROPs would help with Safe, Adequate, and Proper (SAP) process. Mr. Moore stated that regulating ROPs would be a burden on the LHD. Moore also asked how the ROP process is currently handled with large systems and direct dispersal in the LHDs.

Mike Lynn mentioned that his company operates a system with an ROP and the LHD has not been re-issued in 4 years.

Katherine Merten said that VDH would need a database and tools to handle the workload and logistics when the ROPs come due.

Mike Lynn suggested the process might have to be automatic, for example, an operator could file a report for the OSS and request a renewed OP online. Mr. Lynn specified that the regulations would have to be very clear with no ambiguity in the report/request.

Joshua Anderson stated that the owner of the OSS currently tracks their ROP and reports to VDH for renewal. To make a ROP process work, VDH would have to have a mechanism for tracking expirations. The operator of the OSS is the ultimate judge of whether or not system is working. Mr. Anderson asked how this process would work for Conventional Onsite Sewage Systems (COSS) that are not required to have Operation & Maintenance (O&M) visits from an operator now. Mr. Anderson also mentioned that an ROP process would be useful for hybrid facilities that have VDACS, other VDH, or other agencies involved in permitting.

Lance Gregory asked the group what types of systems have failed prematurely that could have been avoided with a ROP. Mr. Gregory further asked if an ROP would have saved a conventional residential system if the ROP would be more useful for commercial type systems.

Curtis Moore stated that the assumption of a septic tank of a COSS being pumped every five years is to lengthen the life of the system. Just because a property owner does not have the tank pumped out for ten years, does not mean the system is failing (or has failed). Instead, having the tank pumped more regularly will extend the life of the system, avoiding premature failure. It is also important to remember that an owner is more likely to catch other problems with their OSS that could lead to premature failure when they are consistent with regular pump outs.

Mike Lynn mentioned that if VDH tracked AOSS inspections and made sure reports were up to date with no deficiencies, those positive reports are similar to a ROP.

Joshua Anderson stated that VDACS-inspected facilities would be monitored more closely with ROP because VDH would get eyes on the function of the system after installation (even COSS). Operation and Maintenance is the key.

John Sawdy asked about the ROP for an OSS that does not meet VDH's specific definition of failure; how would VDH require repair work for ROP issuance if the system is not technically failing.

Lance Gregory mentioned that ROP process would come into play for an existing OSS when it is repaired with a repair permit.

Curtis Moore asked about something like a control panel that is working, but the operator says it needs to be replaced. Curtis wonders if that work would be required to get the ROP issued.

Lance Gregory stated that if VDH used a process like Mike Lynn's comment earlier, making the process an automatic renewal connected with O&M reports or even real estate transactions. Mike Lynn mentioned that having a piggyback float and bad wiring (that are working) should not keep a homeowner from getting a ROP.

Joshua Anderson asked if there would be a benefit to making the ROP non-transferable. It would certainly catch any real estate transaction or change of use for an OSS. An exception could be included for systems with recent O&M visits. Curtis Moore stated that during real estate transactions, the buyer is the one who

ends up with the problems. Mr. Moore sees it as a conflict that the person with the equity in the home is not responsible for the inspection.

Lance Gregory mentioned that the Virginia Realtor Association (VRA) interviewed him for an episode of their podcast during SepticSmart Week 2021. During this interview, the VRA mentioned that many buyers are waiving the septic system inspection in today's market. This is something that Lance and the VRA strongly encourage buyers not to.

Mike Lynn suggested having the owner of a property file for the ROP themselves by answering a few simple questions about their OSS. If they do not feel comfortable answering questions, they can hire someone to inspect the system. But if the owner has been responsible with pump outs and know there is no issue (backup or surfacing of sewage), they can sign off on the questionnaire themselves. In a previous meeting, the Virginia Realtor Association mentioned that properties change hands every seven years, so maybe an ROP could work with real estate transactions.

Lance Gregory suggested maybe not calling it a Renewable Operation Permit, maybe calling it a Real Estate Inspection is better. Lance explained that resources in VDH and LHDs would be an issue.

Katherine Merten ask what enforcement would look like for the ROP process with the current limiting definition of system failure. Katherine also wonders what mechanism VDH would have to enforce non-renewal when it comes to an occupied structure.

