

**Virginia Department of Health (VDH)
Sewage Handling and Disposal Advisory Committee (SHADAC)
August 11, 2017 Meeting Summary**

Primary Location: James Madison Building
5th Floor Main Conference Room
109 Governor Street
Richmond, Virginia 23219

Remote Location: Botetourt County Health Department
21 Academy Street
Fincastle, Virginia 24090

List of Attendees at Primary Meeting Location:

SHADAC Members

Mike Lynn, Chairman – Home Builders Association of Virginia
Curtis Moore – Virginia Onsite Wastewater Recycling Association
Morgan Kash – Virginia Association of Professional Soil Scientist (sitting in for Bill Sledjeski)
Neal Zahradka – Virginia Department of Environmental Health (sitting in for Valarie Rourke)
Sean McGuigan – Manufacturer (sitting in for Colin Bishop)
V'Lent Lassiter – Chesapeake Bay Local Assistance Department
Alan Brewer – Virginia Association of Counties
Dwayne Roadcap – VDH
Joel Pinnix – American Council of Engineering Companies of Virginia

VDH Staff and Members of the Public

Lance Gregory – VDH	Todd Grubbs – VDH	Dave Tiller – VDH
Angela Redwine – VDH	Mike Burch	Paul Saunders
Chip Richardson		

List of Attendees at Remote Meeting Location:

SHADAC Members

None

VDH Staff and Members of the Public

Karri Atwood - VDH

Administrative

1. Welcome.

Chairman Lynn welcomed the committee members, VDH staff, and the public to the meeting.

2. Approve agenda.

Chairman Lynn commented the Mr. Pinnix had asked to discuss issues related to local ordinances and the recent fast track regulation for direct dispersal. Chairman Lynn asked to wait to discuss the agenda item for issues related to internal VDH policies and the fast track regulation until Mr. Pinnix arrived.

Mr. Moore moved to approve the agenda. Mr. Brewer seconded the motion. All members were in favor.

3. Review summary from June 19, 2017 meeting.

Mr. Gregory shared the draft meeting summary with edits provide by Mrs. Rourke. Mr. Moore moved to approve the agenda with Mrs. Rourke's edits. Mr. Brewer seconded the motion. All members were in favor.

Public Comment Period

There were no public comments.

Old Business

1. HB 2477 implementation.
 - i. GMP 2015-01 update.

Mr. Tiller discussed a draft revision to existing Guidance Memorandum and Policy (GMP) 2015-01. Revisions had been discussed multiple times with SHADAC, and comments had been incorporated into the final draft. Mr. Tiller began by discussing a proposed change to the designer certification statement. This is based on language in House Bill 2477. The policy states that the option for alternative and conventional onsite sewage systems will be discussed with the owner. This statement will be in the certification statement on the cover page for both public and private designers.

Mr. Moore asked whether the cover page is mandatory.

Mr. Gregory commented that the certification statement is required, but designers can use their own forms.

Mr. Tiller then discussed a clarification in the policy regarding valid construction permits. Again, this is prompted by House Bill 2477. A new application is not required to transfer the permit. The policy stated VDH will add a statement to the permit that the permit can transfer. VDH will revise owner information at the owner's request using the voluntary permit transfer

form. If the owner hasn't submitted a permit transfer form we will still conduct an inspection. There is no distinction in the policy between public and private sector designs.

Chairman Lynn commented that the policy says VDH will inspect the system, and that the policy may need to clarify that could be an onsite soil evaluator (OSE) or professional engineer (PE) inspection. He also raised concerns about transferring permits without the OSE or PE knowing.

Mr. Moore asked what is the mechanism for a transfer; a new permit or just changing information in the VDH database.

Mr. Tiller commented that the concept is VDH would put the permit transfer form in VDH database. He asked whether there should be a new permit that is copied to the OSE or PE.

Mr. Moore agreed if VDH is doing the work anyway. If the OSE or PE doesn't know who the new owner is, then their paperwork may not match VDH records.

Mr. Pinnix commented that, as a PE, he could have a complaint against his license if he has incorrect information on his paperwork. Mr. Pinnix added that he has a difficult time getting copies of permits from some local health departments; some districts want to charge a fee. Adding another administrative burden would be a problem. He suggested VDH have the new owner fill out an applications - don't need to collect a fee - and follow the process.

Mr. Roadcap reflected on what is currently happening. A permit is issued and the permit can be extended. If the ownership changes, the permit is null and void. What House Bill 2477 is trying to do is allow that permit to transfer. Currently, owners would not know that the permit is null and void until the system is inspected, but only if VDH is made aware of the change in ownership. For most properties this is not an issue. This was designed as a simple process to avoid the few issues with permit transfer.

Mr. Pinnix commented that he has a contract with the owner to get a permit. The new owner cannot come back to him; he had no obligation to go out. He stated that he needs to be notified of the new owner. He also asked how VDH would verify that the person actually is the new owner, and recommended using the term "certify" instead of "verify" in the permit transfer form.

Mr. Moore agreed that "certify" is better.

Chairman Lynn asked how VDH extends permits in the database, and why VDH couldn't just change the owner without a new application. He added that if it is a private sector permit the OSE or PE has to be involved. He suggested treating permit transfers like permit extensions.

Mr. Pinnix commented that he feels VDH needs enabling legislation, and that VDH can't change owner's names on permit. He commented that he cannot support the draft policy.

Chairman Lynn commented that until we get a revised definition of maintenance, that moving voluntary upgrades down to lowest priority in the policy is a problem. Even with a voluntary upgrade, the condition is not as designed and it needs to have a higher priority. He suggested having all private sector designs, including voluntary upgrades, move up to priority level 2.

Mr. Tiller then discussed changes in the policy language regarding surveys. For all applications, VDH requires a copy of a survey plat unless it is waived pursuant to the policy. For permit drawings the information can be obtain from a survey plat.

Mr. Pinnix commented that the draft policy confused the issue of survey plats and site plans. He recommended separating the issues in the policy. He stated that survey plats are required by the Code of Virginia; site plans are in the Sewage Handling and Disposal Regulations.

There was general agreement among the committee to separate discussion on survey plats and site plans. The committee also recommended removing the section regarding site plans and replace it with a reference to the applicable section in the Sewage Handling and Disposal Regulations.

Mr. Moore commented that not all plats produced are records and recommended taking out the word "recorded".

Mr. Tiller commented that VDH was proposing to eliminate references to survey plat requirements in 18VAC10-20 to avoid denials being issued because staff believe that a survey plat does not meet one of the regulations applicable to survey plats.

There was general agreement among the committee to remove those references.

Mr. Richardson commented that recorded survey and unrecorded survey hold the same weight and noted that many plats do not get recorded. He added that if when you reference a survey plat, the surveyor has to do certain things. With a surveyor seal you've gone from a survey of a drainfield to a full property boundary survey.

Mr. Brewer asked whether VDH had review the potential impacts to local health departments for 100% inspection as required by House Bill 2477. He also asked why the policy is requiring that deficiencies be notified to the owner within 1 business day. He comment that may create a burden for local health departments.

Mr. Gregory commented that VDH had reviewed the potential impacts to local health departments to perform 100% inspections of private sector designs. He noted that several districts already perform 100% inspections, and the impact will be low in areas with a high number of bare applications. However, VDH did identify several districts where the impacts would be high.

Mr. Pinnix suggested clarifying what conditions the system is in that qualifies as a final inspection. He also raised concerns with the statement “all observations must be document”, and asked whether there is any requirement for VDH to share the as-built. He also asked whether VDH staff would bring contractors completion statement with them and have the contractor fill it out.

Standing Agenda Items

1. Issues related to internal VDH policies and processes.

Mr. Pinnix commented that local health departments don't understand the policy regarding local ordinance, and the local health department staff need some training. He noted that staff also need to write better denials. He was told that VDH does not have the authority to adjudicate the legality of local ordinances, but disagrees with that statement. He asked why wouldn't VDH evaluate local ordinance and determine whether a local ordinance is legal and not enforce those local ordinances.

Mr. Roadcap commented that local health departments are on cooperative agreements with localities; localities provide a portion of their funding. The locality may request assistance in enforcing their local ordinance as part of their cooperative agreement. He agreed that local ordinances could be reviewed as part of evaluating the cooperative agreement. Duly elected Board of Supervisors pass ordinances under title 15.2 of the Code of Virginia, and VDH has regulations under 32.1 of the Code of Virginia. VDH's authorities in 32.1 cannot undo the authorities that localities have in 15.2.

Mr. Pinnix commented that the previous Attorney General addressed the issue, and he believe the Attorney General's opinion is clear that VDH cannot enforce the ordinance if it would disallow the use of an alternative onsite sewage system that would otherwise be permitted by the state regulations.

Mr. Moore commented that it would help if the denial letter said VDH can issue the permit based on state requirements, but the application is denied based on local ordinance.

Mr. Roadcap commented that one of the things VDH can do to help is modify the print forms in the VDH database.

1. HB 2477 implementation continued.

Mr. Gregory presented the first draft report to the General Assembly regarding implementation of House Bill 2477. He noted that the format of the draft report was similar to the House Bill 558 report from 2016. There were eight specific tasks in House Bill 2477 and the implementation of those recommendation is covered in the report. Additional, the draft report include recommendations regarding the portions of the House Bill 558 report that were not

included in House Bill 2477; specifically the recommendation related to transferring services that would require changes to the Code of Virginia.

ii. Education and Outreach.

Mr. Gregory commented that for implementation of the education and outreach task, VDH develop an onsite sewage and private well education and outreach program outline. The outline sets out the specific steps VDH will take to create individual education and outreach initiatives. The process starts by working with partners to determine messages and issues for the initiative, then how those messages will be delivered. VDH and our partners would then set goals and objectives for the initiative, create material, disseminate those materials, and then evaluate whether the initiative was effective in meeting the goal. VDH used this outline to develop two pilot projects, one statewide and one local. The statewide pilot project deals with SepticSmart weeks. For the local pilot project VDH is working with the Smith Mountain Lake Association and other partners to develop education and outreach specific to that area.

Mr. Brewer commented that the House Bill 558 report connected shifting work to the private sector with VDH taking on these additional task. However, the recommendations to transition services were not part of HB 2477. He asked whether there is an opportunity to highlight that VDH may not have the resources to perform the task in House Bill 2477 without the transition.

Mr. Gregory commented that those concerns are addressed in the draft House Bill 2477 report.

iii. Community health assessments.

Mr. Gregory commented that for implementing the House Bill 2477 task regarding community health assessments, Office of Environmental Health Services (OEHS) staff met with Population Health staff. We learned that the community health assessment process is driven by stakeholders, not by VDH. OEHS is creating a list of stakeholders to share with local health departments to get environmental health more involved in community health assessments. OEHS will also provide training to local health department staff regarding an existing protocol from the Centers for Disease Control and Prevention to incorporate environmental health data into community health assessments.

iv. Quality assurance manual update.

Mr. Gregory commented that for implementing the House Bill 2477 task regarding enhanced quality assurance, VDH has draft revision to the Onsite Quality Assurance Manual. The revisions include using a rubric system for conducting quarterly assessments and pulling in 100% inspection for private sector evaluations.

v. Separating work unit functions.

Mrs. Atwood commented that for evaluating options for separating permitting from enforcement, VDH created an internal workgroup. The workgroup hear from the Department of Mines Minerals and Energy, the Department of Environmental Quality, and building officials using different models than VDH. The workgroup is submitting a report and making a recommendation on separating permitting and enforcement for the Commissioner's consideration.

vi. Data collection and sharing.

Mr. Gregory commented that most of the items in House Bill 2477 dealing with data collection will be implemented as part of a database request for proposal RFP. In October 2016, VDH put out an RFP for the environmental health database for EH. The provider that is awarded that contract will put a database into place on January 1, 2019.

2. Discuss regulatory reform options.
 - i. Program administration options.

The committee then discussed the regulatory reform options developed by the Regulatory Reform Subcommittee. Discussion began with options regarding program administration.

Mr. Brewer commented that he would like to get a recommendation from the SHADAC to the Commissioner to hire a consultant to evaluate VDHs resources. He commented that every new requirement in the Code of Virginia or internal policy becomes a top priority for the agency without discussion of the resources. He added that the program is beyond the point where VDH and the private sector can take everything on as a top priority. He would like VDH to go to a third party to evaluate resources, requirements for the program, and priorities. Chairman Lynn asked what the process was for the community health assessment that the Commissioner recently undertook.

Mr. Roadcap commented that the goal is for Virginia to be the healthiest state in the nation. The measures for who defines the healthiest state deals with access to health care and a whole lot of things that are not related to environmental health. VDH is also working to become a data driven agency, making date driven decisions. VDI is also assigning metrics for tasks, such as repairing failing system within 60 days. If a consultant were to be called in, the agency's focus would be data driven decisions and healthiest state in the nation.

Mr. Brewer commented that one of the challenges is that environmental health is a preventative program, where the Commissioner's initiatives are trying to correct issues.

Mr. Pinnix commented that there is a cost associated with every new priority, every new focus, and ever new rule. The private sector bares a cost along with the public. There was a graph that showed the level of effort that goes into creating a permit; 90% of the programs resources were prior to operation, and 10% was after the system is installed. He commented that paradigm needs to change. He suggested things VDH could do differently to achieve that goal, such as an

online registration program, similar to the Department of Environmental Quality's general permit.

Mr. Roadcap commented that VDH has a lot of regulatory actions under way; the Regulations for Alternative Onsite Sewage System, and the Private Well Regulations. Additionally the Sewage Handling and Disposal Regulations haven't been updated in 17 years. VDH could examine general permits.

Chairman Lynn commented those VDH essential deals with three regulations; an administrative regulation, a design regulation, and an operation and maintenance regulation. He asked Mr. Brewer for what the recommendation would be for hiring a third party to evaluate VDH resources.

Mr. Brewer suggested looking at a comprehensive inventory of what VDH is mandated to do and what they are doing in practice, then what the optimal prioritization of those processes would be, and how to implement that strategy.

Mr. Roadcap commented that, unless there is money dedicated to this type of effort, this would be conducted by internal audit reviews.

Chairman Lynn commented that he thinks it is important that the Commissioner is aware that our preventative program may not be getting the credit it deserves.

Mr. Brewer made a motion that the SHDAC recommend that the Commissioner consider hiring a consultant to assess current roles, responsibilities and tasks and the associated public health risk with each, assess priorities with each responsibility and task, and identify resources for optimal performance and existing conditions within the environmental health section.

Mr. Moore seconded motion.

Mr. Moore asked whether Mr. Roadcap perceived the motion as a benefit to the agency.

Mr. Roadcap comment that he did not oppose the proposal, but noted that VDH is going through some fairly significant changes in the program. If VDH were to hire a consultant, VDH will still be heavily involved. He added that VDH would be interest in the SHADACs recommendations on the different options that the Commissioner could consider.

Mr. Pinnix asked whether the proposal is what E.L. Hamm already performed.

Mr. Moore presented a substitute motion to table the motion.

Mr. Pinnix seconded the motion.

All members were favor, accept Mr. Brewer who opposed.

Chairman Lynn commented that if we are talking about online applications and have a regulation that prevents an adverse outcome, VDH and the private sectors time would best be spent agreeing on the soil.

3. AOSS Regulations revision process update.

Mr. Pinnix commented that the fast track regulations for direct dispersal are a little confusing, and he doesn't think people understand the changes. His understanding is that compliance with the regulations is pretty much voluntary. If you have certain conditions then you don't need a waiver, but if you take a waiver then you don't need to comply. He asked whether an owner still needs a variance to the operation and maintenance requirements if they take a waiver. He also suggested that VDH issue a policy to help staff understand the change. Lastly, he commented that properties were encumbered with waivers and indemnification statements under the previous requirements. Those systems now meet the regulatory requirements. He asked whether owners can unrecord those documents.

Mr. Roadcap commented that the fast track amendment went into effect on July 17th. There are also allowances in the Code of Virginia for owners to waive treatment requirements. The fast track amendment says if you have a failing system or a voluntary upgrade a system that already results in direct dispersal, VDH will relax the standard to treatment level 3 with disinfection and 50% total nitrogen reduction. You can still take a waiver. If you take the waiver, you still get the reduced operation and maintenance requirements.

Mr. Roadcap noted that VDH has several workgroups currently reviewing other aspects of the Regulations for Alternative Onsite Sewage Systems.

Mr. Pinnix commented that he was supposed to be involved in two workgroups, but the meeting schedule is difficult to work around. He asked that VDH schedule these meeting back to back so he would not have to take two days off.

Adjourn

**Virginia Department of Health
Sewage Handling and Disposal Advisory Committee (SHADAC) Meeting
Agenda**

Date: August 11, 2017
Time: 10 am to 2 pm
Primary Location: James Madison Building
5th Floor Main Conference Room
109 Governor Street
Richmond, Virginia 23219

Remote Location: Botetourt County Health Department
21 Academy Street
Fincastle, Virginia 24090

Administrative (15 minutes)

1. Welcome. (5 minutes)
2. Approve agenda. (5 minutes)
3. Review summary from June 19, 2017 meeting. (5 minutes)

Public Comment Period

Standing Agenda Items (20 minutes)

1. Issues related to internal VDH policies and processes. (20 minutes)

Old Business

1. HB 2477 implementation. (20 minutes)
 - i. GMP 2015-01 update. (20 minutes)

Break (10 minutes)

1. HB 2477 implementation continued. (80 minutes)
 - ii. Education and Outreach. (15 minutes)
 - iii. Community health assessments. (5 minutes)
 - iv. Quality assurance manual update. (5 minutes)
 - v. Separating work unit functions. (15 minutes)
 - vi. Data collection and sharing. (10 minutes)
 - vii. Draft report. (30 minutes)

Break (10 minutes)

2. Discuss regulatory reform options. (60 minutes)
 - i. Program administration options. (30 minutes)
 - ii. Resource options. (30 minutes)
3. AOSS Regulations revision process update. (10 minutes)

Adjourn

**Virginia Department of Health (VDH)
Sewage Handling and Disposal Advisory Committee (SHADAC)
June 19, 2017 Meeting Summary**

Primary Location: James Madison Building
5th Floor Main Conference Room
109 Governor Street
Richmond, Virginia 23219

Remote Locations: Loudoun County Government Center
1 Harrison Street SE
Leesburg, Virginia 20175

Christiansburg Health Department
210 South Pepper Street, Suite A
Christiansburg, Virginia 24073

List of Attendees at Primary Meeting Location:

SHADAC Members

Mike Lynn, Chairman – Home Builders Association of Virginia
Curtis Moore – Virginia Onsite Wastewater Recycling Association
Bill Sledjeski – Virginia Association of Professional Soil Scientist
Valerie Rourke – Virginia Department of Environmental Quality
Adam Feris – Virginia Environmental Health Association
Dwayne Roadcap – Virginia Department of Health
Sean McGuigan – Manufacturer (sitting in for Colin Bishop)

VDH Staff and Members of the Public

Marcia Degen - VDH	Dave Tiller – VDH	Paul Saunders - DPOR
Todd Grubbs - VDH	Jay Conta - VDH	Trisha Henshaw - DPOR
Angela Redwine - VDH	Anthony Creech - VDH	

List of Attendees at Remote Meeting Locations:

SHADAC Members

Scott Fincham – Virginia Association of Counties (sitting in for Alan Brewer)

VDH Staff and Members of the Public

Jerry Franklin – VDH

Administrative

1. Welcome.

Chairman Lynn welcomed the committee members, VDH staff, and the public to the meeting.

2. Approve agenda.

Mr. Moore moved to approve the agenda. Mr. Feris seconded the motion. All members were in favor.

3. Review summary from April 14, 2017 meeting.

Mr. Moore moved to approve the summary. Mr. Feris seconded the motion. All members were in favor.

Public Comment Period

There were no public comments.

Standing Agenda Items

1. Issues related to internal VDH policies and processes.

i) AOSS recordation form.

This issue was a follow up from the previous SHADAC meeting. Mr. Roadcap commented that there is a statewide form for recording that a property is served by an alternative onsite sewage system (AOSS). He commented that Loudoun County has a local ordinance to require recordation letters to include details about the system in the recordation form. If the design changes someone may need to record another document to detail the changes.

Mr. Roadcap commented that VDH is looking at the potential of revising the regulations to make the recordation document associated with the operation permit, and not the construction permit. This would make the details associated with what is installed.

Chairman Lynn asked why the form ever needs to be different.

Mr. Roadcap reiterated that his understanding is the variation in Loudoun is based on a local ordinance. He also clarified that the state form is guidance. However, local court clerks have different requirements, so the forms may look slightly different in other localities.

Other comment on this issue included:

- State code says localities cannot have different requirements for operation and maintenance of AOSS.

- In Fairfax, you have to record the form and then the health department gives the owner the permit. In other localities, the form just has to be recorded before the owner receives an operation permit.
- Districts not requiring a new form to be recorded again for a repair or voluntary upgrade of an existing AOSS.
- Realtors have commented that when a house settles no one sees the recordation form. Are we actually accomplishing anything? Is this the right tool?

Mr. Roadcap commented that VDH will try to clarify that document can be recorded any time before the operation permit.

Mr. Moore commented that the intent is to make sure that the owner knows.

ii) Replacement of pumps.

Chairman Lynn stated there is a definition of maintenance in the Regulations for Alternative Onsite Sewage Systems (AOSS Regulations) which supersede the Sewage Handling and Disposal Regulations (SHDR). He asked whether the definition of maintenance in the AOSS Regulations is also the definition of maintenance for conventional systems.

Mr. Roadcap stated that maintenance is defined in the Code. The House Bill 558 report recommended revising the definition of maintenance. A permit is not required to do maintenance for a conventional system. For alternative systems you have to submit a report. Staff from the Fairfax Health Department are planning on coming to the next SHADAC meeting to discuss local authority for pump replacement for conventional systems. Mr. Roadcap noted his understanding is Fairfax's expectation is that notice is provided and then environmental health staff conduct an inspection. The House Bill 558 report recommends reporting of maintenance for all systems.

Mr. Ferris commented that the concern is maintenance, if not reported, could include corrections that do not meet the regulations.

Mr. Sledjeski commented that in Fairfax pump lines had to be sealed by a professional engineers (PE); he suspects Fairfax will want a PE seal on the replacement of a pump.

Chairman Lynn commented that the removal of sludge is a reportable incident and that he does not think the Virginia Environmental Information System (VENIS) is set up to accept sludge removal.

Mr. Moore commented that he thinks the concept was VENIS would be like a third party systems.

Old Business

1. Discuss regulatory reform options.
 - i) Conflicting regulations options.

The SHADAC discussed a list of regulatory reform options regarding conflicting regulations put together by a subcommittee on regulatory reform.

Mr. Ferris noted there is a conflict between the SHDR and the Private Well Regulations regarding 60 degree arc siting of systems downslope from a well. He also noted a conflict with separation distance to forcemains in those two regulations.

Mr. Moore noted that the subcommittee looked at the issues with a holistic approach. He noted that the subcommittee discussed several options for an onsite program, such as enabling ordinances at a local level with program manuals and a national model concept. He noted there are several model ordinances available, but he did not believe they are sufficient.

Mr. Sledjeski noted in his experience, one fundamental state code is beneficial.

Mr. Moore suggested that VDH staff inventory local ordinance requirements and putting that information on the website to highlight localities where there are more stringent requirements.

Additional conversation on this topic included:

- May be helpful for the memorandum of agreements between localities and local health departments spelled out how the ordinance will be different from state regulations, and the authority for that requirement.
- The contracts outline the state programs that VDH will provide. If there are local ordinances, then the locality can include ordinances in the agreement.
- There are certain levels of conflict. More restrictive separation distances in local ordinances are a major issue.
- Some issues where local ordinances may be improperly implemented by local health department staff.
- There are cases where localities are requiring vacuum testing of tanks without a safe and satisfactory guidance for performing the test. What happens if someone gets hurt?
- The localities should at least provide the authority to the local health departments for ordinances.
- What percent of staff time is spent resolving issues with conflicting local ordinances?
- Not sure what additional public health protection the local ordinances provide.
- When local ordinances come up for review, the local health department often supports more restrictive requirements.
- Think it would help if local health departments tell the owner they are ready willing and able to issue a state permit, when the application doesn't not comply with local ordinances.
- At the end of the day, it cost people more money in some localities to install a sewage system because of local ordinance.
- You cannot use certain products in some localities.

Comment [VR1]: This sentence is not making sense.

Mr. Roadcap commented that the guidance is that if a local health department denies an application for a local ordinance, that the local health department notify the owner that they meet

the state requirements but the application does not meet the local ordinance and give the owner the appeal rights provided by the local ordinance.

ii) Paradigm shift options.

Next, the SHADAC discussed a list of regulatory reform options regarding paradigm shift put together by a subcommittee on regulatory reform.

Chairman Lynn asked whether there is a need to modify the regulations from a 30,000 foot view, and revising the program based on the shift to private sector evaluators.

Mr. Moore commented that it does not seem effective to have a district level between the state level for the program. Mr. Moore added that as the paradigm shifts, VDH may need to look internally and say you don't need one person in each locality to deal with onsite.

Mr. Roadcap commented that one of the items VDH is discussing internally is separating permitting and enforcement. The issue is the funding. Each county contributes a certain percentage of the local health department funds, and they expect certain types of services.

Chairman Lynn commented that centralizing the evaluation and review of private sector designs would improve consistency.

Mr. Moore commented that the discussion harkens back to the old regional sanitarians.

Mr. Roadcap commented that VDH has been working closely with the Virginia Department of Environmental Quality (DEQ) on projects which require creating a complete inventory of private wells. He noted that VDH was also recently approached by a company that has created a toilet to tap treatment system. VDH is in the middle of trying to update the AOSS Regulations and trying to keep wastewater recycling in mind. These are all examples of the paradigm shift currently happening in the onsite program.

Mrs. Rourke commented that discussion about the spectrum of water management ties into the need for more interconnection with other VDH programs and other agencies. We are starting to see where alternative systems could possibly move towards drinking water with additional treatment. When DEQ developed the Water Reclamation [and Reuse Regulations from 2006 to 2007](#), it ~~restricted-prohibited~~ direct [potable](#) reuse based on feedback from VDH. States like California are pushing ahead with direct potable reuse ([DPR](#)). If DEQ were to amend ~~that the regulatory prohibition of DPR~~ in the future, they would [again](#) seek VDH's input, [which may differ based on new and improved technologies capable of producing potable water that is safe for human consumption from domestic sewage](#).

Mr. Roadcap commented that VDH's shellfish program is using DNA testing to determine the source of bacteriological contaminants. The United States Geological Survey recently did a test

in Fairfax that found a significant nitrogen impact from a cluster of home on onsite sewage systems. These were provided as addition examples of the paradigm shift in the onsite program.

DRAFT

2. AOSS Regulations revision process update.

Mr. Roadcap commented that the fast track for direct dispersal is moving forward. VDH has set up three workgroups to address other potential changes to the AOSS Regulations. One, working on section 80 of the AOSS Regulations, met one time and there is a draft that will be going to them soon. ~~Thank The~~ workgroup will then hold a second meeting. Once that group finalizes its thoughts, the draft revisions will be brought back to the SHADAC. Another group met to discuss section 70 of the AOSS Regulations and another workgroup is looking at the 180 day sampling requirements. Both of those groups have met one time. The sampling group is exploring eliminating the 5 year sampling requirement and replacing it with field testing and triggers. Recommendations from those subgroups will be brought back to the SHADAC.

3. HB 2477 implementation.

i. GMP 2015-01 update.

Mr. Tiller walked through several suggested revisions to GMP 2015-01. The first was to a proposal to clarify septic tank effluent to a pad as an alternative system.

Mr. Moore suggested that VDH may want to expand the definition to include “where septic effluent is disposed by gravity following the requirements in 12VAC5-610-930.”

Chairman Lynn asked septic tank effluent to a pad could be considered an alternative system.

Mr. Roadcap commented that VDH is seeking to clarify that the agency’s interpretation is that septic tank effluent to a pad is an alternative system.

Mr. Tiller then discussed a proposed modification to the cover page to include the following language: “The potential for both conventional and alternative systems has been discussed with the owner/applicant.”

Chairman Lynn suggested that VDH should also tell the owner about alternative options.

Mr. Roadcap commented that the statement would go on the cover page, which would be one of the forms for the policy and VDH staff would use the form as well.

Next, Mr. Tiller discussed proposed language for transfer of valid construction permits.

Mr. Conta asked for a definition of the term “valid” construction permit.

Chairman Lynn asked whether the proposed revision is in direct conflict with the regulations.

Mr. Moore asked how VDH would receive permission to access the property without the new owners name or contact information. He suggested adding a step where VDH is provided the new owners information.

Mr. Tiller also discussed a proposed change to language in GMP 2015-01. Mr. Tiller noted that the section was revised based on comments from the previous SHADAC meeting, and that VDH is also seeking input from land surveyors.

- ii. 100% inspections.

Mr. Grubbs addressed the SHADAC regarding an additional revision to GMP 2015-01 to develop a procedure for VDH staff to inspect all onsite sewage systems as required by HB 2477. He noted that for VDH designs the current inspection procedure would not change. The intent of the procedure for VDH inspection of private sector designs is to provide value and not hold up the process. The Code of Virginia still requires the certifying private sector designer to inspect the system at the time of installation. The private designer is responsible for inspecting the entire system, completing an as-built drawing, and providing an inspection report.

The installer will be responsible for contacting the local health department one business day prior to the installation. VDH staff could then inspect the system at any point once construction has begun. The VDH inspection would not be a complete review, and would focus on confirming the location, treatment level, depth, and sizing of the installation. Staff would also collect GPS coordinates. If the private sector designer approves the installation, the system can be covered prior to VDH's inspection, provided notice was given.

- iii. Education and Outreach.
- iv. Community health assessments.
- v. Quality assurance manual update.
- vi. Separating work unit functions.
- vii. Data collection and sharing.

Mr. Gregory briefly commented on VDH's efforts to address additional components of HB 2477, such as education and outreach, community health assessments, and quality assurance manual updates. He noted that all draft proposals would be brought to the SHADAC for review.

Mr. Roadcap commented that VDH has created an internal workgroup to assess the potential for separating permitting and enforcement work unit functions. Draft proposal will be brought to the SHADAC for review.

Adjourn

**Virginia Department of Health
Sewage Handling and Disposal Advisory Committee (SHADAC) Meeting
Agenda**

Date: June 19, 2017
Time: 10 am to 2 pm
Primary Location: James Madison Building
5th Floor Main Conference Room
109 Governor Street
Richmond, Virginia 23219

Remote Locations: Loudoun County Government Center
1 Harrison Street SE
Leesburg, Virginia 20175

Christiansburg Health Department
210 South Pepper Street, Suite A
Christiansburg, Virginia 24073

Administrative (15 minutes)

1. Welcome. (5 minutes)
2. Approve agenda. (5 minutes)
3. Review summary from April 14, 2017 meeting. (5 minutes)

Public Comment Period

Standing Agenda Items (20 minutes)

1. Issues related to internal VDH policies and processes. (20 minutes)
 - i) AOSS recordation form. (10 minutes)
 -) Replacement of pumps. (10 minutes)

Old Business (45 minutes)

1. Discuss regulatory reform options. (45 minutes)
 - i) Conflicting regulations options. (45 minutes)

Break (10 minutes)

Old Business Continued (50 minutes)

1. Discuss regulatory reform options. (45 minutes)
 - ii) Paradigm shift options. (45 minutes)
2. AOSS Regulations revision process update. (5 minutes)

Break (10 minutes)

Old Business Continued (90 minutes)

3. HB 2477 implementation. (90 minutes)

- i. GMP 2015-01 update. (20 minutes)
- ii. 100% inspections. (40 minutes)
- iii. Education and Outreach. (5 minutes)
- iv. Community health assessments. (5 minutes)
- v. Quality assurance manual update. (5 minutes)
- vi. Separating work unit functions. (5 minutes)
- vii. Data collection and sharing. (10 minutes)

Adjourn

DRAFT

MEMORANDUM

DATE: March 17, 2017

TO: Mike Lynn, Chair, Sewage Handling and Disposal Advisory Committee

FROM: Alan Brewer, Chair, Regulatory Reform Subcommittee

THROUGH: Regulatory Reform Subcommittee: Lance Gregory, Morgan Kash, Curtis Moore, Valerie Rourke

SUBJECT: Options for Regulatory Reform

BACKGROUND: At the April 15, 2015 Sewage Handling and Disposal Advisory Committee (Committee) meeting, members and other stakeholders were asked to identify items they felt should be discussed at future meetings. Committee members then “voted” for items that they thought should be the highest priority for Committee to consider. At the December 2, 2015 meeting, the Committee discussed issues related to regulatory review and revision. During this discussion Committee members noted that many of the priority items identified on April 15, 2015 were related to regulatory reform. As a result of these ongoing discussions, the Committee created a Regulatory Reform Subcommittee (Subcommittee) and directed that Subcommittee to “*assess and propose to the SHADAC, options for regulatory reform*”.

The Subcommittee met five times in 2016. Meeting summaries can be found at the Town Hall website - [Virginia Regulatory Town Hall Home Page](#). The Subcommittee used a systematic process to effectively and efficiently meet its objective. This process included the following steps:

- Affirm the responsibilities and purpose of the Subcommittee.
- Obtain an understanding of the current regulatory framework and conditions.
- Identify areas of the current program that work well.
- Identify challenges/issues with the current program.
- Identify options for regulatory reform.

PROCESS:

Affirm the responsibilities and purpose of the Subcommittee

The Subcommittee recognized, and the Committee confirmed, that the options for regulatory reform should not be limited to regulations. The intent of the directive was to offer options to reform any aspect of the Virginia Department of Health (VDH) Onsite Sewage and Water Services Programs (OS&WSOP). The Subcommittee agreed to a goal to serve as the criteria for development of options to be provided to the Committee.

The goal of the Subcommittee is to present a broad set of options for regulatory and programmatic reform that are protective of public health and the environment, and result in a consumer friendly, flexible, progressive and collaborative program.

Importantly, the Subcommittee did not limit their discussions to existing conditions, authorities, or likelihood of adoption or success. Effectively, the discussions were not bound by “historic baggage” and other constraints.

Obtain an understanding of the current regulatory framework and conditions

Due to the diverse composition, perspectives, and experiences of Subcommittee members, VDH staff provided for the benefit of the Subcommittee an overview of core functions and responsibilities, and regulations administered by OS&WSP (see Attachment 1). This information was a catalyst for developing options.

Identify areas of the current program that work well

The Subcommittee recognized that there are aspects of the existing program and regulations that work well and should not be discounted when considering options for reform. These aspects were discussed at length during meetings. The essence of these discussions can be found in the meeting summaries, particularly the summary of the May 11, 2016 meeting.

Identify challenges/issues with the current program

Before attempting to identify options for reform, the Subcommittee first characterized the challenges and issues with the existing program. In other words, the Subcommittee described the problems before discussing potential solutions. The list of challenges identified by the Subcommittee is included as Attachment 2. The Subcommittee provided this list to the Committee in May 2016 for input and did not receive any comments. The Subcommittee grouped the challenges into four categories: Conflicting Regulations, Program Administration, Paradigm Shift, and Resource. Categorizing the challenges helped the Subcommittee focus their discussions of possible solutions.

Conflicting Regulations includes issues related to contradictions, inconsistencies, incompatibilities, and variations in practices, policies, ordinances, regulations and codes.

Program Administration includes issues related to managing, directing, overseeing and governing program responsibilities.

Paradigm Shift includes issues where a fundamental change in approach or underlying assumptions is necessary for change.

Resource issues are related to financial disparity, inflexibility and reasonableness of the program.

Identify options for regulatory reform

Building on the previous steps in the process, the Subcommittee was able to enumerate options for regulatory reform. It is important to note that the options described below are not recommendations from the Subcommittee, they are simply possibilities for the Committee to evaluate further.

OPTIONS FOR REGULATORY REFORM:

Conflicting Regulations Options

- Codify that VDH will enforce local ordinances when they are more stringent than state requirements.
- Create a model ordinance that localities could choose to adopt so every locality has the same standard for requirements not included in the state regulations.
- Prohibit localities from having local ordinances that are more stringent than state regulations.
- Create a process where VDH's regulations are a higher level view of requirements, and then allow VDH to create an implementation manual to apply the regulations. VDH could then revise the implementation manual without going through the regulatory process every time.
- Combine regulations where possible.
- Conduct a comprehensive assessment of all the regulations to identify and resolve conflict.
- Review all of the policies and codify areas where there needs to be an enforceable requirement rather than guidance.
- Review local ordinances and national industry standards and incorporate good practices in the regulations.
- If a national model code becomes available, shift to the building code model for adopting regulations.
- The Health Commissioner could advocate for a national model code.
- VDH could work with other agencies in a more prescribed manner than just having them sit on the SHADAC and other committees and have the different agencies meet at some frequency to discuss changes and overlap. The first point of discussion at the inter-agency meetings should be to determine where conflicts exist.
- Eliminate the regulations and let local governments or another agency take over the program.

Program Administration Options:

- Dictate by policy that VDH will not enforce local ordinances.
 - Codify or mandate that local ordinances must follow the Administrative Processes Act.
 - Dictate that appeals of local ordinances must go through VDH.
 - Have regional sanitarians to help with consistency across the state.
 - Revise regulations so that they only contain requirements that VDH is willing to enforce through the courts.
 - Match VDH resources areas that have the highest risk to public health. This would require an assessment of responsibilities, resources and outcomes.
 - Hire a consultant to evaluate VDH's responsibilities/tasks, the associated risk, and where resources should be directed;
- OR-**

- VDH evaluates its responsibilities/tasks, the associated risk, and where resources should be directed.
- Provide stakeholders with VDH's goals and measures for the program.
- Change the way VDH inputs and uses data to improve enforcement of alternative onsite sewage system (AOSS) operation and maintenance (O&M).
- Allocate more resources to O&M.
- Administer O&M from the Central Office; evaluate the potential to centralize the initial enforcement phase for O&M (e.g. sending notices to owners).
- Use the private sector more for data collection and entry.
- Propose a statutory or regulatory change so that licensees could have their license revoked if they falsify a document.
- Instead of making the owner responsible for O&M of the system, make the operator responsible or mandate joint responsibility in an effort to make the operator responsible for compliance and enforcement.
- Create a renewable operations permit for all AOSS, not just the large systems.
- Rather than mandating O&M, create more conservative regulations (e.g. more conservative site condition requirements).
- Create a program for conventional onsite sewage system O&M.
- Allow VDH staff to perform non-enforcement contact with owners when potential issues are observed but the issues do not rise to the level of enforcement.

Paradigm Shift Options:

- Use a risk based regulatory model that takes into account items like sensitive sites and lot size.
- Modify the program to a watershed perspective not a statewide standpoint.
- Engage a consultant or contractor outside of VDH to evaluate the potential to refocus efforts to what is really important; don't do things just because they've always been done.
- Evaluate whether there are other VDH programs (e.g. Community Health Services, Health Equity) that can assist with community health issues related to onsite sewage and private wells.
- Incorporate a responsible management entity (RME) model into the regulatory scheme.
- Where there is jurisdictional overlap with other agencies, have VDH provide more information regarding human health impacts.
- Allow licensed entity's to design and install systems outside the regulations provided they are willing to bond the system.
- Require that completion statements are signed by a licensed installer.
- Require that licensed operators get hauler permits; VDH inspector has to certify that the installer is licensed.
- Have VDH establish an internal working group to improve communication between offices and agencies.

Resource Options

- Establish a repair fund.
- Regarding betterment loans, evaluate the potential for a program where VDH backs betterment loans, and determine what can be done to allow the program to better serve low income homeowners.
- Incorporate a funding structure into new fees.
- Charge fees for services that currently do not have a fee.
- Work with the Department of Environmental Quality and other partners to get greater access to the state revolving loan funds for onsite sewage system projects.
- Allow localities to establish sewer service districts countywide. Everyone in the district pays a monthly fee, and when their onsite sewage system fails the service authority is responsible for the repair. Could also use private provider models.

The Subcommittee sincerely appreciates the opportunity to provide this information to the Committee and looks forward to future discussions related to the options presented.

ATTACHMENTS:

1. VDH - Current Regulatory Environment
2. List of Challenges

ATTACHMENT 1

Virginia Department of Health Onsite Sewage and Water Services Program Structure

The Code of Virginia (the Code) established the Virginia Department of Health (YOH) to administer and provide comprehensive environmental health services, to educate citizens about health and environmental matters, develop and implement health resource plans, collect and preserve health statistics, assist in research, and abate hazards and nuisances to the health and the environment. The purpose of these activities is to improve the quality of life in the Commonwealth.

The Division of Onsite Sewage and Water Services, Environmental Engineering, and Marina Programs (DOSWSEEMP) and local health department (LHD) Environmental Health (EH) staff are tasked with administering sections of the Code dealing with onsite sewage systems, alternative discharging systems, and private wells (the Onsite Sewage and Water Services Program). Activities outlined by the Code within the Onsite Sewage and Water Services Program include:

- Long range planning for the handling and disposal of onsite sewage.
- Review (office and field) of applications with corresponding work from private sector designers for subdivision reviews, permit approvals, letters for residential development, and private well construction.
- Issuance of construction permits or denials for applications with corresponding work from private sector designers.
- Field review and system design of certain applications without corresponding work from private sector designers to issue or deny permits for the construction, installation, and modification of a sewerage system or treatment works.
 - Development of the Engineering Design Review Panel (EDRP).
- Implement regulations regarding operation and maintenance of alternative discharging sewage systems.
- Conduct regular inspections of alternative discharging sewage systems.
- Establish and implement regulations governing the collection, conveyance transportation, treatment and disposal of sewage by onsite sewage systems and alternative discharging sewage systems.
- Establish and implement regulations regarding the maintenance, inspection, and reuse of alternative onsite sewage systems (AOSS).
- Collection of fees and assessment of fee waivers for onsite sewage system and private well permit applications.
- Establish and maintain a statewide web-based reporting system to track the operation, monitoring, and maintenances of AOSS.
- Establishment and administration of a uniform schedule of civil penalties for violations of onsite sewage and alternative discharge regulations.
- Process appeals for adverse case decisions.
- Establish and implement an onsite sewage indemnification fund.
- Process and grant waivers, where applicable, from treatment and pressure dosing requirements.

- Establish and implement a betterment loan eligibility program.
- Process permit applications and waiver request for voluntary upgrades.
- Administer the Onsite Operation and Maintenance Fund.
- Process safe, adequate and proper evaluations.
- Enter into agreements with any appropriate federal agency to regulate and monitor the collection, transportation, conveyance, treatment and disposal of sewage.
- Establish and facilitate the Sewage Handling and Disposal Appeal Review Board.
- Establish and implement regulations pertaining to the location and construction of private wells.

Under authority provided by the Code, the Board of Health has promulgated the following regulations pertained to the Onsite Sewage and Water Services Program: the Sewage Handling and Disposal Regulations (12VAC5-610), the Regulations for Alternative Onsite Sewage Systems (12VAC5-613), the Fee Regulations (12VAC5-620), the Private Well Regulations (12VAC5-630), the Alternative Discharging Sewage Treatment Regulations (12VAC5-640), and the Schedule of Civil Penalties (12VAC5-650). The primary purpose(s) for each of these regulations is listed below:

Sewage Handling and Disposal Regulations

- To assure that all sewage is handled and disposed of in a safe and sanitary manner;
- To guide the State Health Commissioner in her determination of whether a permit for handling or disposing of sewage should be issued or denied; and
- To guide property owners in the requirements necessary to secure a permit for handling and disposing of sewage.

Regulations for Alternative Onsite Sewage Systems

- To establish a program for regulating the operation and maintenance of AOSS;
- To establish performance requirements for AOSS;
- To establish horizontal setbacks for AOSS that are necessary to protect public health and the environment;
- To discharge the Board's responsibility to supervise and control the safe and sanitary collection, conveyance, transportation, treatment, and disposal of sewage by onsite sewage systems and treatment works as they affect the public health and welfare;
- To protect the quality of surface water and ground water;
- To guide the Commissioner in determining whether a permit or other authorization for an AOSS shall be issued or denied;
- To inform property owners, applicants, onsite soil evaluators, system designers, and other persons of the requirements for obtaining a permit or other authorization for an AOSS; and
- To develop, as DOSWSEEMP deems necessary, best management practices for the purpose of recognizing acceptable methods to reduce pollution from AOSSs.

Fee Regulations

- To establish a procedure for determining the fees for services provided by the department for onsite sewage systems, alternative discharge systems, and private wells;
- To establish procedures for the refund of fees; and
- To establish procedures for the waiver of fees.

Private Well Regulations

- To Ensure that all private wells are located, constructed and maintained in a manner which does not adversely affect ground water resources, or the public welfare, safety and health.;
- To guide the Commissioner in her determination of whether a permit for construction of a private well should be issued or denied;
- To guide the property owner or his agent in the requirements necessary to secure a permit for construction of a private well; and
- To guide the property owner or his agent in the requirements necessary to secure an inspection statement following construction.

Alternative Discharging Sewage Treatment Regulations

- To ensure that discharging systems are permitted, constructed, and operated in a manner which protects the environment and protects the public welfare, safety and health;
- To guide the commissioner in her determination of whether a permit for construction and operation of a discharging system should be issued or denied;
- To guide the property owner or his agent in the requirements necessary to secure a permit for construction of a discharging system;
- To guide the owner or his agent in the requirements necessary to secure an operation permit following construction;
- To guide the owner or his agent in the requirements necessary to operate and maintain a discharging system;
- To guide the Commissioner in her determination of whether a discharging system is being operated in a manner which protects public health and the environment; and
- To guide the Commissioner in her determination of what actions are appropriate to correct violations of this chapter.

Schedule of Civil Penalties

- To establish a uniform schedule of civil penalties for violations of 12VAC5-610 (includes 12VAC5-613), and 12VAC5-640;
- To support enforcement activities necessary to discharge the Board's responsibility to supervise and control the safe and sanitary collection, conveyance, transportation, treatment, and disposal of sewage as they affect the public health and welfare;
- To support enforcement activities necessary to discharge the Board's responsibility to exercise due diligence to protect the quality of ground and surface waters; and
- To guide the Commissioner in charging civil penalties.

In addition to these regulatory sections, the Board also promulgated the Authorized Onsite Soil Evaluator Regulations (12VAC5-615) to implement, administer, and enforce licensing requirements for onsite soil evaluators. However, the 2007 Virginia General Assembly enacted House Bill 3134, which transferred implementation, administration, and enforcement of licensing to the Department of Professional and Occupational Regulation. DOSWSEEMP is currently in the process of developing a proposed action to repeal 12VAC5-615.

The administration of the Code and these regulations are essentially broken into two staffing segments: DOS WSEEMP staff and local health department EH staff. The general duties of each of those segments is provided below.

Central Office

DOSWSEEMP staff are responsible for programmatic activities such as: providing assistance within the legislative process; regulatory development; policy and guidance development; agency staff and industry stakeholder training; database management; programmatic data analysis; website management; variance processing; indemnification fund processing; product evaluations; EDRP processing; Sewage Handling and Disposal Advisory Committee facilitation; agency representation before the Sewage Handling and Disposal Appeals Board; providing assistance to local health departments for appeals processing; providing technical assistance to local health department when dealing with complex cases; development of agreements with federal and state agencies, where applicable (e.g. Chesapeake Bay Watershed Implementation Plan); long range planning; and overall program quality assurance.

Local Health Departments

The local health department EH staff are responsible for programmatic activities such as: processing applications; issuing or denying permits for onsite sewage systems, alternative discharging sewage systems, and private wells (with or without accompanying work from private sector designers); inspection of onsite sewage systems, alternative discharging sewage systems, and private wells; data entry for onsite sewage system, alternative discharging system, and private well applications, permits, installations, and operation; processing request from local governments for development (safe, adequate and proper evaluations, subdivisions proposals, special use permits, etc.); issuance of operation permits for onsite sewage systems and alternative discharging systems; issuance of inspection statements for private wells; issuance of pump and haul permits; inspection and approval of sewage handlers; providing courtesy reviews of private sector evaluations; sewage and water complaint investigations; administration of enforcement actions when violations of sewage and well regulations are observed; enforcement of required operation and maintenance for AOSS and alternative discharging sewage treatment systems; conducting informal fact finding conferences; conducting Level I and Level II reviews of private sector work; conducting field evaluations and designs for bare applications; inspection of discharge systems; and administration of other activities outline through agreements with local governments.

ATTACHMENT 2

Virginia Department of Health
Sewage Handling and Disposal Advisory Committee
Regulatory Reform Subcommittee
June 20, 2016

Challenges/Issues Categorized

Challenge / Issue	Category
Issues regarding local ordinance enforcement when the site/design fully complies with state regulations, but not local ordinance. There are a lot of localities that have ordinances that do not conform with VDH regulations (e.g. Louisa County ordinance requires cast iron sewer pipe).	Program Administration/Conflicting Regulations
Various layers of regulations and local ordinances that don't always align. That leads to conflict or confusion.	Program Administration/Conflicting Regulations
GMPs at times are treated as regulation and not guidance. They also at times conflict or do not align with all regulations or other policies.	Program Administration/Conflicting Regulations
Customer service and transparency become issues because of the conflicts between the various layers of regulations and local ordinances.	Conflicting Regulations
Historical baggage.	Paradigm Shift
Need more interconnection with other programs within VDH, and other agencies at state and federal levels. When there is potential overlap of VDH programs with those of other state agencies, really need to spell it out in the regulations or MOUs.	Paradigm Shift
Need to look at wastewater as part of a spectrum of water management (e.g. VDH also needs to look at its role in surface water and groundwater quality and management issues).	Paradigm Shift
Community wastewater problems are different than individual system problems, but the current program treats them the same.	Paradigm Shift
What is a "failing system"? Need to distinguish between repairs and voluntary upgrades.	Paradigm Shift
The regulations provide somewhat of a preferential benefit to someone that can afford to install an alternative system on sites where less expensive conventional systems cannot be used (e.g. direct dispersal - poor person couldn't develop the property but a rich person can).	Paradigm Shift
Installers upset that unlicensed contractors are still getting their system installations approved.	Paradigm Shift

Challenge / Issue	Category
EPA design manual says onsite sewage programs should become more involved with watershed protection planning. This is not currently the case in Virginia. For instance, a locality has an impaired waterway. The locality determines the best way to address that issue is stream buffers, so the county spends significant funds on buffers. But then under state regulations developer installs an onsite sewage systems within the buffer because it meets the regulations even though it's not part of the County's plan to improve the impaired waterway. This relates to two other challenges noted below: (1) Need to look at wastewater as part of a spectrum of water management, and (2) Need more interconnection with other programs within VDH, and other agencies at state and federal levels.	Paradigm Shift
Concerned about permits for alternative systems being issued in areas that clearly shouldn't be developed (e.g. sensitive receiving environments) even though the site meets the minimum regulations.	Program Administration / Paradigm Shift
Are VDH resources aligned with the goals of the program? (first flush vs. ongoing maintenance).	Program Administration
Lack of enforcement on O&M, and regulatory oversight.	Program Administration
Perception that VDH staff think just because a PE signs off on a design they (VDH staff) have to permit the design.	Program Administration
Issue with consistency and lack of enforcement statewide, possibly resulting from the elimination of the regional sanitarians.	Program Administration
Blurred line when a VDH employee steps over from being a regulator to being a designer.	Program Administration
Information dissemination is a challenge, especially regarding O&M.	Program Administration
The fee structure for repairs. Should repair permits really be free for everyone? Should we even be reclassifying repairs versus construction permits? Why not make everything a construction permit that must fully comply with the regulations? Should there be a sliding scale for the cost of repairs based on the income of the household serviced by the system?	Program Administration / Resource
The Betterment Loan program doesn't work for low income homeowners.	Resource
There is one regulatory standard that has no flexibility to deal with income. Regulations can facilitate grants/exemptions, but there needs to be another financial solution from an external source.	Resource
How do you handle case with a \$10,000 trailer on a \$5,000 lot that needs a \$20,000 septic system?	Resource

August~~January~~ 11, 2017~~5~~

MEMORANDUM

TO: District Health Directors
Environmental Health Managers
Office of Environmental Health Services Staff
~~VPI Contract Soil Scientists~~
Onsite Soil Evaluators
Professional Engineers

GMP #2017~~5~~-01

THROUGH: Marissa J. Levine, MD, MPH, FAAFP
State Health Commissioner

THROUGH: Allen Knapp, Director
Office of Environmental Health Services

FROM: Dwayne Roadcap, Director
Division of Onsite Sewage and Water Services, Environmental Engineering
and Marina Programs

SUBJECT: GUIDANCE MEMORANDUM AND POLICY 2017~~5~~-01: Onsite Sewage Application
Expectations and Requirements. This policy revises GMP 2015-01. GMP 2015-01 is hereby
rescinded.

Table of Contents

August 1/January 1, 20175..... 1

Part I: Background, Scope, General Requirements 3

 A. Authority 3

 B. Purpose, Scope, and Applicability. 3

 C. Definitions..... 3

 D. Roles and Responsibilities. 54

 E. General Requirements..... 6

Part II: Applications 7

 A. Applications: General..... 7

 B. Construction Permit Applications 87

 C. Certification Letter Applications..... 109

 D. Subdivision Review Applications 10

 E. Documentation Required for Site Evaluation Reports. 11

 F. Survey Plats..... 12

 G. Denials of Applications (not a principal place of residence); 1312

 H. Denials of applications (principal place of residence)..... 14

 I. Prioritizing Applications 1615

 J. Work Product Expectations: 1716

Part III: VDH Review 19

 A. Application Review..... 19

 B. Revalidating Expired OSE/PE Permits; Relying on Previous Certifications. 21

 C. Design Changes..... 2221

 D. Professional Courtesy Reviews..... 2322

 E. Processing time limits for applications subject to deemed approval. 2423

 F. Processing time limits for applications NOT subject to deemed approval..... 2423

Part IV: Final Inspections..... 24

 A. General Requirements and Expectations: 24

Index of Forms..... 2825

Part I: Background, Scope, General Requirements

A. Authority.

This policy is authorized by the *Private Well Regulations* (12 VAC 5-630, the *Well Regulations*), the *Sewage Handling and Disposal Regulations* (12 VAC 5-610, the SHDR), the *Regulations for Alternative Onsite Sewage Systems* (12 VAC 5-613, the AOSS Regulations) and the *Alternative Sewage Treatment Discharging Regulations for Single Family Homes* (12 VAC 5-640, the Discharging Regulations). This interim policy is further authorized by §32.1-164 of the *Code of Virginia (Code)*, which provides the Board of Health (Board) with the powers and duties to establish:

1. Processes for filing an application for an onsite sewage disposal system permit with the Virginia Department of Health (VDH).
2. Procedures for issuing letters recognizing onsite sewage sites in lieu of issuing onsite sewage construction permits.
3. Criteria for granting, denying and revoking permits for onsite sewage disposal systems.