Lance Gregory agreed that a more clear definition of failing would be necessary to manage Renewable Operation Permits effectively.

Curtis Moore suggested using the simple question, "Is the system operating as it was designed to function?" The ROP could be automatic and only need to be formally renewed if the OSS is not meeting ongoing performance measures.

b. SHDR in relation to other Regulations

Anne Powell asked the group if they have observed a lack in harmony or conflict between the SHDR and other regulations.

Mike Lynn mentioned that some building inspectors across the state are interpreting the plumbing code to include water softener and condensate drain flow into OSS.

Curtis Moore mentioned the relationship between storm water management infrastructure and wells; for example, he wonders if retention ponds/trenches for storm water management require a 100 feet separation from a well. Lance Gregory mentioned that this infrastructure technically might not be "surface water". Mr. Gregory suggested the SHDR mirror DEQ regulations/policy.

John Sawdy mentioned underground utilities, such as electric, broadband, and phone. Mr. Sawdy said these utilities are frequently installed over top of existing OSS. Curtis Moore explained that OSS are often thought of as subservient since it is in the ground first. Mr. Moore explained that there is much more flexibility in locating where a telephone line can go than where a drainfield can go.

Curtis Moore mentioned that under the Sewage Collection and Treatment (SCAT) Regulations, wastewater treatment plants are treated a lot differently with larger flows. Because of these larger flows, Renewable Operation Permits are sometimes utilized for wastewater treatment plants to keep them up to date on new standards. This sort of requirement may be a good idea of larger OSS.

Mike Lynn suggested strengthening the definitions of features including in the separation distance tables of the SHDR. Mr. Lynn explained that the wide interpretation of these feature leads to conflict with Safe, Adequate, and Proper reviews. If the SHDR could provide more guidance and less ambiguity in what each item is, it would be very helpful.

Curtis Moore mentioned adding certain questions to the application stage that may help address/diagnose failure. An example is determining if a property will be rented or if it will be owner occupied.

Lance stated there has been discussion in a subgroup about tacking on additional OSS sizing for larger homes (based on square footage). Curtis Moore explained that he cares more about how many people are going to be in the house and how they are going to use it than the square footage of the house. Lance asked the group if the design flows in the SHDR should be re-evaluated. Curtis Moore suggested considering removing the commercial flows from SHDR Table 5.1, because Professional Engineers are required to characterize commercial flows.

Katherine Merten mentioned a need to review the policy for installing an OSS in an overhead utility easement. The policy says the owner has to get permission from the utility company, but recently the utility companies are not giving owners a written statement of approval.

Joshua Anderson suggested working with Virginia Department of Transportation (VDOT) for projects (road widening, ingress/egress ramps, etc.) in relations to existing wells and OSS. Mr. Anderson also mentioned a lack of oversight and enforcement for small commercial discharges. Many localities do not understand the difference between discharges regulated by the Department of Environmental Quality (DEQ) and VDH. Mr. Anderson stated he would like to see VDH have enforcement for sewage on the ground, regardless of who is in charge of the disposal (locality, DEQ, VDH, etc.). Lance Gregory stated that VDH does have a broader authority under the code with public health protection.

Curtis Moore mentioned the local mandates for septic pump outs and building in Resource Management Areas (RMAs)/Resource Protection Areas (RPAs) included in the Chesapeake Bay Preservation Act. Lance stated that he recently had conversations with the Department of Conservation and Recreation (DCR) and DEQ about general construction within the 100-year flood plain (which is disallowed under CBPA). However, the SHDR currently disallow construction of an OSS in the annual flood plain.

Mike Lynn stated that he has encountered 10 feet clearing buffers to RPAs and 20 feet setback for drainfields from RPAs. Mr. Lynn mentioned that these standards have pushed some properties to require an AOSS or to decrease the number of bedrooms to decrease the size of the drainfield.

Curtis Moore mentioned the possibility of encouraging larger flow systems for better management, similar to the way DEQ treats systems with large flows in the SCAT regulations. This process is contradictory to the concept of flows per bedroom currently found in the SHDR.