B. Purpose, Scope, and Applicability.

The purposes of this document are to:

1. Inform applicants of the expectations for certification letters, subdivision approvals and construction permits in the onsite sewage and private well programs;
2. Provide guidance to agency staff and private sector professionals for processing the above applications; and
3. Establish expectations and deadlines for processing applications.

This policy applies to all applications submitted to the VDH, including applications with supporting work from private sector designers. VDH shall accept, review, and approve or deny applications in accordance with the *Code*, applicable regulations, and VDH policies.

C. Definitions. The following words and terms have the following meanings unless the context clearly indicates otherwise:

“Backlog” is deemed to exist when the processing time for more than 10% of a local or district health department’s complete bare applications for construction permits exceeds a predetermined number of working days (e.g., a 15-day backlog exists when the processing time for more than 10% of permit applications exceeds 15 working days). When calculating backlogs, only applications for construction permits shall be counted.

“Bare Application” means an application for a construction permit or a certification letter submitted without supporting documentation from a private sector designer.

Comment [TD1]: This policy lays out roles for the private sector also.

“Conventional Onsite Sewage System” (COSS) means a treatment works consisting of one or more septic tanks with gravity, pumped, or siphoned conveyance to a gravity distributed subsurface drainfield. An example of a COSS is an in-ground system design (See 12VAC5-594, A. and B.) where septic tank effluent is dispersed by gravity following the requirements in 12VAC5-930.

Comment (TD2): A STE pad would be considered an AOSS.

“Complete Application” means an application for a construction permit or certification letter that includes all necessary information needed to process the application as specified by code, regulation or this policy.

“Deemed Approved” or “Deemed Approval” means that VDH has not taken action to approve or disapprove an application for a permit, an individual lot certification letter, multiple lot certification letters, or subdivision approval for residential development within the time limits prescribed in §§ 32.1-163.5 and 32.1-164 G of the *Code of Virginia*. In such cases, an application submitted in proper form pursuant to this chapter is deemed approved. “Deemed approved” means that the application is approved only with respect to the Board of Health’s regulations.

Sites previously denied by VDH and proprietary, pre-engineered systems deemed by VDH to comply with the Board’s regulations are not subject to the provisions of deemed approval.

“Multiple Lot Certification Letters” means two or more applications for certification letters filed by the same owner for existing or proposed lots to serve detached, individual dwellings.

“Onsite Soil Evaluator” (OSE) means a person who is licensed under Chapter 23 (§ 54.1-2300 et seq.) of Title 54.1 as an onsite soil evaluator. A licensed onsite soil evaluator is authorized to evaluate soils and soil properties in relationship to the effects of these properties on the use and management of these soils as the locations for onsite sewage systems.

“OSE/PE” means a licensed onsite soil evaluator, a professional engineer, or a professional engineer working in consultation with a licensed onsite soil evaluator.

“Processing Time” means the number of working days from the date a complete application is received by a local health department to the date a permit or certification letter is issued or denied. Working days characterized by severe weather conditions shall not be included in any calculation of processing time.

Comment (TD3): Changed to be in alphabetical order.

“Professional Courtesy Review” means a site-specific field review requested by an OSE/PE prior to the submission of an application for a construction permit or certification letter or a general field consultation (not site-specific) regarding a proposed subdivision.

“Processing Time” means the number of working days from the date a complete application is received by a local health department to the date a permit or certification letter is issued or denied. Working days characterized by severe weather conditions shall not be included in any calculation of processing time.

“Single Lot Construction Permit/Certification Letter” means one application filed by an owner for a sewage disposal system construction permit or certification letter to serve an individual dwelling on one lot or parcel of land.

“Subdivision Review” means the review of a proposed subdivision plat by a local health department for a local government pursuant to a local ordinance and §§ 15.2-2242 and 15.2-2260 of the *Code of Virginia* and 12 VAC 5-610-360 of the *Sewage Handling and Disposal Regulations* for the purposes of determining and documenting whether an approved sewage disposal site is present on each proposed lot.

D. Roles and Responsibilities.

1. The Virginia Department of Health (VDH) shall:
 - a. Review applications as necessary to assure compliance with applicable regulations and the department’s policies prior to approval or disapproval of an application.
 - b. Conduct paperwork (Level 1) and field (Level 2) reviews prior to approving or denying applications as necessary to protect public health and the environment.
 - c. Conduct construction inspections of private sector designed systems as necessary to protect public health and the environment.
 - d. Provide a site-specific field courtesy review when requested by an OSE/PE as time and resources may allow. Such requests shall not be included in any calculation of backlogs nor shall they be subject to the time limits contained in this policy or to deemed approval. The professional courtesy review is voluntary and will be provided at the sole discretion of the local health department. Staff will not render case decisions for requests for courtesy reviews.
 - e.d. Initiate procedures to revoke or modify permit approval, certification letter or subdivision approval when there is reason to believe the approval does not substantially comply with applicable regulations. VDH may revise a permit, certification letter, or subdivision approval upon the owner filing a new application or as outlined in Part III Section C of this document.

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2. The OSE/PE shall:
 - a. Certify that work performed meets all applicable regulations when that work is used to seek a permit, letter, or other approval from VDH.
 - b. Assure site evaluations and designs comply with all applicable regulations and this policy when applicable. See GMP #153 (or successor policy), Va. Code § 32.1-163.6, and other requirements within this policy.
 - c. Inspect sewage systems installed based upon work submitted in support of a permit application subsequently approved by VDH.

d. Complete an inspection and provide an inspection report and a completion statement to VDH for any sewage disposal system installed pursuant to a construction permit based on a design certified by the OSE/PE. VDH may, but is not required to, inspect systems designed by a private sector OSE/PE.

Comment (TD4): Following HB 2477.

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e. Disclose to property owners when a conventional onsite sewage system is an option and document disclosure on the cover page under the certification statement. The certification statement will include the following "The potential for both conventional and alternative systems has been discussed with the owner/applicant."

Comment (TD5): Following HB 2477.

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3. Professional Relationships

VDH staff and private sector designers must be mindful of the sometimes subjective nature of onsite sewage system evaluations and designs. On any site there may be a number of possible solutions to install an onsite sewage system, all of which must comply with the regulatory requirements.

It is paramount that VDH staff and private sector designers respect one another's professional judgment in such variable circumstances. A private sector designer forms an independent professional opinion based on an objective evaluation of all the relevant information available and his/her professional judgment. At the same time, VDH staff is equally qualified to form independent professional opinions based on an evaluation of the relevant information available.

When making case decisions, VDH employees must distinguish their professional opinion from an administrative responsibility to process permit applications based on facts. It is the private sector designer's responsibility to assure that his/her evaluation and design are completed in accordance with all applicable laws and regulations. Deference should be given to the private sector designer's professional judgment unless factual evidence is available to show that an evaluation and/or design does not comply with applicable laws and regulations.

When problems occur, VDH is obligated to take appropriate enforcement actions to assure public health and environmental protection. Local and district environmental health staff and directors are responsible for problem solving situations encountered regarding site approvals, system design, and construction.

VDH is a partner in trying to identify solutions. Private sector designers are expected to take primary responsibility for solving problems on sites where a permit is requested based on the private sector designer's supporting documentation. In all cases, the first steps to resolving problems should attempt to identify non-adversarial solutions that are mutually agreeable to the owner, the designer, and the agency.

E. General Requirements.

1. All requests for VDH approvals or reviews must be made on the appropriate application form (or in writing for courtesy reviews). The owner of record must give VDH permission to enter

the property to process the application or request. Generally, applications for construction permits and certification letters begin with filing an application; requests for review of proposed subdivisions are initiated by a local government; and requests for courtesy reviews are initiated by a private sector OSE/PE.

2. All evaluation reports and designs submitted to VDH must be in the form specified by regulation, the Code of Virginia, and applicable agency policy. The designer must certify that the application substantially complies with the applicable regulations.
3. With respect to individuals involved in the design of any onsite sewage disposal system, VDH will require the designer to affix a professional engineer (PE) seal or provide a signed certification statement stating that the designer is exempt from the engineering requirements. The exemption statement shall identify the specific exemption under which the plans and specifications were prepared and certify that the designer is authorized to prepare such plans pursuant to the exemption. If the design is submitted without the required seal or statement, the application will be considered incomplete and will not be accepted. If the required seal or statement is provided, the local health department will evaluate the work for compliance with VDH regulations and policies and render an appropriate decision. Upon request, VDH will provide the Department of Professional and Occupational Regulation (DPOR) with reports containing information on individuals who invoke the exemption from the engineering requirements and information on the number and type of systems designed pursuant to said exemption.
4. The owner of the property or his agent is responsible for filing an application with the local health department. A complete application is required to apply for and receive a construction permit, certification letter, or denial. _____

4.5. Valid construction permits for onsite sewage systems and private wells are transferable to new property owners. Valid construction permits remain in force through property transfers. A new application is not required and the construction permit and operation permit will remain in the original owner's name. At the owner's request, VDH will revise "owner information" for valid construction and operation permits in VENIS. All sewage disposal construction permits are null and void when (i) conditions such as house location, sewage system location, sewerage system location, well location, topography, drainage ways, or other site conditions are changed from those shown on the application; (ii) conditions are changed from those shown on the construction permit; or (iii) more than 18 months elapse from the date the permit was issued.

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Comment (TD6): Change follows HB 2477.

Comment (TD7): A comment from SHADAC is VDH will lose the right of entry to inspect.

Part II: Applications

A. Applications: General

1. Incomplete applications delay timely and accurate decision making. Applicants are encouraged to assure all submittals are complete at the time of submission by following the guidelines below.
2. Applications submitted to VDH are either bare applications (i.e., without evaluation or designs from a private sector OSE/PE) or applications with complete supporting documentation as

required for the type of application currently submitted (e.g., construction permit, certification letter, et al.) from a private sector OSE/PE.

3. This section outlines the minimum administrative and documentation requirements for processing an application. VDH staff OSEs are required to comply with the Work Product Expectations (WPEs) listed in Part II Section J below. Private sector OSEs and PEs are strongly encouraged to comply with the WPEs. VDH may make reasonable requests for additional documentation for any application when the agency deems such information necessary for making a case decision; failure to provide such documentation may result in denial of the application.

B. Construction Permit Applications

1. General: All applications with supporting work from a private sector OSE/PE for construction permits shall contain the following:
 - a. The correct and complete application;
 - b. The appropriate fees;
 - c. A site and soil evaluation report;
 - d. A proposed well site location and well specifications (when a private well is proposed);
 - e. Construction drawings and specifications for the system; and
 - f. A statement *on the cover page* certifying that the site and soil conditions and design substantially comply with applicable regulations.
 - g. When the application is for a repair permit or a voluntary upgrade permit, a completed Condition Assessment Form Malfunction Assessment (Form 14).

Comment [TD8]: This part is to conform with the voluntary upgrade/repair policy.

For bare applications, a VDH OSE shall provide the items c through g as part of the application processing procedure.

2. System Designs.
 - a. The OSE/PE must provide sufficient detail to allow an installer and well driller to accurately construct the onsite sewage system and private well (if applicable). Plans and specifications must be sufficient to allow the successful installation of the treatment works.
 - b. Construction drawings shall comply with 12VAC5-610-460. As a minimum, drawings must show property lines, all existing and proposed structures, existing and proposed sewage systems and water supplies, slope, any topographic features which may impact the design of the system and well (if applicable), and existing and proposed easements and utilities within a distance from the edge of the proposed soil absorption system and reserve area (when applicable) equal to the horizontal setback required for that particular feature (e.g., 70 feet for shellfish growing waters, 100-feet for Class III-C wells). The designer should provide any other information necessary to determine compliance with the

applicable horizontal setbacks contained in Table 5.4 of the SHDR, 12VAC5-610-950, and 12VAC5-613-200.

- c. When applicable, the drawing of the proposed sewage system shall show sewer lines, septic tank, treatment units, pump station, conveyance system, reserve area, and other relevant features which may affect the proper operation and functioning of the system or be affected by the system. When a private drinking water supply is to be located on the same lot, all sources of pollution necessary to determine compliance with Table 3.1 of the *Well Regulations*, 12VAC5-630-380, shall be shown.
- d. Design calculations used to establish the design parameters must be included where applicable:
 - i. Calculations indicating that the proposed design complies with minimum separation distance to seasonal ground water, rock, or other limiting factor shall be provided to determine compliance with Tables 4.3 and 4.4 of the SHDR, 12VAC5-610-597, and the performance requirements of the *AOSS Regulations*, if applicable.
 - ii. Minimum depth of trenches and separation of trenches shall be provided to determine compliance with 12VAC5-610-950.
 - iii. Pump tank volumes and emergency storage requirements shall be provided to determine compliance with 12VAC5-610-880.
 - iv. When a pump is used in an onsite system design, the calculations shall show the static head, friction head and total dynamic head at the design flow of the pump to determine compliance with 12VAC5-610-880.
 - v. Trench bottom area and number of trenches shall be provided as necessary to determine compliance with Table 5.4 of the SHDR, 12VAC5-610-950, or Table 1 of the *AOSS Regulations*, 12VAC5-613-80, when applicable.
 - vi. Calculations for low pressure distribution, drip irrigation, etc. shall be provided as necessary to determine compliance with 12VAC5-610-940, 12VAC5-610-955, and the performance requirements of the *AOSS Regulations*, 12VAC5-613-80 thru 110, when applicable.
 - vii. Calculations for Wisconsin mound, other fill systems, etc. shall be provided as necessary to determine compliance with 12VAC5-610-960 and the performance requirements of the *AOSS Regulations*, 12VAC5-613-80 thru 110, when applicable.

Additional information may be necessary depending on the regulations applicable to the specific site. See 12VAC5-610, 12 VAC5-613 and Va. Code §32.1-163.6 for more information.

C. Certification Letter Applications

1. All applications submitted pursuant to Va. Code §32.1-163.5 with supporting work from a private sector OSE/PE for certification letters must include the following information:
 - a. The correct and complete application;
 - b. The appropriate fees;
 - c. A site and soil evaluation report;
 - d. A site sketch in compliance with 12VAC5-610-460;
 - e. A proposed well site location and well class (when a private well is proposed);
 - f. Information on proposed treatment level, proposed trench bottom area and proposed sewage volume and flow; and
 - g. A statement on the cover page certifying that the site and soil conditions substantially comply with applicable regulations.

When processing a bare application for a certification letter, the VDH OSE shall include items c through g.

2. Each site certified by an OSE/PE for a certification letter must be located by surveying the perimeter of the soil absorption area and showing that area on a survey plat unless waived pursuant to this policy. This plat should be incorporated as part of the site and soil evaluation report
3. All applications for multiple certification letters must include the information for a single-lot certification letter and be processed in accordance with local ordinances for subdivision reviews. Additionally, a preliminary subdivision plat that provides the information specified in paragraph 1 is expected.

D. Subdivision Review Applications

1. All applications for reviewing proposed subdivisions must come from an authorized agent of the local government having jurisdiction. An owner or applicant cannot initiate a request for a subdivision review independent of the local subdivision process.
 - a. The subdivision process is a local function that is governed by local ordinances.
 - b. Va. Code §15.2-2242 of the *Code* provides that localities may adopt ordinances requiring the applicable health official to render a preliminary opinion regarding the suitability of the subdivision for the installation of subsurface sewage disposal systems.
 - c. Va. Code § 15.2-2260 provides that a local subdivision agent must forward preliminary plats to appropriate state agencies if approval of a feature or features of the plat by a state agency is necessary. This section further provides that any state agency making a review of a plat must complete its review within 45 days

from receipt. If the agency does not approve the plat, then it must state the specific reasons for disapproval in writing.

- d. The SHDR provides guidance when review of subdivision plats is required by local ordinances. All requests for subdivision review must include the following:
 - i. A letter from the authorized agent of the local government requesting review of the proposed subdivision and a statement certifying that the subdivision package has been determined to be complete;
 - ii. Site and soil evaluation reports by a OSE/PE for each proposed lot;
 - iii. Proposed well site locations and well class when private wells are proposed;
 - iv. A preliminary subdivision plat. The plat must include all the information required by local ordinances and the following: locations of proposed onsite sewage systems and reserve areas (if applicable), all proposed and existing streets, utilities, storm drainage, water supplies, easements, and lot lines for each proposed lot, and original topographic contour lines by detail survey. The plat should be prepared according to suggested scales contained in Appendix L of the *SHDR*, 12VAC5-610-1170:7.
 - v. A statement on the cover page certifying that the site and soil conditions and designs substantially comply with applicable regulations.
 - vi. A signed statement from the owner of record giving VDH permission to enter the property for the purposes of reviewing the site and soil conditions both prior to the review and approval and afterward (if necessary) for quality control purposes and to protect public health and the environment.

E. Documentation Required for Site Evaluation Reports.

1. All reports must be properly marked as substantially complying (approved) or not complying (rejected) with applicable regulations.
2. Each soil profile hole augered or dug during a soil investigation must be described completely and accurately and located on a site sketch. All holes used to establish the suitability of a site must show that the site substantially complies with applicable regulations.
3. The SHDR require a minimum of five soil profile descriptions for each separate area being established as suitable for a soil absorption system (e.g. primary and/or reserve area). If, in the opinion of the site evaluator, a site exhibits sufficient uniformity of topography and profile, the number may be reduced to three. Profile holes must be placed so as to be representative of the soil absorption area.

4. The depth of each major horizon of all soil profiles must be documented using U. S. Department of Agriculture soil textural classes (including the percent and size of coarse fragments) and soil colors. Soil colors (matrix and mottle patterns) are to be determined and reported using the *Munsell Soil Color Charts*. All colors must be reported using the Munsell notations for hue, value and chroma (e.g. 5YR 5/6). Color names may be added. Abbreviations of terms (e.g. soil color, texture, etc.) are not acceptable.
5. All holes or pits in the area of the proposed soil absorption system must be described as to depth to seasonal water table or seasonal saturation.
6. Depth to rock or restrictive layers must be described when applicable.
7. The estimated percolation rate must be reported. When permeability tests are conducted (including percolation tests, hydraulic conductivity tests, and other measures of soil permeability), a copy of all test results must be included. Permeability tests conducted by a licensed designer do not require VDH supervision.
8. Estimated shrink-swell potential, if moderate or greater, must be noted.
9. Soil concretions shall be noted, where applicable.
10. Other relevant soil features that, in the opinion of the evaluator, are necessary to document that the site is sufficient to accommodate an onsite sewage treatment and dispersal system and to support the proposed design.
11. The site evaluation shall indicate the landscape position and the degree of slope in the area of the proposed system installation.
12. A site sketch in accordance with 12VAC5-610-460 shall be provided with each site and soil evaluation report. See Part II, Section J (9), page 18, of this policy for Work Product Expectations related to site sketches.

F. Survey Plats.

This section of the policy is intended to supersede GMP 152 and is applicable to permits and certification letters whether or not such work is supported by private sector professionals.

1. All applications for sewage disposal system certification letters, onsite and sewage disposal system construction permits and alternative discharging system permits must be accompanied by a copy of a survey plat unless waived pursuant to this policy. For construction permit drawings, private sector OSEs/PEs may opt to show the perimeter of the soil absorption area(s) on a copy of a survey plat. VDH does not prescribe the professional's methods or equipment to accomplish the performance expectations of this policy; however, VDH strongly recommends that all sites, including those for construction permits, be surveyed by a licensed surveyor and platted accordingly. This policy does not circumvent survey requirements contained under 18VAC10-20-370, 18VAC10-20-380, 18VAC10-20-382, 18VAC10-20-390, 18VAC10-20-392 and 18VAC10-20-395.

Comment [TD9]: To clarify survey requirement.

1. identifying the proposed sewage disposal system and/or reserve area, proposed dwelling, and any other features impacting placement of the sewage disposal system, unless waived pursuant to this policy.

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2. All applications for alternative discharging systems must be accompanied by a survey plat prior to the issuance of the permit unless waived pursuant to this policy.

3.1. The survey plat requirement for sewage disposal system certification letters, onsite sewage disposal system construction permits and alternative discharging systems or onsite sewage system construction permits and sewage disposal system certification letters may be waived if the following criteria are met:

- a. The owner shall submit a complete application and fee if applicable.
- b. The owner shall request a waiver from the survey requirement by completing Form 11.
- c. The two main goals are to ensure the sewage system is located on the correct property and in the correct location on the property. The Environmental Health Specialist Senior (EHSS) shall evaluate the risk that the goals will not be met. Before granting a waiver, the local health department shall determine there is a low risk of improper placement of the sewage system. The EHSS will determine the risk by reviewing the application package for completeness, evaluating the owner's answers on Form 11, and by conducting a complete site and soil evaluation for bare applications or a Level 2 Review for applications with supporting work from a private sector OSE/PE, which includes verification of identified property boundary markers.
- c. Certification letters do not expire. There must be a high level of confidence the proposed absorption area(s) can be re-located in the distant future prior to granting a survey waiver for a certification letter.

—Prior to issuance of an Operation Permit where a survey plat waiver has been granted, the owner shall sign a statement (See Form 12) confirming that the sewage disposal system has been installed on his property and in the permitted location.

G. Denials of Applications (not a principal place of residence):

The owner(s) or agent thereof shall indicate on the application form whether or not the requested approval is a construction permit or certification letter for a system that is intended to serve his or her principal place of residence. The following procedures apply for denials for construction permits and certification letters when the applicant has not indicated that the system intends to serve his or her principal place of residence; the following procedure also applies to all denials of subdivision reviews.

1. VDH will deny applications that do not comply with applicable regulations and cite the applicable regulatory requirements. Denial letters must clearly state in plain English the rights and administrative remedies available to the owner.

2. The applicant must elect which potential remedy to pursue. The applicant may not pursue multiple administrative remedies simultaneously. With denials for systems not intended to serve a principal place of residence, the mutually exclusive administrative remedies are as follows:
 - a. The applicant may submit one new application within 90 days from the date that the original application was denied without paying an additional fee;
 - b. The applicant may appeal the denial by requesting an informal fact-finding conference (IFFC) before VDH pursuant to §2.2-4019 of the *Code*. To obtain an IFFC before VDH, the applicant must submit a written request to the District Health Director within 30 days of receipt of the denial; or
 - c. For denials of submittals under §32.1-163.6 of the *Code*, the applicant or the professional engineer responsible for the onsite sewage system design, with the applicant's written consent, may request an IFFC before the engineering design review panel. To request an IFFC before the engineering design review panel, a written request must be submitted to the District Health Director within 30 days of the professional engineer's receipt of the denial.
3. If the applicant elects to submit a new application within 90 days and does not appeal the original denial, no fee will be charged for that second submittal. However, VDH will assess the full fee for any subsequent application. The time limits for processing the application (when applicable) begin anew on the day of each resubmission. The following table illustrates the fees to be assessed when processing applications:

Table 1: Fees for Re-submissions – Not a Principle Place of Residence (new applications)

Application	Fee Attached
First Application	Full Fee
Second Application if submitted within 90 days of denial of first application (and the applicant does not appeal the original denial)	No Fee
Any subsequent application	Full Fee

4. An applicant for a construction permit or a certification letter may request a refund of the application fee if the applicant voluntarily withdraws his application before VDH issues or denies the requested permit, letter or subdivision review. The application fee will be refunded if the application is withdrawn before VDH makes a site visit for the purpose of evaluating the application.

H. Denials of applications (principal place of residence)

The owner(s) or agent thereof shall indicate on the application form whether or not the requested approval is a construction permit or certification letter for a system that is intended to serve as his or her principal place of residence. The following procedures apply to denials of onsite sewage construction permits when the applicant has indicated that the system is intended to serve as the applicant's principal place of residence.

1. VDH will deny applications that do not comply with the applicable regulations and cite the applicable regulatory requirements. Denial letters must clearly state in plain English the rights and administrative remedies available to the owner.
2. The applicant must elect which potential remedy to pursue. The applicant may not pursue multiple administrative remedies for the same denial. With denials for systems intended to serve a principal place of residence, the mutually exclusive administrative remedies are as follows:
 - a. In accordance with 12VAC5-620-90, the owner or agent thereof may apply for and obtain a refund of the application fee for any denial of a permit or letter on land on which the owner seeks to construct his or her principal place of residence. He or she may do so by executing an affidavit (Form 13) and submitting it to the local health department within 12 months of the date of denial. Local health departments shall attach a copy of Form 13 to any denial of a construction permit or certification letter for principal place of residence. The applicant may not obtain a refund if he or she is pursuing an administrative appeal of the denial or if he or she has submitted another application for which the fee was waived. Such application fees shall not be refunded unless any administrative appeals based on the denial have either been resolved or waived by the applicant; such waiver can be explicit via the execution of affidavit Form 13 or implicit by virtue of a failure to exercise appeal rights within the timeframe specified in the denial letter;
 - b. The applicant may submit one new application within 90 days from the date that the original application was denied without paying an additional fee;
 - c. The applicant may appeal the denial by requesting an IFFC before VDH pursuant to Va. Code Section 2.2-4019. To obtain an IFFC before VDH, the applicant must submit a written request to the District Health Director within 30 days of his or her receipt of the denial; or
 - d. For denials of submittals under §32.1-163.6 of the *Code*, the applicant or the professional engineer responsible for the onsite sewage system design, with the applicant's written consent, may request an IFFC before the engineering design review panel. To request an IFFC before the engineering design review panel, a written request must be submitted to the District Health Director within 30 days of the professional engineer's receipt of the denial.
3. If the applicant elects to submit a new application within 90 days and does not appeal the original denial or request a refund, then no fee will be charged for that second submittal. VDH will assess the full fee for any subsequent application. The time limits for processing the application (when applicable) begin anew on the day of each resubmission.

Table 2: Fees for Re-submissions – Principle Place of Residence (new applications)

<u>Application</u>	<u>Fee Attached</u>
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First Application	Full Fee
Second Application if submitted within 90 days of denial of first application (and the applicant does not appeal the original denial or request a refund)	No Fee
Any subsequent application	Full Fee

4. An applicant for a construction permit or a certification letter may request a refund of the application fee if the applicant voluntarily withdraws his or her application before VDH issues or denies the requested permit or letter. The application fee will be refunded if the application is withdrawn before VDH makes a site visit for the purpose of evaluating the application.