Mike Lynn stated that average flows in community systems are 190 to 220 gallons per household per day, while the designs are based on 300 to 400 gallons per household per day. Curtis Moore stated that this system might not be providing the necessary treatment to function as design because the OSS is not getting the flow for which it was designed. Mike Lynn stated that he is finding it difficult to meet the total nitrogen requirements at the end of pipe because the OSS is short on “food”.

c. Licensing of Onsite Sewage Professionals

Lance Gregory mentioned that in the VDH Septic and Well Assistance Program (SWAP), VDH is verifying licensure with contractors bidding on projects, both installer and contractor licenses. Mr. Gregory mentioned that a change in the SHDR could be as simple as stating “all work by properly

licensed individuals" for each specific action. VDH would check licenses prior to issuing permit, approving installation/inspection, and approving O&M reports.

John Sawdy suggested cleaning up the process of searching for licenses on the DPOR website because those old interim licenses are still listed in the database when you search by name. This makes it difficult to determine which license is still valid.

Tanya Pettus mentioned the advanced search option on the DPOR website, which helps the use filter between the Boards and license types. Ms. Pettus also mentioned that anyone could call into the DPOR office for license verification.

Lance asked about how to verify Class A, B, or C Contractor Licenses because VDH does not necessarily know the cost of the job. Ms. Pettus stated that DPOR does not get into specific classes.

Curtis Moore asked if there is a reason the §54.1-402 exemptions cannot be reiterated in the SHDR. Mr. Moore further asked if an individual is required to be an OSE/PE by the SHDR or could VDH accept an application from an unlicensed individual. Lance Gregory stated that the SHDR do specify a licensed OSE under the installation inspections and gravelless material sections.

Mike Lynn asked if instead of using the minutia of specifics in §54.1-402, if VDH could use a simpler method of determining when a Professional Engineer is required. Mr. Lynn suggested that OSS with flows less than 1000 gallons per day (gpd) require an OSE while OSS with flows greater than 1000 gpd require a PE.

Tom Ashton mentioned that in some states OSEs use prescriptive component manuals to design OSS with flows less than 1000 gpd. Mr. Ashton emphasized that an individual with a master OSE license is properly qualified and has been to the site and understands the site's limitations.

Joshua Anderson agrees with adding in licensure requirement in the SHDR. Mr. Anderson stated he does not see a problem with any OSE doing a design for any system with flows less than 1000 gpd, but it would need to go through legislation.

Mike Lynn explained there is an inconsistency in requiring a PE to design an OSS but not requiring a PE to review the design before approval. Curtis Moore stated that licensure has been a hot topic for several years and it might be best as a fast track change.

Lance Gregory mentioned his recent work with the creation of the Rainwater Harvesting Regulations. This process received a lot of internal feedback regarding wording in regulations. Mr. Gregory offered the example in SHDR where it says that no part of installation should be covered before inspection. The recent directive is to specify to whom that requirement is directed. VDH could add "the licensed installer" as the audience of that requirement. This might be a good avenue to indicate whom is responsible and what license is required.

Tanya Pettus reiterated that at last meeting, she said that DPOR is kicking off regulatory review for onsite regulations. Ms. Pettus informed the group that the next meeting will be held on June 29. That meeting will likely touch on entry requirements for licensure. The meeting will be held at the DPOR office in Richmond with no virtual option.

Anne Powell suggested looking into how Renewable Operation Permits are handled in LHDs currently to get a better idea of how a larger-scale initiative could be included in the SHDR. Ms. Powell also

recommended the group members start thinking of how the definition of "failure" could be more clearly defined in the SHDR. These topics should be considered in preparation for the next subgroup meeting.

Anne Powell concluded the meeting with mention of the next Programmatic Changes subgroup meeting scheduled for Tuesday, June 14, 2022 at 10:00 am.

AGENDA

1. Welcome / Brief Introductions (5 minutes)
2. Follow-Up from April Meeting (notes posted to Town Hall) (10 minutes)
3. Topics from Other Subgroup Meetings (45 minutes)
    a. Renewable Operation Permit
    b. SHDR in relation to regulations from other agencies (SCAT, Plumbing Code, etc.)
    c. Licensing of Onsite Sewage Professionals
    d. Other
4. Additional Proposals / Discussion from Subgroup Members (45 minutes)
5. Next Steps for Subgroup / Preparation for Next Meeting (15 minutes)