I. Prioritizing Applications

This section is intended to replace GMP 51 and provide guidance for processing applications to meet applicant needs and make the best use of agency resources. It is not possible to develop a set of criteria that will account for all possible circumstances, but VDH staff should follow these guidelines as closely as possible.

1. Applications for onsite sewage permits and approvals are categorized as follows, in order of priority:
 - a. Priority Level 1: Applications for construction permits to repair failing systems.
 - b. Priority Level 2: Applications for construction permits where the applicant has concurrently applied for a building permit.
 - c. Priority Level 3: Applications for certification letters.
 - d. Priority Level 4: Applications for voluntary up-grades.
 - e. Priority Level 5: Applications for multiple-lot certification letters or subdivision approvals.
2. Applications for construction permits to repair a failing system should always receive immediate attention, due to the public health hazard.
3. Each district may set the proportions of time among the different priority levels to best meet local needs, unless processing time for priority levels 1 and 2 exceeds 15 days. In that case, processing of lower level priority applications should be delayed as necessary to allow processing of priority 1 and priority 2 applications within 15 days.
4. VDH's policy is to encourage the use of private sector OSEs and PEs for site evaluation and design. Districts should consider that processing applications with complete supporting documentation from the private sector requires less staff time when prioritizing applications *within* each priority level (e.g. all other aspects of the applications being equal, if a bare application for new construction is submitted on the same date as an application for new construction with supporting documentation from a private OSE/PE, then the application with supporting documentation should receive priority for review). Further, districts should encourage applicants to obtain the services of a private sector OSE/PE.

J. Work Product Expectations:

The following are Work Product Expectations (WPEs) established for all designers of onsite sewage systems, including those employed by VDH. These WPEs are intended to serve as guidelines for documentation *in addition to the minimum requirements outlined previously in this document*. The WPEs are the standard expected of VDH employees. Private sector OSEs and PEs are strongly encouraged to comply with these standards since doing so should reduce misinterpretations and lead to more efficient processing of applications.

A failure to adhere to these WPEs shall not result in the denial of an application. However, as is the case with any application, VDH has discretion to conduct a Level 2 review if the designer fails to adhere to a particular WPE. If the Level 2 review reveals that applicable regulations have not been complied with, then VDH shall deny the application.

1.2. The pages of all submittals should be consecutively numbered beginning with the first page using the format "Page x of y". The cover page should, at a minimum, contain a list of the documents contained in the supporting design package, a property identification, the property owner's name and address, the OSE/PE's contact information, date of plans, and revision dates. To assure that contractors have the correct set of plans, the health department's approval letter must correspond to the date on the cover page or the date of last revision on the cover page, if revisions are made.

2.3. OSE/PEs, at his or her discretion, may make minor revisions to a permit, certification letter or subdivision approval issued in reliance on his or her evaluations or designs. Private sector OSE/PEs should notify VDH when the OSE/PE has revised his or her evaluations and designs. All OSE/PEs should notify the property owner when such evaluations and designs have been revised. All revisions must comply with applicable regulations. See Part III, Section C of this document for additional details.

3.4. All applications with footprints, sites, and areas planned for treatment works and/or private wells should have the proposed areas identified with accuracy and precision of three feet or less. The OSE/PE or surveyor must provide sufficient information to allow a person with the knowledge, skills, and abilities of an Environmental Health Specialist (EHS), an onsite wastewater system installer, or water well systems provider to locate the area in the field using the paperwork and field markers, when applicable. Field markers may include permanent field stakes or distances and bearings to identifiable landmarks. Trees and wooden stakes are not considered permanent field markers.

4. An OSE/PE may opt to show the location of a site for a construction permit (not a certification letter or proposed subdivision) by drawing the perimeter of the absorption area to scale on a survey plat or a copy of a survey plat. VDH does not prescribe the professional's methods or equipment to accomplish the performance expectations of this policy; however, VDH strongly recommends that all sites, including those for construction permits, be surveyed by a licensed surveyor and platted accordingly.

5. Preliminary subdivision plats for subdivision applications should show the immediate area in and around each proposed system, including the soil absorption system, using a contour

interval shown in Table 3; the contour area shown outside the soil absorption system should be sufficient to establish the relationship of the area to relevant topographic features such as, but not limited to, drainage ways, sink holes, road cuts, and steep slopes. A minimum distance of 20 feet is recommended.

Table 3: Contour Interval for Subdivision Plats

Slope (%)	Contour Interval
0-5	2
6-25	5
26-50	10

6. All submittals should document compliance with Chesapeake Bay Preservation Act requirements and other applicable state laws and local ordinances;
7. All drawings should be drawn to scale. Critical dimensions must be shown on the drawing. This includes measurements to critical system components (e.g. distribution box, well site or area, etc.) which should be located using triangulation from appropriate field markers. When a well area is designated, the boundaries shall be clearly defined and limited on all sides.
8. The WPEs related to site evaluations are stated below.
 - a. All site evaluation reports should be signed and dated.
 - b. The maximum acceptable separation distance between observation holes during a soil investigation is 100 feet. The use of common holes between adjacent proposed sewage disposal system sites to describe both sites should be avoided.
 - c. Soil features should be described using the standards contained in the USDA NRCS Field Book for Describing and Sampling Soils.
 - d. When backhoe pits or other excavations are used during a site and soil evaluation, the complete range of soil characteristics exposed should be described (depth to mottles, rock percentage and depth to rock or other restrictive layers and variability in rock depth). OSHA Regulations apply when working in pits.
 - e. A site and soil evaluator should describe the following soil characteristics as he or she deems necessary:
 - i. Soil consistence;
 - ii. Soil structure (grade, size and type);
 - iii. Soil color patterns (kind, quantity, size, contrast, color, shape location, moisture state, hardness and boundary);
 - iv. Soil parent material and physiographic province; and
 - v. Estimated clay mineralogy and the existence of observable minerals (feldspar, mica, quartz, etc.)

vi. Root penetration.

9. The WPEs related to site sketches are as follows:

- a. Site sketches should represent the topography in the vicinity of the proposed onsite sewage system as well as the topography in the vicinity of any private water supply (existing or proposed) so as to establish the topographic relationship between such water supplies and sources of contamination including, but not limited to, the proposed soil absorption system.
- b. Sketches should be neat, legible, and drawn to scale when possible. The sketch should provide accurate documentation (distances) for profile holes and other features and suitable reference points. The site sketch should show existing and proposed property lines for the subject property and any other property lines within ten feet of the perimeter of the proposed soil absorption area and/or proposed structure.
- c. Within 200 feet of the edge of the proposed soil absorption area, the following must be shown:
 - i. Existing and proposed wells, springs, and cisterns. If a private water supply is proposed, the location and construction of the proposed water supply (or supplies) must comply with the *Well Regulations*.
 - ii. Existing and proposed onsite sewage systems;
 - iii. Shellfish waters, lakes, streams, other bodies of water, and surface impoundments used for drinking water; and,
 - iv. Sinkholes, drainage ways, flood plains, drainage ditches, and tile drainage.
- d. Site sketches should document percent slope and direction (an acceptable topographic map may be substituted);
- e. Site sketches should document all existing and proposed structures, buildings, etc. within 100 feet of the perimeter of the proposed soil absorption area and private water supply (if applicable);
- f. Site sketches should document easements, rights of way, driveways, roads, and buried and above-ground utilities within 20 feet of the perimeter of the proposed soil absorption area.

Part III: VDH Review

A. Application Review.

1. All applications and fees must be logged in. Local and district health departments are responsible for entering data into VDH's data system, the Virginia Environmental Information System (VENIS). As a best practice, all applications should be reviewed for completeness at

the time they are received. That way, if the application is incomplete for any reason, VDH can contact the applicant and/or designer to provide the missing information so that VDH can fully evaluate the application within the timeframes specified by the *Code of Virginia* and this policy.

2. An incomplete application should not be logged in, nor should fees be accepted for an application that is known to be incomplete at the time it is filed. Whenever possible, administrative support staff should be responsible for these tasks. If an incomplete application is accepted, it shall be denied.
3. VDH's program for reviewing applications for permits, certification letters, and requests for subdivision approval will employ two basic levels of review: the in-office (paperwork) Level 1 review and the field, Level 2 review.
 - a. A Level 1 review determines whether an application at face value is complete. The Level 1 review confirms the site and/or the design certified by the OSE/PE substantially complies with applicable regulations.
 - b. A Level 1 review consists of administrative and technical reviews and *does not include field review*. Local and district health departments should complete a Level 1 review of every application as soon as practicable.
4. For Level 1 reviews, staff should review VDH records to verify the site was not previously denied a permit and the proposed treatment works or well does not conflict with the minimum set back distances for features on adjacent properties. This review of VDH records constitutes a quality assurance review and is not a substitute for a sanitary survey, which is necessary to positively establish setbacks with certainty. The ultimate responsibility for establishing setback distances remains with the OSE/PE certifying the submitted work.
5. The Level 2 review (field check or quality assurance check) is a detailed onsite evaluation of the site conditions and the design certified by a private sector OSE/PE. The Level 2 review is discretionary and should be performed on at least 10% of applications submitted with supporting work from each private sector OSE/PE. In addition, staff is strongly encouraged to conduct a Level 2 review when a submittal lacks a WPE specified in this policy.
 - a. If a Level 2 review is not performed and the application complies with the minimum requirements of the applicable regulations and this policy based upon the Level 1 review, then a construction permit or certification letter must be issued within the required or expected time frames. Applications that do not comply with the minimum requirements of the applicable regulations must be denied. The denial must be linked to the appropriate OSE/PE using VENIS.
 - b. A Level 2 review assesses the performance of private sector evaluators and designers by sampling a subset of the work submitted by the OSE/PE.
 - c. Local and district health departments should complete Level 2 Reviews of a minimum of 10% of the sites and/or designs certified by each private sector

OSE/PE. Local and district health departments may conduct additional Level 2 reviews as necessary.

- d. Level 2 reviews must be conducted within the processing times expected for the application. Staff should conduct Level 2 reviews prior to approving or denying an application, unless pursuant to a request from the owner or agent, the designer, or the contractor responsible for installing the system.
 - e. A Level 2 review may include conducting soils borings, examining backhoe pits or other excavations, a sanitary survey, permeability testing, or other actions necessary to assure that a site or design complies with applicable regulations.
 - f. The local or district health department will perform Level 2 reviews using the best methods available, including evaluating open backhoe pits or a hand auger. An owner will not be required to hire a backhoe for a Level 2 review if one is unavailable at the time of VDH's Level 2 review.
 - g. Except in extraordinary circumstances, the local or district health department shall notify the owner and the OSE/PE when intending to conduct a Level 2 review.
 - h. If a Level 2 review reveals that a site and/or a design do not substantially comply with applicable regulations, the application will be denied. The denial letter must be linked to the appropriate OSE/PE using VENIS.
6. The local health department shall provide a copy of each approval or denial based on an OSE or OSE/PE certification to the licensed individual that certified the site. Additionally, a copy of any Level 1 and Level 2 forms used in the review of the submittal shall be provided to the owner and the OSE/PE. This policy is not intended to create a burdensome procedure or extensive copying process. Sending a copy of the approval or denial letter including the permit identification number (when the approval is for a construction permit), and a copy of the Level 1 and Level 2 forms (when applicable), normally shall be sufficient to comply with this policy. If for whatever reason, the Department's permit is different from that certified by the OSE/PE, then the Department shall also include a copy of the permit, and an explanation of the revision(s), in addition to the approval letter so that all differences are readily identified.

B. Revalidating Expired OSE/PE Permits; Relying on Previous Certifications.

1. In general, VDH will rely upon the certified evaluation or design of an OSE/PE when considering renewal or revalidation of an expired permit as long as the OSE/PE provides reasonable assurance no substantive intervening changes have occurred.
2. When VDH has issued a construction permit in reliance upon the work of an OSE/PE and that permit has expired the following shall apply:

- a. Pursuant to Va. Code § 32.1-164.1:1: “*if a building permit has been obtained or building construction has commenced, the permit may be extended for an additional 18 months.*” Unless the local or district health department is aware of specific facts supporting a conclusion that the permit does not substantially comply with applicable regulations or no construction has commenced, then staff will extend the permit by adding eighteen months to the original term of the permit upon request. No additional extensions may be permitted.
- b. Before a permit is extended, the local or district health department will require a signed statement from the property owner or OSE/PE affirming that there has been no “substantial, intervening change in the soil or site conditions where the onsite sewage system is to be located and building construction commenced prior to expiration of the permit.”
- c. No new OSE certification is required when an applicant seeks to renew an expired permit with no changes in the design or location of the system or in the location of the structure.

3. In some circumstances ~~new new certifications~~ certifications along with new applications and fees are required. Examples of such situations include, but are not limited to, new approvals (letter, permit, or subdivision lot), modification of an existing approval, and changes to an existing or expired construction permit design.

Comment [TD10]: Following FAQ

C. Design Changes

The OSE/PE, with the consent of the owner, may make certain design changes to a valid construction permit without prior approval of the health department. No new application or fee shall be required. Such changes must comply with the following:

1. For onsite sewage systems the design change shall not affect any of the following design parameters:
 - a. The proposed daily flow (GPD);
 - b. The proposed waste strength (e.g. residential, commercial);
 - c. The proposed level of treatment (including nitrogen reduction and disinfection);
 - d. The proposed dispersal area foot print (location or size); or
 - e. The proposed dispersal method; (minor adjustments to the dispersal area are allowed).⁽¹⁾
2. All changes for onsite sewage systems must fully comply with all applicable codes, regulations and policies.
3. The designer shall provide the health department with complete documentation including a list of all changes and revised specifications, calculations and drawings as part of a complete

⁽¹⁾Minor adjustments will be allowed to installation depth and dispersal area configuration that are i) supported by site and soil evaluations on file (i.e., no additional site or soil evaluation required), ii) contained within the perimeter of the originally designated absorption area, and iii) do not require additional field (Level II) review.

revised design package. Such documentation should be submitted prior to installation of the system.

4. The designer and owner are responsible for ensuring that all design changes are communicated to the onsite sewage system installer and/or water well system installer.

For private wells, all design changes will require a new application and a new fee. Therefore, it is vital that the OSE/PE discuss the proposed well location with the owner and their well driller (if possible) prior to submitting an application. The use of well areas is encouraged in areas deemed appropriate by the OSE/PE. The use of well areas can avoid unnecessary follow-up site evaluations. Where dry holes or low yielding wells are common, or other conditions indicate their use (such as with close loop geothermal well systems), a well area may be more appropriate than a well site. When a well area is designated and a dry hole is encountered, a well driller may drill multiple wells without reapplying for a new permit for each new site, provided the dry holes are properly abandoned in accordance with the *Well Regulations*.

VDH will review any changes before issuing an operation permit or well approval. Any changes that do not fully comply with this section and applicable regulations may result in the construction permit being deemed null and void. In such case, the owner will be required to submit a new application and a new application fee. If improperly installed, the owner may be required to abandon the sewage system and/or private well.

The designer and owner are responsible for assuring that any design changes fully comply with all applicable laws and regulations. The cost to correct an error created by a design change initiated by the owner or designer without prior approval by VDH will not be considered a hardship when processing a variance request.

D. Professional Courtesy Reviews.

1. VDH will provide consultative field reviews with an OSE/PE when requested if possible. The courtesy review must be requested prior to the filing of any application with VDH, or prior to filing any documents with a local government for a proposed subdivision. The courtesy review is discretionary and not subject to time limits.
2. Courtesy reviews are not intended to relieve an OSE/PE of the responsibility for determining whether a site complies with applicable regulations.
3. The OSE/PE requesting a courtesy review must file a request in writing and the property owner must provide permission for VDH to enter the property.
4. The OSE/PE must provide a brief, written description of the specific questionable or marginal site or soil feature where the courtesy review is being requested.
5. Requests should be logged into VENIS. All activities, evaluations, and results of the courtesy review shall be documented.

6. VDH determinations regarding site and soil characteristics from courtesy reviews are not case decisions and no written response is required. They cannot be appealed nor are they binding on any party.
7. VDH may limit professional courtesy reviews. If a local or district health department elects not to provide a requested courtesy review, it must inform the OSE/PE in writing.

E. Processing time limits for applications subject to deemed approval.

1. VDH shall review and process applications subject to deemed approval within the time frames specified in Table 4. If the application is denied, then VDH shall set forth in writing the reasons for denial.

Table 4: Processing Times for Applications subject to Deemed Approval

Type of Application	Time Limit
Individual Permit Application	15 working days
Individual Certification Letter	20 working days
Multiple Lot Certification Letter	60 days
Subdivision Review	60 days

F. Processing time limits for applications NOT subject to deemed approval.

1. Applications submitted pursuant to Va. Code Section 32.1-163.6 are not subject to deemed approval; however, the *Code* requires VDH to process them within 21 or 60 days, depending on the application.
 - a. Within 21 calendar days from the date of application for treatment works sized at 1,000 gallons per day or smaller, and within 60 calendar days from the date of application for treatment works sized at more than 1,000 gallons per day, the Department shall (i) issue the requested approval, or (ii) set forth in writing the specific reasons for denial.
2. Any application for a proprietary, pre-engineered system that has been deemed by VDH to comply with the Board's regulations should be processed in the time frames identified in Table
4. VDH may accept evaluations and designs for such proprietary, pre-engineered systems in accordance with this policy; however, the processing time limits and deemed approval shall not apply to any such application.
3. For requests for courtesy reviews, VDH should inform the OSE/PE within seven days whether the courtesy review can be scheduled. The courtesy review should be made within 180 days of the request if possible.

Part IV: Final Inspections

A. The local health departments will perform 100% construction inspections of all onsite sewage systems and wells for both VDH and private sector designs. At a minimum, staff will obtain and

record (in VENIS) GPS coordinates for all onsite sewage disposal systems, alternative discharge systems and private wells as specified in previous GMP's. Inspections will take place prior to issuance of the Operation Permit.

A. General Requirements and Expectations:

Onsite Sewage System - VDH OSE Design:

1. Following issuance of a permit, the licensed installers shall notify the appropriate local or district health department one (1) business day in advance of construction to request a final inspection.
2. VDH staff will inspect the entire system to determine whether the installation complies with all applicable regulations and the permit. All observations must be documented during inspection and entered into VENIS.
3. Location information of the tank and distribution box will be recorded by VDH staff by entering the GPS coordinates into the VENIS database.
4. VDH staff must complete an as-built drawing of the installation. Field measurements should be taken to the septic tank, the distribution box, and other necessary components.
5. VDH staff should secure the contractor's completion statement at the time of inspection.
6. If no deficiencies are noted during the inspection, VDH staff shall inform the installer of the satisfactory inspection. An inspection statement reporting the proper installation of the system will be provided to the property owner within two (2) business days of the inspection, and shall note any additional information required to obtain an operation permit.
7. If deficiencies are noted during the inspection, VDH staff shall inform the installer of the deficiencies. If the deficiencies can be corrected during the inspection, VDH staff will note the correction. If the deficiencies cannot be corrected during the inspection, VDH staff will notify the owner of the deficiencies in writing either certified mail or hand delivery within one (1) business day and include information regarding the owner's right to appeal the decision to deny approval of the installation.

Onsite Sewage System - Private Sector OSE/PE Design:

1. Following issuance of a permit, the licensed installers shall notify the certifying private sector OSE/PE in advance to request a final inspection. The necessary notification timeframe is determined by the private sector OSE/PE, in consultation with the installer (many private sector OSEs/PEs provide requested inspection notification timeframes within their proposed designs). Before starting construction, the installer shall also notify the appropriate local or district health department at least one (1) business day in advance to request a final inspection.
2. In accordance with Va. Code § 32.1-164.1.E, the certifying private sector OSE/PE shall inspect the system at the time of installation, the private sector OSE/PE is responsible for the final

inspection of their system design; the responsibility shall extend to any subsequent re-issuance of the permit (e.g. renewal, change of owner, etc.). The certifying private sector OSE/PE is responsible for inspecting the entire system to determine whether the installation complies with the applicable regulations and the permit. The OSE/PE must complete an as-built drawing of the installation. Field measurements should be taken to the septic tank, the distribution box, and other necessary components. The private sector OSE/PE should secure the contractor's completion statement at the time of inspection and file with the applicable local health department as soon as possible.

3. VDH is responsible for informing the OSE/PE of the re-issuance of a permit by sending a copy of the permit approval letter to the OSE/PE who originally designed the system.
4. The VDH inspection can take place at any point during the installation. VDH staff will focus on the location, treatment level, depth, and sizing of the installation. Location information should be recorded by VDH staff by entering GPS coordinates of the tank and distribution box into the VENIS database. The VDH construction inspection of private sector submittals may not be a complete system review and will not include additional soil evaluations. VDH staff are encourage to conduct their inspection prior to, or in coordination with, the private sector OSE/PEs inspection.
5. When conducting a joint inspection, VDH staff may secure the contractor's completion statement at the time of inspection. However, if VDH staff is not present at the time when the private sector OSE/PE completes the final inspection, the private sector OSE/PE should secure the contractor's completion statement and provide a copy to the appropriate district or local health department along with the inspection report.
6. If VDH staff observes deficiencies during the inspection, VDH staff shall inform the certifying private sector OSE/PE and installer of the deficiencies. If the deficiencies can be corrected during the inspection, VDH staff will note the correction. If the deficiencies cannot be corrected during the inspection, VDH staff will notify the owner of the deficiencies in writing either certified mail or hand delivery within one (1) business day and include information regarding the owner's right to appeal the decision to deny approval of the installation.
7. If the certifying private sector OSE/PE does not observe any deficiencies during the inspection, the certifying private sector OSE/PE should inform the installer of the satisfactory inspection. The installer can then cover the system, even if VDH staff has yet to conduct their inspection provided VDH was given notice of the installation. If VDH staff were not notified, VDH may withhold final approval pending further review with the installer. In accordance with Va. Code § 32.1-164.1.E, the certifying private sector OSE/PE shall provide an inspection report to the appropriate district or local health department documenting their inspection observations and recommendation to approve the system installation. No system components shall be covered until the certifying private sector OSE/PE has inspected and approved the system components.
8. If the private sector OSE/PE observes deficiencies during the inspection, the OSE/PE shall inform the owner, VDH staff, and installer of the deficiencies. If the deficiencies can be corrected during the inspection, the OSE/PE will note the correction. If the deficiencies cannot be corrected during the inspection, the OSE/PE shall provide a written inspection report noting

~~the deficiencies to VDH. VDH staff will notify the owner that an inspection approval from the OSE/PE is required and that the OSE/PE has declined to certify the installation within one (1) business day of receiving the inspection statement. VDH will also notify the owner of their right to petition VDH to inspect the installation and render a final case decision approving or disapproving the installation. Decisions to grant or deny petitions for VDH inspections will be determined on a case-by-case basis.~~

Private Wells:

~~An OSE/PE is expected to perform a final inspection for any private well installed pursuant to a construction permit based on a design certified by the OSE/PE. VDH is required to inspect all onsite systems and private wells, including those installed pursuant to a construction permit design certified by a private sector OSE/PE. The well driller shall notify the local health department and private sector OSE/PE (if applicable) prior to starting a new well. Inspections may be made during construction or prior to placing the well in service; however, staff is encouraged to inspect during the grouting process.~~

General Requirements and Expectations:

- ~~1. An OSE/PE is expected to perform a final inspection for any sewage disposal system installed pursuant to a construction permit based on a design certified by the OSE/PE. VDH may, but is not required to, inspect systems designed by a private sector OSE/PE. Installers should always notify the appropriate local or district health department whenever they are ready for a final inspection, regardless of whether that inspection is the responsibility of a private sector OSE/PE or VDH.~~
- ~~2. Each OSE/PE should attempt to secure the contractor's completion statement at the time of inspection and file with the applicable local health department as soon as possible.~~
- ~~3. Local and district health departments should perform final inspections of at least 10% of private sector OSE/PE designed systems. Local and district health departments are discouraged from conducting final inspections as a routine method for accomplishing Level 2 Reviews. -~~
- ~~4. Whenever an OSE/PE is responsible for the final inspection of an onsite system, that responsibility shall extend to any subsequent re-issuance of the permit (e.g. renewal, change of owner, etc.). VDH is responsible for informing the OSE/PE of the re-issuance of a permit by sending a copy of the permit approval letter to the OSE/PE who originally designed the system.~~
- ~~5. Whenever an OSE/PE conducts an inspection of a system and cannot approve it, the OSE/PE should immediately notify the owner in writing and send a copy of the notice to the appropriate local or district health department. The written notice must include an explanation of the reasons for the OSE/PE's refusal to approve. Whenever an OSE/PE requires corrective actions prior to determining a system is properly installed, the inspection report and completion statement must document those corrective actions.~~
- ~~6. OSE/PEs should always submit as built installation drawings. Field measurements should be taken to the septic tank, the distribution box, and other necessary components. If the sewage~~

Comment [TD11]: To follow HB 2477.

system's location and details did not change from the construction permit, then the OSE/PE should note that information on the inspection report.

An OSE/PE is expected to perform a final inspection for any private well installed pursuant to a construction permit based on a design certified by the OSE/PE. VDH is required to inspect all private wells, including those installed pursuant to a construction permit based on a design certified by a private sector OSE/PE. The well driller shall notify the local health department and private sector OSE/PE (if applicable) prior to starting a new well. Inspections may be made during construction or prior to placing the well in service.

Index of Forms. Forms are available upon request from the Division or they may be obtained by visiting the VDH website: vdh.virginia.gov. Forms are subject to change without notice; therefore, all OSEs and PEs are encouraged to periodically review the VDH website to ensure they are using the most current forms.

- Form 1: Application for a Sewage Disposal System and/or Private Well Construction Permit
- Form 2: Cover Page
- Form 3: OSE/PE inspection form
- Form 4: Example request for subdivision review
- Form 5: Request for professional courtesy review
- Form 6: Site and soil evaluation report
- Form 7: Example construction drawing page
- Form 8: Example system specifications worksheet
- Form 9: Example private well specification worksheet
- Form 10: Example private well abandonment specification worksheet
- Form 11: Request for Survey Waiver
- Form 12: Verification of Sewage System Location
- Form 13: Refund Affidavit
- Form 14: Condition Assessment FormMalfunction Assessment

Comment [TD12]: We need to change the form on the website and state where the form is located in all three policies (2017-01, 2017-02 and 2017-03).

MEMORANDUM

DATE: March 17, 2017

TO: Mike Lynn, Chair, Sewage Handling and Disposal Advisory Committee

FROM: Alan Brewer, Chair, Regulatory Reform Subcommittee

THROUGH: Regulatory Reform Subcommittee: Lance Gregory, Morgan Kash, Curtis Moore, Valerie Rourke

SUBJECT: Options for Regulatory Reform

BACKGROUND: At the April 15, 2015 Sewage Handling and Disposal Advisory Committee (Committee) meeting, members and other stakeholders were asked to identify items they felt should be discussed at future meetings. Committee members then “voted” for items that they thought should be the highest priority for Committee to consider. At the December 2, 2015 meeting, the Committee discussed issues related to regulatory review and revision. During this discussion Committee members noted that many of the priority items identified on April 15, 2015 were related to regulatory reform. As a result of these ongoing discussions, the Committee created a Regulatory Reform Subcommittee (Subcommittee) and directed that Subcommittee to “*assess and propose to the SHADAC, options for regulatory reform*”.

The Subcommittee met five times in 2016. Meeting summaries can be found at the Town Hall website - [Virginia Regulatory Town Hall Home Page](#). The Subcommittee used a systematic process to effectively and efficiently meet its objective. This process included the following steps:

- Affirm the responsibilities and purpose of the Subcommittee.
- Obtain an understanding of the current regulatory framework and conditions.
- Identify areas of the current program that work well.
- Identify challenges/issues with the current program.
- Identify options for regulatory reform.

PROCESS:

Affirm the responsibilities and purpose of the Subcommittee

The Subcommittee recognized, and the Committee confirmed, that the options for regulatory reform should not be limited to regulations. The intent of the directive was to offer options to reform any aspect of the Virginia Department of Health (VDH) Onsite Sewage and Water Services Programs (OS&WSOP). The Subcommittee agreed to a goal to serve as the criteria for development of options to be provided to the Committee.

The goal of the Subcommittee is to present a broad set of options for regulatory and programmatic reform that are protective of public health and the environment, and result in a consumer friendly, flexible, progressive and collaborative program.

Importantly, the Subcommittee did not limit their discussions to existing conditions, authorities, or likelihood of adoption or success. Effectively, the discussions were not bound by “historic baggage” and other constraints.

Obtain an understanding of the current regulatory framework and conditions

Due to the diverse composition, perspectives, and experiences of Subcommittee members, VDH staff provided for the benefit of the Subcommittee an overview of core functions and responsibilities, and regulations administered by OS&WSP (see Attachment 1). This information was a catalyst for developing options.

Identify areas of the current program that work well

The Subcommittee recognized that there are aspects of the existing program and regulations that work well and should not be discounted when considering options for reform. These aspects were discussed at length during meetings. The essence of these discussions can be found in the meeting summaries, particularly the summary of the May 11, 2016 meeting.

Identify challenges/issues with the current program

Before attempting to identify options for reform, the Subcommittee first characterized the challenges and issues with the existing program. In other words, the Subcommittee described the problems before discussing potential solutions. The list of challenges identified by the Subcommittee is included as Attachment 2. The Subcommittee provided this list to the Committee in May 2016 for input and did not receive any comments. The Subcommittee grouped the challenges into four categories: Conflicting Regulations, Program Administration, Paradigm Shift, and Resource. Categorizing the challenges helped the Subcommittee focus their discussions of possible solutions.

Conflicting Regulations includes issues related to contradictions, inconsistencies, incompatibilities, and variations in practices, policies, ordinances, regulations and codes.

Program Administration includes issues related to managing, directing, overseeing and governing program responsibilities.

Paradigm Shift includes issues where a fundamental change in approach or underlying assumptions is necessary for change.

Resource issues are related to financial disparity, inflexibility and reasonableness of the program.

Identify options for regulatory reform

Building on the previous steps in the process, the Subcommittee was able to enumerate options for regulatory reform. It is important to note that the options described below are not recommendations from the Subcommittee, they are simply possibilities for the Committee to evaluate further.

OPTIONS FOR REGULATORY REFORM:

Conflicting Regulations Options

- Codify that VDH will enforce local ordinances when they are more stringent than state requirements.
- Create a model ordinance that localities could chose to adopt so every locality has the same standard for requirements not included in the state regulations.
- Prohibit localities from having local ordinances that are more stringent than state regulations.
- Create a process where VDH's regulations are a higher level view of requirements, and then allow VDH to create an implementation manual to apply the regulations. VDH could then revise the implementation manual without going through the regulatory process every time.
- Combine regulations where possible.
- Conduct a comprehensive assessment of all the regulations to identify and resolve conflict.
- Review all of the policies and codify areas where there needs to be an enforceable requirement rather than guidance.
- Review local ordinances and national industry standards and incorporate good practices in the regulations.
- If a national model code becomes available, shift to the building code model for adopting regulations.
- The Health Commissioner could advocate for a national model code.
- VDH could work with other agencies in a more prescribed manner than just having them sit on the SHADAC and other committees and have the different agencies meet at some frequency to discuss changes and overlap. The first point of discussion at the inter-agency meetings should be to determine where conflicts exist.
- Eliminate the regulations and let local governments or another agency take over the program.

Program Administration Options:

- Dictate by policy that VDH will not enforce local ordinances.
- Codify or mandate that local ordinances must follow the Administrative Processes Act.
- Dictate that appeals of local ordinances must go through VDH.
- Have regional sanitarians to help with consistency across the state.
- Revise regulations so that they only contain requirements that VDH is willing to enforce through the courts.
- Match VDH resources areas that have the highest risk to public health. This would require an assessment of responsibilities, resources and outcomes.
 - Hire a consultant to evaluate VDH's responsibilities/tasks, the associated risk, and where resources should be directed;

-OR-

- VDH evaluates its responsibilities/tasks, the associated risk, and where resources should be directed.
- Provide stakeholders with VDH's goals and measures for the program.
- Change the way VDH inputs and uses data to improve enforcement of alternative onsite sewage system (AOSS) operation and maintenance (O&M).
- Allocate more resources to O&M.
- Administer O&M from the Central Office; evaluate the potential to centralize the initial enforcement phase for O&M (e.g. sending notices to owners).
- Use the private sector more for data collection and entry.
- Propose a statutory or regulatory change so that licensees could have their license revoked if they falsify a document.
- Instead of making the owner responsible for O&M of the system, make the operator responsible or mandate joint responsibility in an effort to make the operator responsible for compliance and enforcement.
- Create a renewable operations permit for all AOSS, not just the large systems.
- Rather than mandating O&M, create more conservative regulations (e.g. more conservative site condition requirements).
- Create a program for conventional onsite sewage system O&M.
- Allow VDH staff to perform non-enforcement contact with owners when potential issues are observed but the issues do not rise to the level of enforcement.

Paradigm Shift Options:

- Use a risk based regulatory model that takes into account items like sensitive sites and lot size.
- Modify the program to a watershed perspective not a statewide standpoint.
- Engage a consultant or contractor outside of VDH to evaluate the potential to refocus efforts to what is really important; don't do things just because they've always been done.
- Evaluate whether there are other VDH programs (e.g. Community Health Services, Health Equity) that can assist with community health issues related to onsite sewage and private wells.
- Incorporate a responsible management entity (RME) model into the regulatory scheme.
- Where there is jurisdictional overlap with other agencies, have VDH provide more information regarding human health impacts.
- Allow licensed entity's to design and install systems outside the regulations provided they are willing to bond the system.
- Require that completion statements are signed by a licensed installer.
- Require that licensed operators get hauler permits; VDH inspector has to certify that the installer is licensed.
- Have VDH establish an internal working group to improve communication between offices and agencies.

Resource Options

- Establish a repair fund.
- Regarding betterment loans, evaluate the potential for a program where VDH backs betterment loans, and determine what can be done to allow the program to better serve low income homeowners.
- Incorporate a funding structure into new fees.
- Charge fees for services that currently do not have a fee.
- Work with the Department of Environmental Quality and other partners to get greater access to the state revolving loan funds for onsite sewage system projects.
- Allow localities to establish sewer service districts countywide. Everyone in the district pays a monthly fee, and when their onsite sewage system fails the service authority is responsible for the repair. Could also use private provider models.

The Subcommittee sincerely appreciates the opportunity to provide this information to the Committee and looks forward to future discussions related to the options presented.

ATTACHMENTS:

1. VDH - Current Regulatory Environment
2. List of Challenges

ATTACHMENT 1

Virginia Department of Health Onsite Sewage and Water Services Program Structure

The Code of Virginia (the Code) established the Virginia Department of Health (VDH) to administer and provide comprehensive environmental health services, to educate citizens about health and environmental matters, develop and implement health resource plans, collect and preserve health statistics, assist in research, and abate hazards and nuisances to the health and the environment. The purpose of these activities is to improve the quality of life in the Commonwealth.

The Division of Onsite Sewage and Water Services, Environmental Engineering, and Marina Programs (DOSWSEEMP) and local health department (LHD) Environmental Health (EH) staff are tasked with administering sections of the Code dealing with onsite sewage systems, alternative discharging systems, and private wells (the Onsite Sewage and Water Services Program). Activities outlined by the Code within the Onsite Sewage and Water Services Program include:

- Long range planning for the handling and disposal of onsite sewage.
- Review (office and field) of applications with corresponding work from private sector designers for subdivision reviews, permit approvals, letters for residential development, and private well construction.
- Issuance of construction permits or denials for applications with corresponding work from private sector designers.
- Field review and system design of certain applications without corresponding work from private sector designers to issue or deny permits for the construction, installation, and modification of a sewerage system or treatment works.
- Development of the Engineering Design Review Panel (EDRP).
- Implement regulations regarding operation and maintenance of alternative discharging sewage systems.
- Conduct regular inspections of alternative discharging sewage systems.
- Establish and implement regulations governing the collection, conveyance transportation, treatment and disposal of sewage by onsite sewage systems and alternative discharging sewage systems.
- Establish and implement regulations regarding the maintenance, inspection, and reuse of alternative onsite sewage systems (AOSS).
- Collection of fees and assessment of fee waivers for onsite sewage system and private well permit applications.
- Establish and maintain a statewide web-based reporting system to track the operation, monitoring, and maintenances of AOSS.
- Establishment and administration of a uniform schedule of civil penalties for violations of onsite sewage and alternative discharge regulations.
- Process appeals for adverse case decisions.
- Establish and implement an onsite sewage indemnification fund.
- Process and grant waivers, where applicable, from treatment and pressure dosing requirements.

- Establish and implement a betterment loan eligibility program.
- Process permit applications and waiver request for voluntary upgrades.
- Administer the Onsite Operation and Maintenance Fund.
- Process safe, adequate and proper evaluations.
- Enter into agreements with any appropriate federal agency to regulate and monitor the collection, transportation, conveyance, treatment and disposal of sewage.
- Establish and facilitate the Sewage Handling and Disposal Appeal Review Board.
- Establish and implement regulations pertaining to the location and construction of private wells.

Under authority provided by the Code, the Board of Health has promulgated the following regulations pertained to the Onsite Sewage and Water Services Program: the Sewage Handling and Disposal Regulations (12VAC5-610), the Regulations for Alternative Onsite Sewage Systems (12VAC5-613), the Fee Regulations (12VAC5-620), the Private Well Regulations (12VAC5-630), the Alternative Discharging Sewage Treatment Regulations (12VAC5-640), and the Schedule of Civil Penalties (12VAC5-650). The primary purpose(s) for each of these regulations is listed below:

Sewage Handling and Disposal Regulations

- To assure that all sewage is handled and disposed of in a safe and sanitary manner;
- To guide the State Health Commissioner in her determination of whether a permit for handling or disposing of sewage should be issued or denied; and
- To guide property owners in the requirements necessary to secure a permit for handling and disposing of sewage.

Regulations for Alternative Onsite Sewage Systems

- To establish a program for regulating the operation and maintenance of AOSS;
- To establish performance requirements for AOSS;
- To establish horizontal setbacks for AOSS that are necessary to protect public health and the environment;
- To discharge the Board's responsibility to supervise and control the safe and sanitary collection, conveyance, transportation, treatment, and disposal of sewage by onsite sewage systems and treatment works as they affect the public health and welfare;
- To protect the quality of surface water and ground water;
- To guide the Commissioner in determining whether a permit or other authorization for an AOSS shall be issued or denied;
- To inform property owners, applicants, onsite soil evaluators, system designers, and other persons of the requirements for obtaining a permit or other authorization for an AOSS; and
- To develop, as DOSWSEEMP deems necessary, best management practices for the purpose of recognizing acceptable methods to reduce pollution from AOSSs.

Fee Regulations

- To establish a procedure for determining the fees for services provided by the department for onsite sewage systems, alternative discharge systems, and private wells;
- To establish procedures for the refund of fees; and
- To establish procedures for the waiver of fees.

Private Well Regulations

- To Ensure that all private wells are located, constructed and maintained in a manner which does not adversely affect ground water resources, or the public welfare, safety and health.;
- To guide the Commissioner in her determination of whether a permit for construction of a private well should be issued or denied;
- To guide the property owner or his agent in the requirements necessary to secure a permit for construction of a private well; and
- To guide the property owner or his agent in the requirements necessary to secure an inspection statement following construction.

Alternative Discharging Sewage Treatment Regulations

- To ensure that discharging systems are permitted, constructed, and operated in a manner which protects the environment and protects the public welfare, safety and health;
- To guide the commissioner in her determination of whether a permit for construction and operation of a discharging system should be issued or denied;
- To guide the property owner or his agent in the requirements necessary to secure a permit for construction of a discharging system;
- To guide the owner or his agent in the requirements necessary to secure an operation permit following construction;
- To guide the owner or his agent in the requirements necessary to operate and maintain a discharging system;
- To guide the Commissioner in her determination of whether a discharging system is being operated in a manner which protects public health and the environment; and
- To guide the Commissioner in her determination of what actions are appropriate to correct violations of this chapter.

Schedule of Civil Penalties

- To establish a uniform schedule of civil penalties for violations of 12VAC5-610 (includes 12VAC5-613), and 12VAC5-640;
- To support enforcement activities necessary to discharge the Board's responsibility to supervise and control the safe and sanitary collection, conveyance, transportation, treatment, and disposal of sewage as they affect the public health and welfare;
- To support enforcement activities necessary to discharge the Board's responsibility to exercise due diligence to protect the quality of ground and surface waters; and
- To guide the Commissioner in charging civil penalties.

In addition to these regulatory sections, the Board also promulgated the Authorized Onsite Soil Evaluator Regulations (12VAC5-615) to implement, administer, and enforce licensing requirements for onsite soil evaluators. However, the 2007 Virginia General Assembly enacted House Bill 3134, which transferred implementation, administration, and enforcement of licensing to the Department of Professional and Occupational Regulation. DOSWSEEMP is currently in the process of developing a proposed action to repeal 12VAC5-615.

The administration of the Code and these regulations are essentially broken into two staffing segments: DOSWSEEMP staff and local health department EH staff. The general duties of each of those segments is provided below.

Central Office

DOSWSEEMP staff are responsible for programmatic activities such as: providing assistance within the legislative process; regulatory development; policy and guidance development; agency staff and industry stakeholder training; database management; programmatic data analysis; website management; variance processing; indemnification fund processing; product evaluations; EDRP processing; Sewage Handling and Disposal Advisory Committee facilitation; agency representation before the Sewage Handling and Disposal Appeals Board; providing assistance to local health departments for appeals processing; providing technical assistance to local health department when dealing with complex cases; development of agreements with federal and state agencies, where applicable (e.g. Chesapeake Bay Watershed Implementation Plan); long range planning; and overall program quality assurance.

Local Health Departments

The local health department EH staff are responsible for programmatic activities such as: processing applications; issuing or denying permits for onsite sewage systems, alternative discharging sewage systems, and private wells (with or without accompanying work from private sector designers); inspection of onsite sewage systems, alternative discharging sewage systems, and private wells; data entry for onsite sewage system, alternative discharging system, and private well applications, permits, installations, and operation; processing request from local governments for development (safe, adequate and proper evaluations, subdivisions proposals, special use permits, etc.); issuance of operation permits for onsite sewage systems and alternative discharging systems; issuance of inspection statements for private wells; issuance of pump and haul permits; inspection and approval of sewage handlers; providing courtesy reviews of private sector evaluations; sewage and water complaint investigations; administration of enforcement actions when violations of sewage and well regulations are observed; enforcement of required operation and maintenance for AOSS and alternative discharging sewage treatment systems; conducting informal fact finding conferences; conducting Level I and Level II reviews of private sector work; conducting field evaluations and designs for bare applications; inspection of discharge systems; and administration of other activities outline through agreements with local governments.

ATTACHMENT 2

Virginia Department of Health
Sewage Handling and Disposal Advisory Committee
Regulatory Reform Subcommittee
June 20, 2016

Challenges/Issues Categorized

Challenge / Issue	Category
Issues regarding local ordinance enforcement when the site/design fully complies with state regulations, but not local ordinance. There are a lot of localities that have ordinances that do not conform with VDH regulations (e.g. Louisa County ordinance requires cast iron sewer pipe).	Program Administration/Conflicting Regulations
Various layers of regulations and local ordinances that don't always align. That leads to conflict or confusion.	Program Administration/Conflicting Regulations
GMPs at times are treated as regulation and not guidance. They also at times conflict or do not align with all regulations or other policies.	Program Administration/Conflicting Regulations
Customer service and transparency become issues because of the conflicts between the various layers of regulations and local ordinances.	Conflicting Regulations
Historical baggage.	Paradigm Shift
Need more interconnection with other programs within VDH, and other agencies at state and federal levels. When there is potential overlap of VDH programs with those of other state agencies, really need to spell it out in the regulations or MOUs.	Paradigm Shift
Need to look at wastewater as part of a spectrum of water management (e.g. VDH also needs to look at its role in surface water and groundwater quality and management issues).	Paradigm Shift
Community wastewater problems are different than individual system problems, but the current program treats them the same.	Paradigm Shift
What is a "failing system"? Need to distinguish between repairs and voluntary upgrades.	Paradigm Shift
The regulations provide somewhat of a preferential benefit to someone that can afford to install an alternative system on sites where less expensive conventional systems cannot be used (e.g. direct dispersal - poor person couldn't develop the property but a rich person can).	Paradigm Shift
Installers upset that unlicensed contractors are still getting their system installations approved.	Paradigm Shift

Challenge / Issue	Category
EPA design manual says onsite sewage programs should become more involved with watershed protection planning. This is not currently the case in Virginia. For instance, a locality has an impaired waterway. The locality determines the best way to address that issue is stream buffers, so the county spends significant funds on buffers. But then under state regulations developer installs an onsite sewage systems within the buffer because it meets the regulations even though it's not part of the County's plan to improve the impaired waterway. This relates to two other challenges noted below: (1) Need to look at wastewater as part of a spectrum of water management, and (2) Need more interconnection with other programs within VDH, and other agencies at state and federal levels.	Paradigm Shift
Concerned about permits for alternative systems being issued in areas that clearly shouldn't be developed (e.g. sensitive receiving environments) even though the site meets the minimum regulations.	Program Administration / Paradigm Shift
Are VDH resources aligned with the goals of the program? (first flush vs. ongoing maintenance).	Program Administration
Lack of enforcement on O&M, and regulatory oversight.	Program Administration
Perception that VDH staff think just because a PE signs off on a design they (VDH staff) have to permit the design.	Program Administration
Issue with consistency and lack of enforcement statewide, possibly resulting from the elimination of the regional sanitarians.	Program Administration
Blurred line when a VDH employee steps over from being a regulator to being a designer.	Program Administration
Information dissemination is a challenge, especially regarding O&M.	Program Administration
The fee structure for repairs. Should repair permits really be free for everyone? Should we even be reclassifying repairs versus construction permits? Why not make everything a construction permit that must fully comply with the regulations? Should there be a sliding scale for the cost of repairs based on the income of the household serviced by the system?	Program Administration / Resource
The Betterment Loan program doesn't work for low income homeowners.	Resource
There is one regulatory standard that has no flexibility to deal with income. Regulations can facilitate grants/exemptions, but there needs to be another financial solution from an external source.	Resource
How do you handle case with a \$10,000 trailer on a \$5,000 lot that needs a \$20,000 septic system?	Resource

~~September~~ January 14, 2017

MEMORANDUM

TO: District Health Directors
Environmental Health Managers
Office of Environmental Health Services Staff
~~VPI Contract Soil Scientists~~
Onsite Soil Evaluators
Professional Engineers

GMP #2017-031

THROUGH: Marissa J. Levine, MD, MPH, FAAFP
State Health Commissioner

THROUGH: Allen Knapp, Director
Office of Environmental Health Services

FROM: Dwayne Roadcap, Director
Division of Onsite Sewage and Water Services, Environmental Engineering
and Marina Programs

SUBJECT: GUIDANCE MEMORANDUM AND POLICY 2017-01: Onsite Sewage Application
Expectations and Requirements. This policy revises GMP 2015-01. GMP 2015-01 is
~~hereby rescinded.~~

Table of Contents

~~September 1~~January 1, 2017~~5~~..... 1

Part I: Background, Scope, General Requirements 3

 A. Authority..... 3

 B. Purpose, Scope, and Applicability..... 3

 C. Definitions..... 3

 D. Roles and Responsibilities..... ~~5~~4

 E. General Requirements..... ~~7~~6

Part II: Applications..... 7

 A. Applications: General ~~8~~7

 B. Construction Permit Applications..... ~~8~~7

 C. Certification Letter Applications ~~10~~9

 D. Subdivision Review Applications..... 10

 E. Documentation Required for Site Evaluation Reports..... 11

 F. Survey Plats..... 12

 G. Denials of Applications (not a principal place of residence):..... ~~13~~12

 H. Denials of applications (principal place of residence)..... ~~15~~14

 I. Prioritizing Applications ~~16~~15

 J. Work Product Expectations: ~~17~~16

Part III: VDH Review ~~20~~19

 A. Application Review..... ~~20~~19

 B. Revalidating Expired OSE/PE Permits; Relying on Previous Certifications..... ~~22~~21

 C. Design Changes..... ~~22~~21

 D. Professional Courtesy Reviews..... ~~23~~22

 E. Processing time limits for applications subject to deemed approval..... ~~24~~23

 F. Processing time limits for applications NOT subject to deemed approval..... ~~24~~23

Part IV: Final Inspections ~~25~~24

 A. General Requirements and Expectations: ~~25~~24

Index of Forms..... ~~28~~25

Part I: Background, Scope, General Requirements

A. Authority.

This policy is authorized by the *Private Well Regulations* (12 VAC 5-630, the *Well Regulations*), the *Sewage Handling and Disposal Regulations* (12 VAC 5-610, the SHDR), the *Regulations for Alternative Onsite Sewage Systems* (12 VAC 5-613, the AOSS Regulations) and the *Alternative Sewage Treatment Discharging Regulations for Single Family Homes* (12 VAC 5-640, the Discharging Regulations). This interim policy is further authorized by §32.1-164 of the *Code of Virginia (Code)*, which provides the Board of Health (Board) with the powers and duties to establish:

1. Processes for filing an application for an onsite sewage disposal system permit with the Virginia Department of Health (VDH).
2. Procedures for issuing letters recognizing onsite sewage sites in lieu of issuing onsite sewage construction permits.
3. Criteria for granting, denying and revoking permits for onsite sewage disposal systems.

B. Purpose, Scope, and Applicability.

The purposes of this document are to:

1. Inform applicants of the expectations for certification letters, subdivision approvals and construction permits in the onsite sewage and private well programs;
2. Provide guidance to agency staff and private sector professionals for processing the above applications; and
3. Establish expectations and deadlines for processing applications.

Comment [TD1]: This policy lays out roles for the private sector also.

This policy applies to all applications submitted to the VDH, including applications with supporting work from private sector designers. VDH shall accept, review, and approve or deny applications in accordance with the *Code*, applicable regulations, and VDH policies.

C. Definitions. The following words and terms have the following meanings unless the context clearly indicates otherwise:

“Backlog” is deemed to exist when the processing time for more than 10% of a local or district health department’s complete bare applications for construction permits exceeds a predetermined number of working days (e.g., a 15-day backlog exists when the processing time for more than 10% of permit applications exceeds 15 working days). When calculating backlogs, only applications for construction permits shall be counted.

“Bare Application” means an application for a construction permit or a certification letter submitted without supporting documentation from a private sector designer.

“Conventional Onsite Sewage System” (COSS) means a treatment works consisting of one or more septic tanks with gravity, pumped, or siphoned conveyance to a gravity distributed subsurface drainfield.

A COSS is an in-ground system design (See 12VAC5-610-594, A. and B.) where septic tank effluent is dispersed by gravity following the requirements in 12VAC5-610-930. All other dispersal designs, such as pads, are considered alternative onsite sewage systems and must meet the minimum requirements of 12VAC5-613.

“Complete Application” means an application for a construction permit or certification letter that includes all necessary information needed to process the application as specified by code, regulation or this policy.

“Deemed Approved” or “Deemed Approval” means that VDH has not taken action to approve or disapprove an application for a permit, an individual lot certification letter, multiple lot certification letters, or subdivision approval for residential development within the time limits prescribed in §§ 32.1-163.5 and 32.1-164 G of the *Code of Virginia*. In such cases, an application submitted in proper form pursuant to this chapter is deemed approved. “Deemed approved” means that the application is approved only with respect to the Board of Health’s regulations.

Sites previously denied by VDH and proprietary, pre-engineered systems deemed by VDH to comply with the Board’s regulations are not subject to the provisions of deemed approval.

“Multiple Lot Certification Letters” means two or more applications for certification letters filed by the same owner for existing or proposed lots to serve detached, individual dwellings.

“Onsite Soil Evaluator” (OSE) means a person who is licensed under Chapter 23 (§ 54.1-2300 et seq.) of Title 54.1 as an onsite soil evaluator. A licensed onsite soil evaluator is authorized to evaluate soils and soil properties in relationship to the effects of these properties on the use and management of these soils as the locations for onsite sewage systems.

“OSE/PE” means a licensed onsite soil evaluator, a professional engineer, or a professional engineer working in consultation with a licensed onsite soil evaluator.

“Processing Time” means the number of working days from the date a complete application is received by a local health department to the date a permit or certification letter is issued or denied. Working days characterized by severe weather conditions shall not be included in any calculation of processing time.

Comment [TD2]: Changed to be in alphabetical order.

“Professional Courtesy Review” means a site-specific field review requested by an OSE/PE prior to the submission of an application for a construction permit or certification letter or a general field consultation (not site-specific) regarding a proposed subdivision.

~~“Processing Time” means the number of working days from the date a complete application is received by a local health department to the date a permit or certification letter is issued or denied. Working days characterized by severe weather conditions shall not be included in any calculation of processing time.~~

“Single Lot Construction Permit/Certification Letter” means one application filed by an owner for a sewage disposal system construction permit or certification letter to serve an individual dwelling on one lot or parcel of land.

“Subdivision Review” means the review of a proposed subdivision plat by a local health department for a local government pursuant to a local ordinance and §§ 15.2-2242 and 15.2-2260 of the *Code of Virginia* and 12 VAC 5-610-360 of the *Sewage Handling and Disposal Regulations* for the purposes of determining and documenting whether an approved sewage disposal site is present on each proposed lot.

D. Roles and Responsibilities.

1. The Virginia Department of Health (VDH) shall:

- a. Review applications as necessary to assure compliance with applicable regulations and the department’s policies prior to approval or disapproval of an application.
- b. Conduct paperwork (Level 1) and field (Level 2) reviews prior to approving or denying applications as necessary to protect public health and the environment.

Comment [GL3]: JT Frazier: Some districts don't conduct Level 1, and indicates that it is 100%. May need to clarify.

~~e. Conduct construction inspections of private sector designed systems as necessary to protect public health and the environment.~~

42

~~d.c.~~ Provide a site-specific field courtesy review when requested by an OSE/PE as time and resources may allow. Such requests shall not be included in any calculation of backlogs nor shall they be subject to the time limits contained in this policy or to deemed approval. The professional courtesy review is voluntary and will be provided at the sole discretion of the local health department. Staff will not render case decisions for requests for courtesy reviews.

~~e.d.~~ Initiate procedures to revoke or modify permit approval, certification letter or subdivision approval when there is reason to believe the approval does not substantially comply with applicable regulations. VDH may revise a permit, certification letter, or subdivision approval upon the owner filing a new application or as outlined in Part III Section C of this document.

Comment [GL4]: JT Frazier: Need to add 100% inspection as a role and responsibility.

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2. The OSE/PE shall:

- a. Certify that work performed meets all applicable regulations when that work is used to seek a permit, letter, or other approval from VDH.
- b. Assure site evaluations and designs comply with all applicable regulations and this policy when applicable. See GMP #153 (or successor policy), Va. Code § 32.1-163.6, and other requirements within this policy.

- c. Inspect sewage systems installed based upon work submitted in support of a permit application subsequently approved by VDH.
- d. Complete an inspection and provide an inspection report and a completion statement to VDH for any sewage disposal system installed pursuant to a construction permit based on a design certified by the OSE/PE. ~~VDH may, but is not required to, inspect systems designed by a private sector OSE/PE.~~

Comment [TD5]: Following HB 2477.

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~~e. Disclose to property owners onsite sewage systems that are options and document disclosure on the cover page under the certification statement. The certification statement will include the following: "The potential for both conventional and alternative onsite sewage systems has been discussed with the owner/applicant."~~

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3. Professional Relationships

VDH staff and private sector designers must be mindful of the sometimes subjective nature of onsite sewage system evaluations and designs. On any site there may be a number of possible solutions to install an onsite sewage system, all of which must comply with the regulatory requirements.

It is paramount that VDH staff and private sector designers respect one another's professional judgment in such variable circumstances. A private sector designer forms an independent professional opinion based on an objective evaluation of all the relevant information available and his/her professional judgment. At the same time, VDH staff is equally qualified to form independent professional opinions based on an evaluation of the relevant information available.

When making case decisions, VDH employees must distinguish their professional opinion from an administrative responsibility to process permit applications based on facts. It is the private sector designer's responsibility to assure that his/her evaluation and design are completed in accordance with all applicable laws and regulations. Deference should be given to the private sector designer's professional judgment unless factual evidence is available to show that an evaluation and/or design does not comply with applicable laws and regulations.

When problems occur, VDH is obligated to take appropriate enforcement actions to assure public health and environmental protection. Local and district environmental health staff and directors are responsible for problem solving situations encountered regarding site approvals, system design, and construction.

VDH is a partner in trying to identify solutions. Private sector designers are expected to take primary responsibility for solving problems on sites where a permit is requested based on the private sector designer's supporting documentation. In all cases, the first steps to resolving problems should attempt to identify non-adversarial solutions that are mutually agreeable to the owner, the designer, and the agency.

E. General Requirements.

1. All requests for VDH approvals or reviews must be made on the appropriate application form (or in writing for courtesy reviews). The owner of record must give VDH permission to enter the property to process the application or request. Generally, applications for construction permits and certification letters begin with filing an application; requests for review of proposed subdivisions are initiated by a local government; and requests for courtesy reviews are initiated by a private sector OSE/PE.
2. All evaluation reports and designs submitted to VDH must be in the form specified by regulation, the Code of Virginia, and applicable agency policy. The designer must certify that the application substantially complies with the applicable regulations.
3. With respect to individuals involved in the design of any onsite sewage disposal system, VDH will require the designer to affix a professional engineer (PE) seal or provide a signed certification statement stating that the designer is exempt from the engineering requirements. The exemption statement shall identify the specific exemption under which the plans and specifications were prepared and certify that the designer is authorized to prepare such plans pursuant to the exemption. If the design is submitted without the required seal or statement, the application will be considered incomplete and will not be accepted. If the required seal or statement is provided, the local health department will evaluate the work for compliance with VDH regulations and policies and render an appropriate decision. Upon request, VDH will provide the Department of Professional and Occupational Regulation (DPOR) with reports containing information on individuals who invoke the exemption from the engineering requirements and information on the number and type of systems designed pursuant to said exemption.
4. The owner of the property or his agent is responsible for filing an application with the local health department. A complete application is required to apply for and receive a construction permit, certification letter, or denial.

4.5. Valid (non-expired) construction permits for onsite sewage systems and private wells are transferable to new property owners. Valid construction permits remain in force through property transfers. A new application is not required. The statement "This construction permit is transferrable until expired or deemed null and void. A permit transfer form may be found on VDH website under Onsite Sewage Forms." At the owner's request, VDH will revise owner information for valid construction and operation permits in VDH database. Submitting a permit transfer form is completely voluntary. Valid construction permits transfer to new owners whether or not a permit transfer form has been submitted. All sewage disposal construction permits are null and void when (i) conditions such as house location, sewage system location, sewerage system location, well location, topography, drainage ways, or other site conditions are changed from those shown on the application; (ii) conditions are changed from those shown on the construction permit; or (iii) more than 18 months elapse from the date the permit was issued. Add footnote to define what a valid permit is. Create a transfer form.

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Comment [TD6]: Change follows HB 2477.

Comment [GL7]: JT Frazier: Not a complete statement. Need to add "will be included on construction permits."

Part II: Applications

A. Applications: General

1. Incomplete applications delay timely and accurate decision making. Applicants are encouraged to assure all submittals are complete at the time of submission by following the guidelines below.
2. Applications submitted to VDH are either bare applications (i.e., without evaluation or designs from a private sector OSE/PE) or applications with complete supporting documentation as required for the type of application currently submitted (e.g., construction permit, certification letter, et al.) from a private sector OSE/PE.
3. This section outlines the minimum administrative and documentation requirements for processing an application. VDH staff OSEs are required to comply with the Work Product Expectations (WPEs) listed in Part II Section J below. Private sector OSEs and PEs are strongly encouraged to comply with the WPEs. VDH may make reasonable requests for additional documentation for any application when the agency deems such information necessary for making a case decision; failure to provide such documentation may result in denial of the application.

B. Construction Permit Applications

1. General: All applications with supporting work from a private sector OSE/PE for construction permits shall contain the following:
 - a. The correct and complete application;
 - b. The appropriate fees;
 - c. A site and soil evaluation report;
 - d. A proposed well site location and well specifications (when a private well is proposed);
 - e. Construction drawings and specifications for the system; and
 - f. A statement *on the cover page* certifying that the site and soil conditions and design substantially comply with applicable regulations.
 - g. When the application is for a repair permit or a voluntary upgrade permit, a completed Condition Assessment Form Malfunction Assessment (Form 14).

Comment [TD8]: This part is to conform with the voluntary upgrade/repair policy.

For bare applications, a VDH OSE shall provide the items c through g as part of the application processing procedure.

2. System Designs.
 - a. The OSE/PE must provide sufficient detail to allow an installer and well driller to accurately construct the onsite sewage system and private well (if applicable). Plans and specifications must be sufficient to allow the successful installation of the treatment works.
 - b. Construction drawings shall comply with 12VAC5-610-460. As a minimum, drawings must show property lines, all existing and proposed structures, existing

and proposed sewage systems and water supplies, slope, any topographic features which may impact the design of the system and well (if applicable), and existing and proposed easements and utilities within a distance from the edge of the proposed soil absorption system and reserve area (when applicable) equal to the horizontal setback required for that particular feature (e.g., 70 feet for shellfish growing waters, 100-feet for Class III-C wells). The designer should provide any other information necessary to determine compliance with the applicable horizontal setbacks contained in Table 5.4 of the SHDR, 12VAC5-610-950, and 12VAC5-613-200.

- c. When applicable, the drawing of the proposed sewage system shall show sewer lines, septic tank, treatment units, pump station, conveyance system, reserve area, and other relevant features which may affect the proper operation and functioning of the system or be affected by the system. When a private drinking water supply is to be located on the same lot, all sources of pollution necessary to determine compliance with Table 3.1 of the *Well Regulations*, 12VAC5-630-380, shall be shown.
- d. Design calculations used to establish the design parameters must be included where applicable:
 - i. Calculations indicating that the proposed design complies with minimum separation distance to seasonal ground water, rock, or other limiting factor shall be provided to determine compliance with Tables 4.3 and 4.4 of the SHDR, 12VAC5-610-597, and the performance requirements of the *AOSS Regulations*, if applicable.
 - ii. Minimum depth of trenches and separation of trenches shall be provided to determine compliance with 12VAC5-610-950.
 - iii. Pump tank volumes and emergency storage requirements shall be provided to determine compliance with 12VAC5-610-880.
 - iv. When a pump is used in an onsite system design, the calculations shall show the static head, friction head and total dynamic head at the design flow of the pump to determine compliance with 12VAC5-610-880.
 - v. Trench bottom area and number of trenches shall be provided as necessary to determine compliance with Table 5.4 of the SHDR, 12VAC5-610-950, or Table 1 of the *AOSS Regulations*, 12VAC5-613-80, when applicable.
 - vi. Calculations for low pressure distribution, drip irrigation, etc. shall be provided as necessary to determine compliance with 12VAC5-610-940, 12VAC5-610-955, and the performance requirements of the *AOSS Regulations*, 12VAC5-613-80 thru 110, when applicable.

- vii. Calculations for Wisconsin mound, other fill systems, etc. shall be provided as necessary to determine compliance with 12VAC5-610-960 and the performance requirements of the *AOSS Regulations*, 12VAC5-613-80 thru 110, when applicable.

Additional information may be necessary depending on the regulations applicable to the specific site. See 12VAC5-610, 12 VAC5-613 and Va. Code §32.1-163.6 for more information.

C. Certification Letter Applications

1. All applications submitted pursuant to Va. Code §32.1-163.5 with supporting work from a private sector OSE/PE for certification letters must include the following information:
 - a. The correct and complete application;
 - b. The appropriate fees;
 - c. A site and soil evaluation report;
 - d. A site sketch in compliance with 12VAC5-610-460;
 - e. A proposed well site location and well class (when a private well is proposed);
 - f. Information on proposed treatment level, proposed trench bottom area and proposed sewage volume and flow; and
 - g. A statement on the cover page certifying that the site and soil conditions substantially comply with applicable regulations.

When processing a bare application for a certification letter, the VDH OSE shall include items c through g.

2. Each site certified by an OSE/PE for a certification letter must be located by surveying the perimeter of the soil absorption area and showing that area on a survey plat unless waived pursuant to this policy. This plat should be incorporated as part of the site and soil evaluation report
3. All applications for multiple certification letters must include the information for a single-lot certification letter and be processed in accordance with local ordinances for subdivision reviews. Additionally, a preliminary subdivision plat that provides the information specified in paragraph 1 is expected.

D. Subdivision Review Applications

1. All applications for reviewing proposed subdivisions must come from an authorized agent of the local government having jurisdiction. An owner or applicant cannot initiate a request for a subdivision review independent of the local subdivision process.
 - a. The subdivision process is a local function that is governed by local ordinances.
 - b. Va. Code §15.2-2242 of the *Code* provides that localities may adopt ordinances requiring the applicable health official to render a preliminary opinion regarding

the suitability of the subdivision for the installation of subsurface sewage disposal systems.

- c. Va. Code § 15.2-2260 provides that a local subdivision agent must forward preliminary plats to appropriate state agencies if approval of a feature or features of the plat by a state agency is necessary. This section further provides that any state agency making a review of a plat must complete its review within 45 days from receipt. If the agency does not approve the plat, then it must state the specific reasons for disapproval in writing.
- d. The SHDR provides guidance when review of subdivision plats is required by local ordinances. All requests for subdivision review must include the following:
 - i. A letter from the authorized agent of the local government requesting review of the proposed subdivision and a statement certifying that the subdivision package has been determined to be complete;
 - ii. Site and soil evaluation reports by a OSE/PE for each proposed lot;
 - iii. Proposed well site locations and well class when private wells are proposed;
 - iv. A preliminary subdivision plat. The plat must include all the information required by local ordinances and the following: locations of proposed onsite sewage systems and reserve areas (if applicable), all proposed and existing streets, utilities, storm drainage, water supplies, easements, and lot lines for each proposed lot, and original topographic contour lines by detail survey. The plat should be prepared according to suggested scales contained in Appendix L of the *SHDR*, 12VAC5-610-1170:7.
 - v. A statement on the cover page certifying that the site and soil conditions and designs substantially comply with applicable regulations.
 - vi. A signed statement from the owner of record giving VDH permission to enter the property for the purposes of reviewing the site and soil conditions both prior to the review and approval and afterward (if necessary) for quality control purposes and to protect public health and the environment.

E. Documentation Required for Site Evaluation Reports.

1. All reports must be properly marked as substantially complying (approved) or not complying (rejected) with applicable regulations.
2. Each soil profile hole augered or dug during a soil investigation must be described completely and accurately and located on a site sketch. All holes used to establish the suitability of a site must show that the site substantially complies with applicable regulations.

3. The SHDR require a minimum of five soil profile descriptions for each separate area being established as suitable for a soil absorption system (e.g. primary and/or reserve area). If, in the opinion of the site evaluator, a site exhibits sufficient uniformity of topography and profile, the number may be reduced to three. Profile holes must be placed so as to be representative of the soil absorption area.
4. The depth of each major horizon of all soil profiles must be documented using U. S. Department of Agriculture soil textural classes (including the percent and size of coarse fragments) and soil colors. Soil colors (matrix and mottle patterns) are to be determined and reported using the *Munsell Soil Color Charts*. All colors must be reported using the Munsell notations for hue, value and chroma (e.g. 5YR 5/6). Color names may be added. Abbreviations of terms (e.g. soil color, texture, etc.) are not acceptable.
5. All holes or pits in the area of the proposed soil absorption system must be described as to depth to seasonal water table or seasonal saturation.
6. Depth to rock or restrictive layers must be described when applicable.
7. The estimated percolation rate must be reported. When permeability tests are conducted (including percolation tests, hydraulic conductivity tests, and other measures of soil permeability), a copy of all test results must be included. Permeability tests conducted by a licensed designer do not require VDH supervision.
8. Estimated shrink-swell potential, if moderate or greater, must be noted.
9. Soil concretions shall be noted, where applicable.
10. Other relevant soil features that, in the opinion of the evaluator, are necessary to document that the site is sufficient to accommodate an onsite sewage treatment and dispersal system and to support the proposed design.
11. The site evaluation shall indicate the landscape position and the degree of slope in the area of the proposed system installation.
12. A site sketch in accordance with 12VAC5-610-460 shall be provided with each site and soil evaluation report. See Part II, Section J (9), page 18, of this policy for Work Product Expectations related to site sketches.

F. Survey Plats.

This section of the policy is intended to supersede GMP 152 and is applicable to permits and certification letters whether or not such work is supported by private sector professionals.

1. All applications for sewage disposal system certification letters, ~~onsite and~~ sewage disposal system construction permits and alternative discharging system permits must be accompanied by a copy of a survey plat unless waived pursuant to this policy. For construction permit drawings, the perimeter of the soil absorption area(s) may be shown on a drawing produced

Comment [TD9]: To clarify survey requirement.

~~from information obtained from a recorded survey plat (subject to 18VAC10-20-740 D, E, F). VDH does not prescribe the professional's methods or equipment to accomplish the performance expectations of this policy; however, VDH strongly recommends that all sites, including those for construction permits, be surveyed by a licensed surveyor and platted accordingly. This policy does not circumvent survey requirements contained under 18VAC10-20-370, 18VAC10-20-380, 18VAC10-20-382, 18VAC10-20-390, 18VAC10-20-392 and 18VAC10-20-395.~~

~~1. identifying the proposed sewage disposal system and/or reserve area, proposed dwelling, and any other features impacting placement of the sewage disposal system, unless waived pursuant to this policy.~~

~~2. All applications for alternative discharging systems must be accompanied by a survey plat prior to the issuance of the permit unless waived pursuant to this policy.~~

~~3.1. The survey plat requirement for sewage disposal system certification letters, onsite sewage disposal system construction permits and alternative discharging systems or onsite sewage system construction permits and sewage disposal system certification letters may be waived if the following criteria are met:~~

~~a. The owner shall submit a complete application and fee if applicable.~~

~~b. The owner shall request a waiver from the survey requirement by completing Form 11.~~

~~c. The two main goals are to ensure the sewage system is located on the correct property and in the correct location on the property. The Environmental Health Specialist Senior (EHSS) shall evaluate the risk that the goals will not be met. Before granting a waiver, the local health department shall determine there is a low risk of improper placement of the sewage system. The EHSS will determine the risk by reviewing the application package for completeness, evaluating the owner's answers on Form 11, and by conducting a complete site and soil evaluation for bare applications or an abbreviated-Level 2 Review (possibly as needed or limited level 2; for applications with supporting work from a private sector OSE/PE, which includes verification of identified property boundary markers.~~

~~e. Certification letters do not expire. There must be a high level of confidence the proposed absorption area(s) can be re-established/located in the distant future prior to granting a survey waiver for a certification letter.~~

~~4.2. Prior to issuance of an Operation Permit where a survey plat waiver has been granted, the owner shall sign a statement (See Form 12) confirming that the sewage disposal system has been installed on his property and in the permitted location.~~

G. Denials of Applications (not a principal place of residence):

The owner(s) or agent thereof shall indicate on the application form whether or not the requested approval is a construction permit or certification letter for a system that is intended to serve his or her

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principal place of residence. The following procedures apply for denials for construction permits and certification letters when the applicant has not indicated that the system intends to serve his or her principal place of residence; the following procedure also applies to all denials of subdivision reviews.

1. VDH will deny applications that do not comply with applicable regulations and cite the applicable regulatory requirements. Denial letters must clearly state in plain English the rights and administrative remedies available to the owner.
2. The applicant must elect which potential remedy to pursue. The applicant may not pursue multiple administrative remedies simultaneously. With denials for systems not intended to serve a principal place of residence, the mutually exclusive administrative remedies are as follows:
 - a. The applicant may submit one new application within 90 days from the date that the original application was denied without paying an additional fee;
 - b. The applicant may appeal the denial by requesting an informal fact-finding conference (IFFC) before VDH pursuant to §2.2-4019 of the *Code*. To obtain an IFFC before VDH, the applicant must submit a written request to the District Health Director within 30 days of receipt of the denial; or
 - c. For denials of submittals under §32.1-163.6 of the *Code*, the applicant or the professional engineer responsible for the onsite sewage system design, with the applicant's written consent, may request an IFFC before the engineering design review panel. To request an IFFC before the engineering design review panel, a written request must be submitted to the District Health Director within 30 days of the professional engineer's receipt of the denial.
3. If the applicant elects to submit a new application within 90 days and does not appeal the original denial, no fee will be charged for that second submittal. However, VDH will assess the full fee for any subsequent application. The time limits for processing the application (when applicable) begin anew on the day of each resubmission. The following table illustrates the fees to be assessed when processing applications:

Table 1: Fees for Re-submissions – Not a Principle Place of Residence (new applications)

Application	Fee Attached
First Application	Full Fee
Second Application if submitted within 90 days of denial of first application (and the applicant does not appeal the original denial)	No Fee
Any subsequent application	Full Fee

4. An applicant for a construction permit or a certification letter may request a refund of the application fee if the applicant voluntarily withdraws his application before VDH issues or denies the requested permit, letter or subdivision review. The application fee will be refunded if the application is withdrawn before VDH makes a site visit for the purpose of evaluating the application.

H. Denials of applications (principal place of residence)

The owner(s) or agent thereof shall indicate on the application form whether or not the requested approval is a construction permit or certification letter for a system that is intended to serve as his or her principal place of residence. The following procedures apply to denials of onsite sewage construction permits when the applicant has indicated that the system is intended to serve as the applicant's principal place of residence.

1. VDH will deny applications that do not comply with the applicable regulations and cite the applicable regulatory requirements. Denial letters must clearly state in plain English the rights and administrative remedies available to the owner.
2. The applicant must elect which potential remedy to pursue. The applicant may not pursue multiple administrative remedies for the same denial. With denials for systems intended to serve a principal place of residence, the mutually exclusive administrative remedies are as follows:
 - a. In accordance with 12VAC5-620-90, the owner or agent thereof may apply for and obtain a refund of the application fee for any denial of a permit or letter on land on which the owner seeks to construct his or her principal place of residence. He or she may do so by executing an affidavit (Form 13) and submitting it to the local health department within 12 months of the date of denial. Local health departments shall attach a copy of Form 13 to any denial of a construction permit or certification letter for principal place of residence. The applicant may not obtain a refund if he or she is pursuing an administrative appeal of the denial or if he or she has submitted another application for which the fee was waived. Such application fees shall not be refunded unless any administrative appeals based on the denial have either been resolved or waived by the applicant; such waiver can be explicit via the execution of affidavit Form 13 or implicit by virtue of a failure to exercise appeal rights within the timeframe specified in the denial letter;
 - b. The applicant may submit one new application within 90 days from the date that the original application was denied without paying an additional fee;
 - c. The applicant may appeal the denial by requesting an IFFC before VDH pursuant to Va. Code Section 2.2-4019. To obtain an IFFC before VDH, the applicant must submit a written request to the District Health Director within 30 days of his or her receipt of the denial; or
 - d. For denials of submittals under §32.1-163.6 of the *Code*, the applicant or the professional engineer responsible for the onsite sewage system design, with the applicant's written consent, may request an IFFC before the engineering design review panel. To request an IFFC before the engineering design review panel, a written request must be submitted to the District Health Director within 30 days of the professional engineer's receipt of the denial.

3. If the applicant elects to submit a new application within 90 days and does not appeal the original denial or request a refund, then no fee will be charged for that second submittal. VDH will assess the full fee for any subsequent application. The time limits for processing the application (when applicable) begin anew on the day of each resubmission.

Table 2: Fees for Re-submissions – Principle Place of Residence (new applications)

Application	Fee Attached
First Application	Full Fee
Second Application if submitted within 90 days of denial of first application (and the applicant does not appeal the original denial or request a refund)	No Fee
Any subsequent application	Full Fee

4. An applicant for a construction permit or a certification letter may request a refund of the application fee if the applicant voluntarily withdraws his or her application before VDH issues or denies the requested permit or letter. The application fee will be refunded if the application is withdrawn before VDH makes a site visit for the purpose of evaluating the application.

I. Prioritizing Applications

This section is intended to replace GMP 51 and provide guidance for processing applications to meet applicant needs and make the best use of agency resources. It is not possible to develop a set of criteria that will account for all possible circumstances, but VDH staff should follow these guidelines as closely as possible.

1. Applications for onsite sewage permits and approvals are categorized as follows, in order of priority:
 - a. Priority Level 1: Applications for construction permits to repair failing systems.
 - b. Priority Level 2: Applications for construction permits where the applicant has concurrently applied for a building permit.
 - c. Priority Level 3: Applications for certification letters.
 - d. Priority Level 4: Applications for voluntary up-grades.
 - e. Priority Level 5: Applications for multiple-lot certification letters or subdivision approvals.
2. Applications for construction permits to repair a failing system should always receive immediate attention, due to the public health hazard.
3. Each district may set the proportions of time among the different priority levels to best meet local needs, unless processing time for priority levels 1 and 2 exceeds 15 days. In that case, processing of lower level priority applications should be delayed as necessary to allow processing of priority 1 and priority 2 applications within 15 days.

4. VDH's policy is to encourage the use of private sector OSEs and PEs for site evaluation and design. Districts should consider that processing applications with complete supporting documentation from the private sector requires less staff time when prioritizing applications *within* each priority level (e.g. all other aspects of the applications being equal, if a bare application for new construction is submitted on the same date as an application for new construction with supporting documentation from a private OSE/PE, then the application with supporting documentation should receive priority for review). Further, districts should encourage applicants to obtain the services of a private sector OSE/PE.

J. Work Product Expectations:

The following are Work Product Expectations (WPEs) established for all designers of onsite sewage systems, including those employed by VDH. These WPEs are intended to serve as guidelines for documentation *in addition to the minimum requirements outlined previously in this document*. The WPEs are the standard expected of VDH employees. Private sector OSEs and PEs are strongly encouraged to comply with these standards since doing so should reduce misinterpretations and lead to more efficient processing of applications.

A failure to adhere to these WPEs shall not result in the denial of an application. However, as is the case with any application, VDH has discretion to conduct a Level 2 review if the designer fails to adhere to a particular WPE. If the Level 2 review reveals that applicable regulations have not been complied with, then VDH shall deny the application.

- ~~1-2~~ The pages of all submittals should be consecutively numbered beginning with the first page using the format "Page x of y". The cover page should, at a minimum, contain a list of the documents contained in the supporting design package, a property identification, the property owner's name and address, the OSE/PE's contact information, date of plans, and revision dates. To assure that contractors have the correct set of plans, the health department's approval letter must correspond to the date on the cover page or the date of last revision on the cover page, if revisions are made.
- ~~2-3~~ OSE/PEs, at his or her discretion, may make minor revisions to a permit, certification letter or subdivision approval issued in reliance on his or her evaluations or designs. Private sector OSE/PEs should notify VDH when the OSE/PE has revised his or her evaluations and designs. All OSE/PEs should notify the property owner when such evaluations and designs have been revised. All revisions must comply with applicable regulations. See Part III, Section C of this document for additional details.
- ~~3-4~~ All applications with footprints, sites, and areas planned for treatment works and/or private wells should have the proposed areas identified with accuracy and precision of three feet or less. The OSE/PE or surveyor must provide sufficient information to allow a person with the knowledge, skills, and abilities of an Environmental Health Specialist (EHS), an onsite wastewater system installer, or water well systems provider to locate the area in the field using the paperwork and field markers, when applicable. Field markers may include permanent field stakes or distances and bearings to identifiable landmarks. Trees and wooden stakes are not considered permanent field markers.

~~4. An OSE/PE may opt to show the location of a site for a construction permit (not a certification letter or proposed subdivision) by drawing the perimeter of the absorption area to scale on a survey plat or a copy of a survey plat. VDH does not prescribe the professional's methods or equipment to accomplish the performance expectations of this policy; however, VDH strongly recommends that all sites, including those for construction permits, be surveyed by a licensed surveyor and platted accordingly.~~

5. Preliminary subdivision plats for subdivision applications should show the immediate area in and around each proposed system, including the soil absorption system, using a contour interval shown in Table 3; the contour area shown outside the soil absorption system should be sufficient to establish the relationship of the area to relevant topographic features such as, but not limited to, drainage ways, sink holes, road cuts, and steep slopes. A minimum distance of 20 feet is recommended.

Table 3: Contour Interval for Subdivision Plats

Slope (%)	Contour Interval
0-5	2
6-25	5
26-50	10

6. All submittals should document compliance with Chesapeake Bay Preservation Act requirements and other applicable state laws and local ordinances;

7. All drawings should be drawn to scale. Critical dimensions must be shown on the drawing. This includes measurements to critical system components (e.g. distribution box, well site or area, etc.) which should be located using triangulation from appropriate field markers. When a well area is designated, the boundaries shall be clearly defined and limited on all sides.

8. The WPEs related to site evaluations are stated below.

- a. All site evaluation reports should be signed and dated.
- b. The maximum acceptable separation distance between observation holes during a soil investigation is 100 feet. The use of common holes between adjacent proposed sewage disposal system sites to describe both sites should be avoided.
- c. Soil features should be described using the standards contained in the USDA NRCS Field Book for Describing and Sampling Soils.
- d. When backhoe pits or other excavations are used during a site and soil evaluation, the complete range of soil characteristics exposed should be described (depth to mottles, rock percentage and depth to rock or other restrictive layers and variability in rock depth). OSHA Regulations apply when working in pits.
- e. A site and soil evaluator should describe the following soil characteristics as he or she deems necessary:

- i. Soil consistence;
- ii. Soil structure (grade, size and type);
- iii. Soil color patterns (kind, quantity , size, contrast, color, shape location, moisture state, hardness and boundary);
- iv. Soil parent material and physiographic province; and
- v. Estimated clay mineralogy and the existence of observable minerals (feldspar, mica, quartz, etc.)
- vi. Root penetration.

9. The WPEs related to site sketches are as follows:

- a. Site sketches should represent the topography in the vicinity of the proposed onsite sewage system as well as the topography in the vicinity of any private water supply (existing or proposed) so as to establish the topographic relationship between such water supplies and sources of contamination including, but not limited to, the proposed soil absorption system.
- b. Sketches should be neat, legible, and drawn to scale when possible. The sketch should provide accurate documentation (distances) for profile holes and other features and suitable reference points. The site sketch should show existing and proposed property lines for the subject property and any other property lines within ten feet of the perimeter of the proposed soil absorption area and/or proposed structure.
- c. Within 200 feet of the edge of the proposed soil absorption area, the following must be shown:
 - i. Existing and proposed wells, springs, and cisterns. If a private water supply is proposed, the location and construction of the proposed water supply (or supplies) must comply with the *Well Regulations*.
 - ii. Existing and proposed onsite sewage systems;
 - iii. Shellfish waters, lakes, streams, other bodies of water, and surface impoundments used for drinking water; and,
 - iv. Sinkholes, drainage ways, flood plains, drainage ditches, and tile drainage.
- d. Site sketches should document percent slope and direction (an acceptable topographic map may be substituted);
- e. Site sketches should document all existing and proposed structures, buildings, etc. within 100 feet of the perimeter of the proposed soil absorption area and private water supply (if applicable);
- f. Site sketches should document easements, rights of way, driveways, roads, and buried and above-ground utilities within 20 feet of the perimeter of the proposed soil absorption area.

Part III: VDH Review

A. Application Review.

1. All applications and fees must be logged in. Local and district health departments are responsible for entering data into VDH's data system, the Virginia Environmental Information System (VENIS). As a best practice, all applications should be reviewed for completeness at the time they are received. That way, if the application is incomplete for any reason, VDH can contact the applicant and/or designer to provide the missing information so that VDH can fully evaluate the application within the timeframes specified by the *Code of Virginia* and this policy.
2. An incomplete application should not be logged in, nor should fees be accepted for an application that is known to be incomplete at the time it is filed. Whenever possible, administrative support staff should be responsible for these tasks. If an incomplete application is accepted, it shall be denied.
3. VDH's program for reviewing applications for permits, certification letters, and requests for subdivision approval will employ two basic levels of review: the in-office (paperwork) Level 1 review and the field, Level 2 review.
 - a. A Level 1 review determines whether an application at face value is complete. The Level 1 review confirms the site and/or the design certified by the OSE/PE substantially complies with applicable regulations.
 - b. A Level 1 review consists of administrative and technical reviews and *does not include field review*. Local and district health departments should complete a Level 1 review of every application as soon as practicable.
4. For Level 1 reviews, staff should review VDH records to verify the site was not previously denied a permit and the proposed treatment works or well does not conflict with the minimum set back distances for features on adjacent properties. This review of VDH records constitutes a quality assurance review and is not a substitute for a sanitary survey, which is necessary to positively establish setbacks with certainty. The ultimate responsibility for establishing setback distances remains with the OSE/PE certifying the submitted work.
5. The Level 2 review (field check or quality assurance check) is a detailed onsite evaluation of the site conditions and the design certified by a private sector OSE/PE. The Level 2 review is discretionary and should be performed on at least 10% of applications submitted with supporting work from each private sector OSE/PE. In addition, staff is strongly encouraged to conduct a Level 2 review when a submittal lacks a WPE specified in this policy.
 - a. If a Level 2 review is not performed and the application complies with the minimum requirements of the applicable regulations and this policy based upon the Level 1 review, then a construction permit or certification letter must be

issued within the required or expected time frames. Applications that do not comply with the minimum requirements of the applicable regulations must be denied. The denial must be linked to the appropriate OSE/PE using VENIS.

- b. A Level 2 review assesses the performance of private sector evaluators and designers by sampling a subset of the work submitted by the OSE/PE.
 - c. Local and district health departments should complete Level 2 Reviews of a minimum of 10% of the sites and/or designs certified by each private sector OSE/PE. Local and district health departments may conduct additional Level 2 reviews as necessary.
 - d. Level 2 reviews must be conducted within the processing times expected for the application. Staff should conduct Level 2 reviews prior to approving or denying an application, unless pursuant to a request from the owner or agent, the designer, or the contractor responsible for installing the system.
 - e. A Level 2 review may include conducting soils borings, examining backhoe pits or other excavations, a sanitary survey, permeability testing, or other actions necessary to assure that a site or design complies with applicable regulations.
 - f. The local or district health department will perform Level 2 reviews using the best methods available, including evaluating open backhoe pits or a hand auger. An owner will not be required to hire a backhoe for a Level 2 review if one is unavailable at the time of VDH's Level 2 review.
 - g. Except in extraordinary circumstances, the local or district health department shall notify the owner and the OSE/PE when intending to conduct a Level 2 review.
 - h. If a Level 2 review reveals that a site and/or a design do not substantially comply with applicable regulations, the application will be denied. The denial letter must be linked to the appropriate OSE/PE using VENIS.
6. The local health department shall provide a copy of each approval or denial based on an OSE or OSE/PE certification to the licensed individual that certified the site. Additionally, a copy of any Level 1 and Level 2 forms used in the review of the submittal shall be provided to the owner and the OSE/PE. This policy is not intended to create a burdensome procedure or extensive copying process. Sending a copy of the approval or denial letter including the permit identification number (when the approval is for a construction permit), and a copy of the Level 1 and Level 2 forms (when applicable), normally shall be sufficient to comply with this policy. If for whatever reason, the Department's permit is different from that certified by the OSE/PE, then the Department shall also include a copy of the permit, and an explanation of the revision(s), in addition to the approval letter so that all differences are readily identified.

B. Revalidating Expired OSE/PE Permits; Relying on Previous Certifications.

1. In general, VDH will rely upon the certified evaluation or design of an OSE/PE when considering renewal or revalidation of an expired permit as long as the OSE/PE provides reasonable assurance no substantive intervening changes have occurred.
2. When VDH has issued a construction permit in reliance upon the work of an OSE/PE and that permit has expired the following shall apply:
 - a. Pursuant to Va. Code § 32.1-164.1:1: “*if a building permit has been obtained or building construction has commenced, the permit may be extended for an additional 18 months.*” Unless the local or district health department is aware of specific facts supporting a conclusion that the permit does not substantially comply with applicable regulations or no construction has commenced, then staff will extend the permit by adding eighteen months to the original term of the permit upon request. No additional extensions may be permitted.
 - b. Before a permit is extended, the local or district health department will require a signed statement from the property owner or OSE/PE affirming that there has been no “substantial, intervening change in the soil or site conditions where the onsite sewage system is to be located and building construction commenced prior to expiration of the permit.”
 - c. **No new OSE** certification is required when an applicant seeks to renew an expired permit with no changes in the design or location of the system or in the location of the structure.
3. In some circumstances ~~new-new certificationseertifications along with new applications and fees~~ are required. Examples of such situations include, but are not limited to, new approvals (letter, permit, or subdivision lot), modification of an existing approval, and changes to an existing or expired construction permit design.

Comment [GL10]: JT Frazier: Some districts are requiring a new package and fee for permit extensions. Need to clarify with LHDs.

Comment [TD11]: Following FAQ

C. Design Changes

The OSE/PE, with the consent of the owner, may make certain design changes to a valid construction permit without prior approval of the health department. No new application or fee shall be required. Such changes must comply with the following:

1. For onsite sewage systems the design change shall not affect any of the following design parameters:
 - a. The proposed daily flow (GPD);
 - b. The proposed waste strength (e.g. residential, commercial);
 - c. The proposed level of treatment (including nitrogen reduction and disinfection);
 - d. The proposed dispersal area foot print (location or size); or

- e. The proposed dispersal method; (minor adjustments to the dispersal area are allowed).^[1]
2. All changes for onsite sewage systems must fully comply with all applicable codes, regulations and policies.
3. The designer shall provide the health department with complete documentation including a list of all changes and revised specifications, calculations and drawings as part of a complete revised design package. Such documentation should be submitted prior to installation of the system.
4. The designer and owner are responsible for ensuring that all design changes are communicated to the onsite sewage system installer and/or water well system installer.

For private wells, all design changes will require a new application and a new fee. Therefore, it is vital that the OSE/PE discuss the proposed well location with the owner and their well driller (if possible) prior to submitting an application. The use of well areas is encouraged in areas deemed appropriate by the OSE/PE. The use of well areas can avoid unnecessary follow-up site evaluations. Where dry holes or low yielding wells are common, or other conditions indicate their use (such as with close loop geothermal well systems), a well area may be more appropriate than a well site. When a well area is designated and a dry hole is encountered, a well driller may drill multiple wells without reapplying for a new permit for each new site, provided the dry holes are properly abandoned in accordance with the *Well Regulations*.

VDH will review any changes before issuing an operation permit or well approval. Any changes that do not fully comply with this section and applicable regulations may result in the construction permit being deemed null and void. In such case, the owner will be required to submit a new application and a new application fee. If improperly installed, the owner may be required to abandon the sewage system and/or private well.

The designer and owner are responsible for assuring that any design changes fully comply with all applicable laws and regulations. The cost to correct an error created by a design change initiated by the owner or designer without prior approval by VDH will not be considered a hardship when processing a variance request.

D. Professional Courtesy Reviews.

1. VDH will provide consultative field reviews with an OSE/PE when requested if possible. The courtesy review must be requested prior to the filing of any application with VDH, or prior to filing any documents with a local government for a proposed subdivision. The courtesy review is discretionary and not subject to time limits.
2. Courtesy reviews are not intended to relieve an OSE/PE of the responsibility for determining whether a site complies with applicable regulations.

^[1]Minor adjustments will be allowed to installation depth and dispersal area configuration that are i) supported by site and soil evaluations on file (i.e., no additional site or soil evaluation required), ii) contained within the perimeter of the originally designated absorption area, and iii) do not require additional field (Level II) review.

3. The OSE/PE requesting a courtesy review must file a request in writing and the property owner must provide permission for VDH to enter the property.
4. The OSE/PE must provide a brief, written description of the specific questionable or marginal site or soil feature where the courtesy review is being requested.
5. Requests should be logged into VENIS. All activities, evaluations, and results of the courtesy review shall be documented.
6. VDH determinations regarding site and soil characteristics from courtesy reviews are not case decisions and no written response is required. They cannot be appealed nor are they binding on any party.
7. VDH may limit professional courtesy reviews. If a local or district health department elects not to provide a requested courtesy review, it must inform the OSE/PE in writing.

E. Processing time limits for applications subject to deemed approval.

1. VDH shall review and process applications subject to deemed approval within the time frames specified in Table 4. If the application is denied, then VDH shall set forth in writing the reasons for denial.

Table 4: Processing Times for Applications subject to Deemed Approval

Type of Application	Time Limit
Individual Permit Application	15 working days
Individual Certification Letter	20 working days
Multiple Lot Certification Letter	60 days
Subdivision Review	60 days

F. Processing time limits for applications NOT subject to deemed approval.

1. Applications submitted pursuant to Va. Code Section 32.1-163.6 are not subject to deemed approval; however, the *Code* requires VDH to process them within 21 or 60 days, depending on the application.
 - a. Within 21 calendar days from the date of application for treatment works sized at 1,000 gallons per day or smaller, and within 60 calendar days from the date of application for treatment works sized at more than 1,000 gallons per day, the Department shall (i) issue the requested approval, or (ii) set forth in writing the specific reasons for denial.
2. Any application for a proprietary, pre-engineered system that has been deemed by VDH to comply with the Board’s regulations should be processed in the time frames identified in Table 4.
 4. VDH may accept evaluations and designs for such proprietary, pre-engineered systems in

accordance with this policy; however, the processing time limits and deemed approval shall not apply to any such application.

3. For requests for courtesy reviews, VDH should inform the OSE/PE within seven days whether the courtesy review can be scheduled. The courtesy review should be made within 180 days of the request if possible.

Part IV: Final Inspections

A. The local health departments will perform 100% construction inspections of all onsite sewage systems and wells for both VDH and private sector designs. At a minimum, staff will obtain and record (in VENIS) GPS coordinates for all onsite sewage disposal systems, alternative discharge systems and private wells as specified in previous GMP's. Inspections will take place prior to issuance of the Operation Permit.

A. General Requirements and Expectations:

Onsite Sewage System - VDH OSE Design:

1. Following issuance of a permit, the licensed installers shall notify the appropriate local or district health department one (1) business day in advance of construction to request a final inspection.
2. VDH staff will inspect the entire system to determine whether the installation complies with all applicable regulations and the permit. All observations must be documented during inspection and entered into VENIS.
3. Location information of the tank and distribution box will be recorded by VDH staff by entering the GPS coordinates into the VENIS database.
4. VDH staff must complete an as-built drawing of the installation. Field measurements should be taken to the septic tank, the distribution box, and other necessary components.
5. VDH staff should secure the contractor's completion statement at the time of inspection.
6. If no deficiencies are noted during the inspection, VDH staff shall inform the installer of the satisfactory inspection. An inspection statement reporting the proper installation of the system will be provided to the property owner within two (2) business days of the inspection, and shall note any additional information required to obtain an operation permit.
7. If deficiencies are noted during the inspection, VDH staff shall inform the installer of the deficiencies. If the deficiencies can be corrected during the inspection, VDH staff will note the correction. If the deficiencies cannot be corrected during the inspection, VDH staff will notify the owner of the deficiencies in writing either certified mail or hand delivery within one (1) business day and include information regarding the owner's right to appeal the decision to deny approval of the installation.

Onsite Sewage System - Private Sector OSE/PE Design:

1. Following issuance of a permit, the licensed installers shall notify the certifying private sector OSE/PE in advance to request a final inspection. The necessary notification timeframe is determined by the private sector OSE/PE, in consultation with the installer (many private sector OSEs/PEs provide requested inspection notification timeframes within their proposed designs). Before starting construction, the installer shall also notify the appropriate local or district health department at least one (1) business day in advance to request a final inspection.
2. In accordance with Va. Code § 32.1-164.1.E, the certifying private sector OSE/PE shall inspect the system at the time of installation, the private sector OSE/PE is responsible for the final inspection of their system design; the responsibility shall extend to any subsequent re-issuance of the permit (e.g. renewal, change of owner, etc.). The certifying private sector OSE/PE is responsible for inspecting the entire system to determine whether the installation complies with the applicable regulations and the permit. The OSE/PE must complete an as-built drawing of the installation. Field measurements should be taken to the septic tank, the distribution box, and other necessary components. The private sector OSE/PE should secure the contractor's completion statement at the time of inspection and file with the applicable local health department as soon as possible.
3. VDH is responsible for informing the OSE/PE of the re-issuance of a permit by sending a copy of the permit approval letter to the OSE/PE who originally designed the system.
4. The VDH inspection can take place at any point during the installation. VDH staff will focus on the location, treatment level, depth, and sizing of the installation. Location information should be recorded by VDH staff by entering GPS coordinates of the tank and distribution box into the VENIS database. The VDH construction inspection of private sector submittals may not be a complete system review and will not include additional soil evaluations. VDH staff are encourage to conduct their inspection prior to, or in coordination with, the private sector OSE/PEs inspection.
5. When conducting a joint inspection, VDH staff may secure the contractor's completion statement at the time of inspection. However, if VDH staff is not present at the time when the private sector OSE/PE completes the final inspection, the private sector OSE/PE should secure the contractor's completion statement and provide a copy to the appropriate district or local health department along with the inspection report.
6. If VDH staff observes deficiencies during the inspection, VDH staff shall inform the certifying private sector OSE/PE and installer of the deficiencies. If the deficiencies can be corrected during the inspection, VDH staff will note the correction. If the deficiencies cannot be corrected during the inspection, VDH staff will notify the owner of the deficiencies in writing either certified mail or hand delivery within one (1) business day and include information regarding the owner's right to appeal the decision to deny approval of the installation.
7. If the certifying private sector OSE/PE does not observe any deficiencies during the inspection, the certifying private sector OSE/PE should inform the installer of the satisfactory inspection. The installer can then cover the system, even if VDH staff has yet to conduct their inspection

Comment [GL12]: JT Frazier: LHDs are not likely to send this information. Not always sending the original approval. Don't mind getting it via email if they can't send paper copy.

provided VDH was given notice of the installation. If VDH staff were not notified, VDH may withhold final approval pending further review with the installer. In accordance with Va. Code § 32.1-164.1.E, the certifying private sector OSE/PE shall provide an inspection report to the appropriate district or local health department documenting their inspection observations and recommendation to approve the system installation. No system components shall be covered until the certifying private sector OSE/PE has inspected and approved the system components.

8. If the private sector OSE/PE observes deficiencies during the inspection, the OSE/PE shall inform the owner, VDH staff, and installer of the deficiencies. If the deficiencies can be corrected during the inspection, the OSE/PE will note the correction. If the deficiencies cannot be corrected during the inspection, the OSE/PE shall provide a written inspection report noting the deficiencies to VDH. VDH staff will notify the owner that an inspection approval from the OSE/PE is required and that the OSE/PE has declined to certify the installation within one (1) business day of receiving the inspection statement. VDH will also notify the owner of their right to petition VDH to inspect the installation and render a final case decision approving or disapproving the installation. Decisions to grant or deny petitions for VDH inspections will be determined on a case-by-case basis.

Private Wells:

An OSE/PE is expected to perform a final inspection for any private well installed pursuant to a construction permit based on a design certified by the OSE/PE. VDH is required to inspect all onsite systems and private wells, including those installed pursuant to a construction permit design certified by a private sector OSE/PE. The well driller shall notify the local health department and private sector OSE/PE (if applicable) prior to starting a new well. Inspections may be made during construction or prior to placing the well in service; however, staff is encouraged to inspect during the grouting process

General Requirements and Expectations:

- ~~1. An OSE/PE is expected to perform a final inspection for any sewage disposal system installed pursuant to a construction permit based on a design certified by the OSE/PE. VDH may, but is not required to, inspect systems designed by a private sector OSE/PE. Installers should always notify the appropriate local or district health department whenever they are ready for a final inspection, regardless of whether that inspection is the responsibility of a private sector OSE/PE or VDH.~~
- ~~2. Each OSE/PE should attempt to secure the contractor's completion statement at the time of inspection and file with the applicable local health department as soon as possible.~~
- ~~3. Local and district health departments should perform final inspections of at least 10% of private sector OSE/PE designed systems. Local and district health departments are discouraged from conducting final inspections as a routine method for accomplishing Level 2 Reviews.~~
- ~~4. Whenever an OSE/PE is responsible for the final inspection of an onsite system, that responsibility shall extend to any subsequent re-issuance of the permit (e.g. renewal, change of owner, etc.). VDH is responsible for informing the OSE/PE of the re-issuance of a permit by sending a copy of the permit approval letter to the OSE/PE who originally designed the system.~~

Comment [TD13]: To follow HB 2477.

~~5. Whenever an OSE/PE conducts an inspection of a system and cannot approve it, the OSE/PE should immediately notify the owner in writing and send a copy of the notice to the appropriate local or district health department. The written notice must include an explanation of the reasons for the OSE/PE's refusal to approve. Whenever an OSE/PE requires corrective actions prior to determining a system is properly installed, the inspection report and completion statement must document those corrective actions.~~

~~6. OSE/PEs should always submit as-built installation drawings. Field measurements should be taken to the septic tank, the distribution box, and other necessary components. If the sewage system's location and details did not change from the construction permit, then the OSE/PE should note that information on the inspection report.~~

~~An OSE/PE is expected to perform a final inspection for any private well installed pursuant to a construction permit based on a design certified by the OSE/PE. VDH is required to inspect all private wells, including those installed pursuant to a construction permit based on a design certified by a private sector OSE/PE. The well driller shall notify the local health department and private sector OSE/PE (if applicable) prior to starting a new well. Inspections may be made during construction or prior to placing the well in service.~~

Index of Forms. Forms are available upon request from the Division or they may be obtained by visiting the VDH website: vdh.virginia.gov. Forms are subject to change without notice; therefore, all OSEs and PEs are encouraged to periodically review the VDH website to ensure they are using the most current forms.

Form 1: Application for a Sewage Disposal System and/or Private Well Construction Permit

Form 2: Cover Page

Form 3: OSE/PE inspection form

Form 4: Example request for subdivision review

Form 5: Request for professional courtesy review

Form 6: Site and soil evaluation report

Form 7: Example construction drawing page

Form 8: Example system specifications worksheet

Form 9: Example private well specification worksheet

Form 10: Example private well abandonment specification worksheet

Form 11: Request for Survey Waiver

Form 12: Verification of Sewage System Location

Form 13: Refund Affidavit

Form 14: [Condition Assessment Form](#)~~Malfunction Assessment~~

[Form 15: Permit Transfer Form](#)

Comment [TD14]: We need to change the form on the website and state where the form is located in all three policies (2017-01, 2017-02 and 2017-03).

GMP 2017-03 Website Changes

The “Malfunction Assessment” should be removed from the Onsite Sewage Forms (Form 14) on the website and replaced with the “Condition Assessment”.

The Permit Transfer Form should be included in the Onsite Sewage Forms (Form 15).

The following statement should be included on all private well and onsite sewage system construction permits.

“This construction permit is transferrable until expired or deemed null and void. A permit transfer form may be found on VDH website under the Onsite Sewage Forms.”

The following statement should be included in the certification statement on the cover page for both private and public sector designers.

“The potential for both conventional and alternative onsite sewage systems has been discussed with the owner/applicant.”

DRAFT

PERMIT TRANSFER FORM
FOR
PRIVATE WELL AND ONSITE SEWAGE SYSTEM CONSTRUCTION PERMIT

Commonwealth of Virginia
Virginia Department of Health

_____ Health Department

Health Department Identification Number _____

Name of New Owner: _____

Address of New Owner: _____

New Owner Phone Number: _____

System Address: _____

Tax Map Number: _____

I verify the conditions such as house location, sewage system location, sewerage system location, well location, topography, drainage ways, or other site conditions have not changed from those shown on the application and conditions have not changed from those shown on the construction permit.

New Owner Signature

Date

Report to the General Assembly in Response to
House Bill 2477: Steps to Begin Eliminating VDH Site
Evaluation and Design Services for Onsite Sewage
Systems and Private Wells

DRAFT

November 1, 2017
Division of Onsite Sewage and Water Services,
Environmental Engineering and Marina Programs
Virginia Department of Health

Contents

Executive Summary 4

1. Introduction..... 8

1. Background and Analysis 11

 A. HB 2477 Tasks 12

 Task #1: Disclose to the property owner when a COSS is an option. 12

 Task #2: Inspect all onsite sewage systems and private wells designed by private sector service providers. 12

 Task #3: Expand efforts to educate the public..... 14

 Task #4: Expand efforts to incorporate data into community health assessments. 15

 Task #5: Enhance quality assurance. 16

 Task #6: Consider separating work unit functions. 17

 Task #7.A: Creating a web-based reporting system for COSS O&M. 18

 Task #7.B: Accepting applications and payments online. 19

 Task #7.C: Making onsite sewage system and private well records available online. 19

 Task #7.D: Creating a complete electronic record of all permitted onsite sewage systems and private wells in the Commonwealth..... 20

 Task #7.E: Creating procedures for tracking Notices of Alleged Violations and corrective actions. 21

 Task #8: Transfer of valid construction permits..... 22

2. Implementation 23

3. Recommendations..... 25

4. Conclusion 30

5. References..... 31

6. Appendices..... 32

 Appendix A..... 33

List of Acronyms

AOSS – alternative onsite sewage system
COSS – conventional onsite sewage system
DPOR – Department of Professional and Occupational Regulation
EH – Environmental Health
FPG – Federal Poverty Guideline
GMP – Guidance Memorandum and Policies
gpd – gallons per day
HB – House Bill
LHD – local health department
O&M – operation and maintenance
OSE – onsite soil evaluator
OSS – onsite sewage systems
PE – professional engineer
SAP – safe, adequate, and proper
SHIFT – Safety and Health in Facilitating a Transition
VDH – Virginia Department of Health
VENIS – Virginia Environmental Information System

Executive Summary

The strategic vision of the Virginia Department of Health (VDH) is to shift evaluation and design services for onsite sewage systems (OSS) and private wells to the private sector in an orderly manner so limited VDH resources can be focused on improving public health and groundwater supplies. VDH should not provide evaluation and design services when and where a sufficient number of licensed private sector professionals are available to perform evaluation and design services. VDH presented this vision in a report to the general assembly ([HB 558 Report](#)) and suggested that VDH focus its limited resources on population health and strengthen its efforts in health monitoring, data collection and dissemination, community health assessments, creating a complete inventory of wells and sewage systems throughout the Commonwealth, understanding viral and nutrient impacts to drinking water and recreational water, providing quality assurance inspections of private sector work, educating the public on operation and maintenance (O&M) needs and drinking water quality, developing necessary policies to improve health, and providing reasonable enforcement and programmatic oversight. VDH cannot currently perform these higher priority needs to the extent necessary because the law requires VDH to perform soil evaluations and designs. VDH's report to the general assembly recommended enacting a number of statutory, regulatory, and policy changes necessary to achieve the strategic vision.

On March 16, 2017, Governor McAuliffe signed [House Bill \(HB\) 2477](#) of the 2017 General Assembly Session. HB 2477 requires VDH to take steps to begin eliminating site evaluation and design services for onsite sewage systems and private wells. The bill lays out eight specific tasks which were taken from VDH's HB 558 Report. HB 2477 focused on the tasks that could be completed by revising agency policies or regulations. HB 2477 also requires VDH to report on its progress in implementing the provisions of the bill and any recommendations for statutory, regulatory, policy or budgetary changes necessary to implement the provisions of the bill to the Secretary of Health and Human Resources and the Chairman of the House Committee on Health, Welfare and Institutions and Senate Committee on Education and Health by November 1, 2017. Implementation of HB 2477 will require significant input from agency stakeholders.

To implement the requirements of HB 2477 VDH used the recommendations and stakeholder feedback from the HB 558 Report as a starting point. Staff developed multiple workgroups to assist in the development of draft policies and procedures to implement HB 2477. The draft policies and procedures were shared with the Sewage Handling and Disposal Advisory Committee and Environmental Health (EH) Managers for feedback. Staff also facilitated four meetings across the state with local health department (LHD) staff to provide updates on draft policies and procedures and to encourage LHD staff to share their thoughts on implementing the eight specific tasks in HB 2477.

VDH's response and implementation of the specific tasks contained in HB 2477 is as follows:

Task #1: *Require, in cases in which site evaluations and design services for onsite sewage systems and private wells are provided by private sector service providers, that such site evaluation and design service providers disclose to the property owner when a conventional onsite sewage system is an option.*

VDH has issued a policy to require private sector service providers and VDH staff to certify on their design that options for conventional and alternative onsite sewage systems (AOSS) were discussed with the property owner.

Task #2: *Revise agency regulations and policies to require VDH staff to inspect all onsite sewage systems and private wells designed by private sector service providers.*

VDH has issued a policy requesting that contractors provide VDH 24 hour notice before commencing construction of onsite systems designed by the private sector. Once notified, the VDH inspection will take place at any point during the construction and staff will confirm the location, treatment level, depth, and sizing of the installation.

Task #3: *Expand efforts to educate the public concerning the design, operation, and maintenance of onsite sewage systems and private wells.*

VDH has developed an outline for onsite sewage and private well education and outreach programs, and is using the outline for two pilot projects: one on a statewide level and one on a local level.

Task #4: *Expand efforts to incorporate onsite sewage systems and private well data into community health assessments.*

OEHS staff worked with LHDs to develop a list of possible EH stakeholders to include in community health assessments; developed a list of external environmental data sources that can be used as part of a community health assessment; and provided training on a national protocol for conducting community based EH assessments.

Task #5: *Enhance quality assurance checks and inspection procedures for the review of evaluations, designs, and installations by private sector service providers and update VDH's quality assurance manual to reflect this change in the agency's business model.*

VDH has issued an updated Onsite Quality Assurance Manual that includes new procedures for inspections, and incorporates an improved method for tracking adherence to quality assurance measures.

Task #6: *Consider separating work unit functions regarding permitting and enforcement for onsite sewage systems and private wells to ensure that staff reviewing evaluations and designs for permitting purposes are separate and independent from staff performing enforcement functions.*

[Insert commissioner's recommendation]

Task #7: *Improve the collection and management of data about onsite sewage systems and private wells, including (i) creating a web-based reporting system for conventional onsite sewage system operation and maintenance, (ii) accepting applications and payments online, (iii) making onsite sewage system and private well records available online, (iv) creating a complete*

electronic record of all permitted onsite sewage systems and private wells in the Commonwealth, and (v) creating procedures for tracking Notices of Alleged Violations and corrective actions.

On [insert date], VDH awarded [insert company] with a contract for a new EH database which will be in place by January 1, 2019. The new database will include: a web-based reporting system for conventional onsite sewage systems (COSS); a method for accepting applications and payments online; a method for making onsite sewage and private well records available on line; and tracking Notices of Alleged Violations and corrective actions. VDH has also instituted several pilot projects to develop a process for creating a complete inventory of onsite sewage systems and private wells.

Task #8: *Revise agency policies to allow the transfer of valid construction permits for onsite sewage systems and private wells to new property owners.*

VDH issued a policy that allows the transfer of valid construction permits.

In addition to implementation of eight tasks contained in HB 2477, VDH recommends the following to ensure full implementation of the agency's strategic vision:

Recommendation #1

The General Assembly may wish to give well drillers the authority to perform sanitary surveys for locating wells and submitting work to VDH.

Recommendation #2

The General Assembly may wish to amend § 32.1-163 of the Code of Virginia to revise the definition of maintenance, such that paperwork is reduced for certain types of repairs or voluntary upgrades.

Recommendation #3

The General Assembly may wish to amend § 32.1-164 of the Code of Virginia to establish an O&M program and reporting for COSS, which will improve program oversight.

Recommendation #4

The General Assembly may wish to shift onsite sewage system evaluations and design services which are not associated with a building permit or the repair of a failing system (i.e., subdivision reviews, certification letters, and voluntary upgrades) to the private sector by July 1, 2018.

Recommendation #5

The General Assembly may wish to shift new construction evaluations and designs which are not for a principle place of residence to the private sector by July 1, 2018.

Recommendation #6

The General Assembly may wish to require VDH to establish guidelines to help property owners with a specific hardship and be a provider of last resort.

Recommendation #7

The General Assembly may wish to require applicants to petition VDH to provide evaluation and design services for new construction, repairs, and safe, adequate, and proper (SAP) evaluations.

Recommendation #8

The General Assembly may wish to ensure the orderly transition of evaluations and designs for new construction, repair, and SAP evaluations over a five-year period based on a sliding scale of income eligibility.

Recommendation #9

The General Assembly may wish to provide VDH authority to assess additional fees which would allow VDH to retain its current level of funding during and after the transition of direct services to private sector service providers. This recommendation would allow VDH to maintain a staffing level to provide necessary oversight, improve O&M of AOSS and alternative discharging sewage systems, improve management of onsite sewage system and private well data, and incorporate onsite sewage systems and private wells into community health planning.

Recommendation #10

The General Assembly may wish to create a fund to cover the cost of designing and installing repairs for failing onsite sewage systems and private wells for income eligible property owners.

1. Introduction

On March 16, 2017, Governor McAuliffe signed HB 2477 of the 2017 General Assembly Session. HB 2477 requires VDH to take steps to begin eliminating site evaluation and design services for onsite sewage systems and private wells. The bill lays out eight specific tasks. VDH identified these tasks in a report to the General Assembly in November 2016 as items that could be completed by revising agency policies or regulations. These tasks are part of the agency's strategic vision to have licensed private sector professionals provide consulting services, soil evaluation and design services, and well siting for private property improvements and property sales, which VDH has historically provided over five decades. This vision has developed as a result of gradual changes in the onsite sewage program over the last twenty years.

Before 1994, VDH staff was the primary group providing site and soil evaluations and designs in the Commonwealth for onsite sewage systems. Private sector professionals sometimes provided recommendations for VDH staff to consider when issuing permits for onsite sewage systems, especially as part of a new subdivision review. During this time, VDH staff did not have to accept the work performed by the private sector. Disagreements were handled through administrative due process.

As home building and new construction increased, VDH experienced backlogs in processing applications. Legislation approved in 1994 created the "Authorized Onsite Evaluator" program so that VDH could accept work from private sector practitioners who had previously been offering recommendations to VDH. Legislation approved in 1999 required VDH to accept private evaluations and designs from AOSEs and PEs when those evaluations and designs were certified to comply with the Board of Health's regulations.

Beginning in 1997, VDH addressed the issue of increasing private sector services in its five-year reports to the General Assembly. In 2005-06, as part of the ongoing statewide initiative to improve business processes and operating efficiencies among the various agencies in the Commonwealth of Virginia (<http://www.future.virginia.gov>), VDH commissioned a study of the onsite sewage program and current business models. VDH's consultant, E.L. Hamm and Associates, Inc., concluded that VDH should develop and implement a mechanism for handing over the delivery of the direct services of site and soil evaluations, system design and system installation inspection to the private sector.

In 2009, legislation transferred VDH's certification program for designers to the Department of Professional and Occupational Regulation (DPOR). DPOR implemented a licensing program for Onsite Soil Evaluators (OSE). This effort implemented one of the recommendations from the E.L. Hamm Report. Direct services could now be provided mostly, if not entirely, by the private sector. Following this transition, some members of the private sector began to complain of unfair competition from VDH. Over time, and without a specific statutory mandate to require private evaluations and designs, the OSE program has gained broad acceptance in many parts of the Commonwealth, primarily in those areas with higher property values and higher rates of growth. However, areas of low private sector participation persist today, particularly in more rural areas and the Southwest region of the Commonwealth.

In 2011, HB 2185 would have mandated all applications include supporting work from the private sector. To review this idea, VDH was asked to determine the best course for the Commonwealth's health and safety and also for the marketplace, and to examine the best means of accomplishing the transition of onsite sewage services to the private sector. VDH's report is found at Va. General Assembly, 2012, RD 32.¹ Stakeholders agreed that VDH is an essential participant in making sure public health and groundwater supplies were protected, and that VDH has a critical role in assuring adequate regulations and policies were in place to protect public health. However, stakeholder opinions differed on VDH's role in protecting public health and the environment.

In 2013, the Institute for Environmental Negotiation (IEN) instituted the Safety and Health in Facilitating a Transition (SHIFT) process. IEN worked with VDH to convene a group of 25 stakeholders to provide VDH with recommendations on how to maximize private sector input to the greatest extent possible, while protecting public health and the environment. The SHIFT process recommended a gradual, voluntary approach going forward, which would allow homeowners to choose, or not choose, to work with private sector professionals.

While the SHIFT process recommended a gradual, voluntary, and encouraging approach going forward, VDH has always required private sector work when the applicant has one or more of the following needs:

- A sewage system that serves a business or non-residential need.
- A sewage system that disperses over 1,000 gallons per day (gpd).
- An AOSS that disperses treated effluent into the soil.
- An alternative discharging sewage system.
- A sewage system that requires plans from a professional engineer (PE).
- A sewage system that is part of a new subdivision being reviewed by a local government.

When SHIFT explored whether additional mandated policies should be implemented (such as bare applications for conventional sewage systems), no agreement could be reached.

In 2016, legislation approved by the General Assembly (HB558) directed VDH to develop a plan for the orderly reduction and elimination of evaluation and design services by VDH for onsite sewage systems and private wells. The result of this legislation was VDH's report to the General Assembly which outlined VDH's strategic vision to shift evaluation and design services for sewage systems and private wells to the private sector in an orderly manner so limited VDH resources can be focused on improving public health and groundwater supplies. VDH presented 20 specific recommendations for statutory, regulatory, and policy changes to achieve the vision of gradually transitioning service to the private sector. The transition would allow VDH to focus its limited resources on population health and strengthen its efforts in health monitoring, data collection and dissemination, community health assessments, creating a complete inventory of wells and sewage systems throughout the Commonwealth, understanding viral and nutrient

¹ The HB2185 report is found at:

<http://leg2.state.va.us/dls/h&sdocs.nsf/4d54200d7e28716385256ec1004f3130/b758d93613af667f85257989006edacf?OpenDocument>

impacts to drinking water and recreational water, providing quality assurance inspections of private sector work, improving enforcement of regulations, and educating the public on O&M needs. VDH's report is found at [Va. General Assembly, 2016, HD 10](#).²

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²The HB 558 report is found at:

<http://leg2.state.va.us/DLS/H&SDocs.NSF/4d54200d7e28716385256ec1004f3130/2d721257d696848385257fb7004f93b0?OpenDocument> .

1. Background and Analysis

On March 16, 2017, Governor McAuliffe signed HB 2477 of the 2017 General Assembly Session. HB 2477 requires VDH to take steps to begin eliminating site evaluation and design services for onsite sewage systems and private wells. The bill lays out eight specific tasks. VDH identified these tasks in a report to the General Assembly in November 2016 as items that could be completed by revising agency policies or regulations. Before discussion specific outcomes, it is important to discuss VDH's process to implement the tasks contained in HB 2477.

VDH used the recommendations and stakeholder feedback from the HB 558 Report as a starting point for implementation of HB 2477. Staff developed multiple workgroups to assist in the development of draft policies and procedures to implement HB 2477. The draft policies and procedures were shared with the Sewage Handling and Disposal Advisory Committee and EH Managers for feedback. Staff also facilitated four meetings across the state with LHD staff to provide updates on draft policies and procedures, and to provide LHD staff the opportunity to share their thoughts on implementing the eight specific tasks in HB 2477.

List of HB 2477 Tasks

- 1) Require, in cases in which site evaluations and design services for onsite sewage systems and private wells are provided by private sector service providers, that such site evaluation and design service providers disclose to the property owner when a COSS is an option.
- 2) Revise agency regulations and policies to require VDH staff to inspect all onsite sewage systems and private wells designed by private sector service providers.
- 3) Expand efforts to educate the public concerning the design, operation, and maintenance of onsite sewage systems and private wells.
- 4) Expand efforts to incorporate onsite sewage systems and private well data into community health assessments.
- 5) Enhance quality assurance checks and inspection procedures for the review of evaluations, designs, and installations by private sector service providers and update VDH's quality assurance manual to reflect this change in the agency's business model.
- 6) Consider separating work unit functions regarding permitting and enforcement for onsite sewage systems and private wells to ensure that staff reviewing evaluations and designs for permitting purposes are separate and independent from staff performing enforcement functions.
- 7) Improve the collection and management of data about onsite sewage systems and private wells, including (i) creating a web-based reporting system for COSS O&M, (ii) accepting applications and payments online, (iii) making onsite sewage system and private well records available online, (iv) creating a complete electronic record of all permitted onsite sewage systems and private wells in the Commonwealth, and (v) creating procedures for tracking Notices of Alleged Violations and corrective actions.
- 8) Revise agency policies to allow the transfer of valid construction permits for onsite sewage systems and private wells to new property owners.

A. HB 2477 Tasks

Task #1: Disclose to the property owner when a COSS is an option.

VDH's HB 558 report recommended that the General Assembly require private sector OSEs and PEs verify system design options and disclose estimated costs to the property owner. HB 2477 incorporates a portion of this recommendation by requiring, in cases in which site evaluations and design services for onsite sewage systems and private wells are provided by private sector service providers, that such site evaluation and design service providers disclose to the property owner when a COSS is an option.

To implement this recommendation, VDH revised Guidance Memorandum and Policies (GMP) 2015-01 which discusses onsite sewage system application expectations and requirements.³ The policy was revised with input from the SHADAC and EH Managers. Staff also discussed the draft policy with LHD staff during four face-to-face meetings across the state.

The revised policy, GMP 2017-03, was issued on September 1, 2017.⁴ The revised policy requires private and public sector service providers certify the potential for both conventional and AOSS has been discussed with the owner or applicant. This included revising the certification statement on the cover page for onsite sewage systems which is required to be signed by designers for all applications.

Task #2: Inspect all onsite sewage systems and private wells designed by private sector service providers.

The agency's vision to shift design responsibility to the private sector would allow VDH staff to focus efforts in other areas of public health protection. One such area would be VDH staff conducting construction inspections of all onsite systems and private wells during construction. HB 2477 tasks the agency with conducting construction inspections of all onsite sewage systems and private wells.

VDH staff inspect every onsite sewage system design by VDH staff. However, GMP 2015-01 only requires staff to inspect a minimum of 10% of onsite sewage systems designed by the private sector. GMP 2015-01 requires VDH staff to inspect all private wells, including those designed by the private sector.

GMP 2015-02 requires VDH staff to obtain GPS coordinates for all onsite sewage systems and private wells after installation.⁵ The policy states the LHD will obtain and record, in VDH's electronic database, Virginia Environmental Information System (VENIS), Global Positioning System (GPS) coordinates for all onsite systems and private wells. Some LHDs rely on the private sector designer to provide this information since § 32.1-164.1.E of the Code requires the certifying private sector OSE/PE to inspect the system at the time of installation.

³ GMP 2015-01 can be viewed at [insert link, will be moved to rescinded policy page]

⁴ GMP 2017-03 can be viewed at [insert link].

⁵ GMP 2015-02 can be viewed at <http://www.vdh.virginia.gov/content/uploads/sites/20/2016/05/GMP-2015-02.pdf>.

Pursuant to § 32.1-164.1.E of the Code, private sector OSE/PEs are responsible for the final inspection of their system design; the responsibility extends to any subsequent re-issuance of the permit (e.g. renewal, change of owner, etc.). The certifying private sector OSE/PE is responsible for inspecting the entire system to determine whether the installation complies with the applicable regulations and the permit. GMP 2015-01 clarifies that the OSE/PE must complete an as-built drawing of the installation with field measurements to the septic tank, the distribution box, and other necessary components. In some cases the LHD is using the as-built drawing provided by the private sector designer to obtain the GPS data.

To implement the inspection criteria in HB 2477, VDH staff established a stakeholder workgroup to draft recommendations to the Commissioner. The workgroup consisted of members of the Office of Environmental Health Sciences (OEHS), EH Specialists and Supervisors, licensed private well and onsite contractors, and private sector designers. The workgroup meetings were also observed by members of DPOR. The group explored several possible scenarios and came to consensus that the VDH inspection should provide added value and not impede the approval process. The key would be avoiding a duplication of effort and VDH staff observing key components of the installation.

The workgroup came to a consensus that VDH should continue to inspect VDH designs with no changes in current procedures or policies. For private sector designs the licensed contractor should notify VDH staff 24 hours before commencing construction. The workgroup noted that a change to the Code or regulations may be necessary to ensure that VDH receives notification. Once notified the VDH inspection could take place at any point during the construction and staff would confirm the location, treatment level, depth, and sizing of the installation. The workgroup also recommended that VDH staff also record the GPS location of tank, distribution box, and well, in addition to the center of the drainfield, for entry into VENIS. The private sector designer will still be responsible for providing the complete system inspection, certification, and as-built drawings.

The workgroup recommended that any observations of deficiencies be handled using the current established procedures. The workgroup recommends the Commissioner approve the group's model for procedures and begin implementation. The recommendations were incorporated into the revisions to GMP 2015-01 and were shared with the SHADAC and EH Managers. The draft policy was also shared with local EH staff during four face-to-face meetings around the state.

GMP 2017-01 was issued on September 1, 2017, to replace GMP 2015-01. The policy includes the recommendations presented by the workgroup for conducting 100% inspections of onsite sewage systems and private wells.

During development of the draft policy, VDH staff evaluated the potential impact on LHD resources. The impact will be low in areas where the majority of permits are currently designed by VDH staff as the LHD already conducts inspections for most installations. However, in areas with a significant number of designs where LHD staff currently only conduct 10% inspections the resource impact will be high. The HB 558 Report recommended that VDH conduct 100% inspections as part of a larger vision to shift evaluation and design services to the private sectors.

OEHS staff will work with the LHDs that may see a substantial increase in staff resource demands to meet this new expectation to the extent possible until such time that the larger program vision can be incorporated. This may include having staff perform a post installation inspection while collecting GPS coordinates.

Task #3: Expand efforts to educate the public.

LHD staff provide education to the public on a daily basis regarding onsite sewage system and private well design, operation, and maintenance. The majority of this information is provided on an individual basis to people applying for construction permits or contacting LHD staff with questions. LHD also occasionally participate in outreach efforts at schools and community events to educate the public. However, previous reports, such as the 2006 E.L. Hamm report and the 2016 HB 558 report identified education and outreach as an area where VDH could take a more active role.

Improving education offered to the public would likely improve O&M practices, extending the life of onsite sewage systems and reducing repair costs for owners. Improved education would also likely improve the health of Virginians through reduced impacts on the environment, as owners would better understand how to monitor and improve water quality and sewage system function.

HB 2477 directs VDH to expand efforts to educate the public concerning the design, operation, and maintenance of onsite sewage systems and private wells. To begin implementation, OEHS staff drafted an outline for an education and outreach program (see Appendix A). The program outline lays out a process for developing, disseminating, and monitoring the effectiveness of individual outreach projects. The process would begin by meeting with partners to determine the specific topics and messages for the specific outreach program. VDH would then work with partners to set goals and objectives, develop materials, and disseminate the content for the outreach effort. VDH would then monitor results of the effort to ensure that goals are met and meet with partners to modify material as necessary. The concept is to develop proven education and outreach materials that can be used for future outreach initiatives.

The draft outline was shared with the SHADAC and EH Managers for feedback. Following feedback from stakeholders, OEHS staff worked to identify pilot projects for the program; a statewide project and a local project were identified.

The statewide project was for VDH to participate in the U.S. EPA's annual SepticSmart Week, which occurs September 18-22, 2017. The goal of the effort was to improve onsite sewage system owner awareness of how systems work and necessary system maintenance. To achieve this goal staff submitted a request for a Governor's proclamation to promote SepticSmart Week. The proclamation was signed by Governor McAuliffe on [insert date]. The Governor's proclamation and other VDH efforts were discussed in press releases and interviews with VDH staff throughout the state. VDH staff also placed promotional material on the VDH website and various agency social media platforms. Staff worked with stakeholders and industry groups to share promotional materials. OEHS also worked with LHDs to set up education and outreach efforts throughout the state related to SepticSmart week. OEHS staff are monitoring the number

of unique visitors to the VDH website and the number of onsite sewage system maintenance activities to evaluate the effectiveness of this statewide education and outreach effort.

For the local effort, OEHS worked with SHADAC members to identify the Smith Mountain Lake community for a local pilot project. OEHS and LHD staff meet with representatives from the Smith Mountain Lake Association, the Tri-County Lakes Administrative Commission, local government representatives, and other local stakeholders to:

1. Determine whether education and outreach about onsite sewage systems is needed;
2. Get buy-in from stakeholders to support the promotion of onsite sewage system education and outreach;
3. Identify a list of potential messages; and
4. Develop messages specific to the community's needs.

Staff are still working with community stakeholders to prioritize messages and finalize a plan for disseminating educational material. Stakeholders agreed that the outreach would be an ongoing process focusing on issues such as:

- Do's and Don'ts for onsite sewage system owners.
- Cost of repairs.
- Impacts to the environment.
- Types of systems.
- Maintenance requirements.
- Impacts of improper sizing.
- How systems work.
- What is an onsite sewage system?
- System owner responsibilities.

Following dissemination of education and outreach messages, VDH will work with stakeholders to identify measures to identify the effectiveness of the program.

Task #4: Expand efforts to incorporate data into community health assessments.

LHDs through Virginia have been working with community stakeholders to conduct community health assessments. While EH is sometimes involved in conducting community health assessments, the focus is typically to share data on program components, such as foodborne illness and water quality of public water supplies.

In the HB 558 Report, VDH recommended expanding efforts to incorporate onsite sewage system and private well data into community health assessments. This recommendation was included as a task in HB 2477. Expanding community health assessments would improve stakeholder decisions and policies regarding private drinking water supplies and onsite sewage treatment.

OEHS staff met with staff from the Division of Population Health to better understand how onsite sewage system, private well, and other EH data can be incorporated into community

health assessments. Staff noted that being able to bring stakeholders from the EH community is a key first step to including EH into community health assessments. OEHS staff worked with LHDs to develop a list of possible stakeholders and shared the list at a statewide EH Managers meeting in September.

In addition to onsite sewage system and private well data, EH staff can work with other agencies and stakeholders to incorporate additional environmental data such as surface water and air quality and permits for waste disposal. Incorporating these datasets can help increase awareness of environmental factors that may impact local communities. OEHS has worked with LHDs to develop a list of external environmental data sources that can be used as part of a community health assessment. This list was shared at a statewide EH Managers meeting in September.

The Center for Disease Control and Prevention (CDC) has partnered with the National Association for County and City Health Officials (NACCHO) to develop a Protocol for Assessing Community Excellence in Environmental Health (PACE EH).⁶ PACE EH guides communities and local health officials in conducting community based EH assessments. Training on PACE EH was provided to EH Managers at a statewide meeting in September. OEHS staff also discussed incorporating EH data into community health assessments with LHD staff at four face-to-face meetings throughout the state.

Task #5: Enhance quality assurance.

In 2006, OEHS was directed to work with the health districts to develop a Quality Assurance (QA) Program for the onsite sewage program. A QA Committee was convened to draft an initial QA Procedures Manual for the onsite sewage program. The QA Procedures Manual identifies measurable standards for four major processes - bare applications, OSE applications, inspection and approval of installations, and subdivision reviews.

In 2013, OEHS convened the SHIFT committee to produce a report of recommendations to advise VDH on how to maximize private sector participation in the onsite sewage program while providing adequate oversight to protect public health and the environment. One of the consensus recommendations of SHIFT process was to revise the QA Procedures Manual to address any changes to existing practices. To identify necessary revisions, OEHS convened a workgroup consisting of both OEHS staff and LHD staff. Draft revisions were produced but not released prior to the issuance of the HB 558 Report.

The HB 558 Report recommended that VDH enhance quality assurance checks and inspection procedures for the review of private sector evaluations, designs, and installations, and update the quality assurance manual to reflect a change in the agency's business model. This recommendation was incorporated into HB 2477.

As previously discussed, VDH updated existing agency policy to enhance quality assurance inspection of private sector designs by conducting 100% installation inspections. In addition to

⁶ More information on PACE EH is available at https://www.cdc.gov/nceh/ehs/ceha/pace_eh.htm.

updating agency policy, OEHS staff also incorporated the 100% inspection procedures into the QA Procedures Manual. The updated manual was approved on September 15, 2017.

One major change in the updated QA program is the replacement of the tool staff used to determine whether quality assurance measures are met. The QA Procedures Manual previous used a pass/fail method of determining whether a measure was met. This pass/fail method was replaced with a scoring rubric where districts will give a 1, 2, 3, or 4 for each measure. A 3 indicates that the measure was met, a 4 exceeds expectations, a 2 is slightly below expectations, and a 1 indicates a need for significant improvement. OEHS believes this revised method for determining whether measure are met will help better identify areas where VDH is succeeding and where improvement is necessary.

Task #6: Consider separating work unit functions.

The HB 558 Report included a recommendation that VDH should consider whether to separate work unit functions regarding permitting and enforcement. Staff reviewing evaluations and designs for permitting purposes may need to have a separate and independent function from staff performing enforcement actions. This recommendation was incorporated into HB 2477. An evaluation of this change would possibly allow specific staff to dedicate their efforts to improving compliance with onsite sewage system and private well laws and regulations with a focus on i) timely repair of failing onsite sewage system, ii) O&M of AOSS, and iii) O&M of alternative discharging sewage systems.

To address this task in HB 2477 OEHS established an internal workgroup to analyze the feasibility of separating work unit functions regarding permitting and enforcement; and if feasible, submit a plan for separating work unit functions. The workgroup drafted a report and recommendations for the Commissioner's consideration.

The workgroup consisted of members of the OEHS staff, EH Managers and Specialists, and District Directors, and investigated several models of enforcement and permitting utilized within various state and local agencies. Among the models were considered the regional enforcement model, the centralized enforcement model, the local enforcement model, and the current enforcement model. The workgroup agreed that permitting functions should remain within the LHD based upon the interplay of local ordinances in many permitting functions. The workgroup asked representatives from the Department of Environmental Quality, the Department of Mines, Minerals and Energy, and the Department of Housing and Community Development to speak about their respective agency's models used for permitting and enforcement. The representatives answered the workgroup's questions regarding the benefits and costs involved in the particular enforcement model utilized and asked for observations on the efficiency of the model.

The regional enforcement model used by DEQ and some programs in DMME separates permitting, compliance, and enforcement into three separate work units. Permitting involves reviewing designs, working with applicants to obtain permits, and updating permits for renewal. Compliance specialists work with the permittee to maintain their permit and meet all the requirements of the Code and Regulation. Once a permittee enters formal enforcement (a Notice of Violation for DEQ), the case is submitted to the Enforcement Division which works on

Consent Orders, hearings, orders of the Board and court cases alongside the Office of the Attorney General.

The centralized enforcement model, utilized by DMME for some programs, centralizes all enforcement staff into a single office which is a separate unit from the permitting staff. Central enforcement staff are given cases from all over the Commonwealth once a Notice of Alleged Violation is sought to be issued.

The local enforcement model, utilized by DHCD, separates permitting and enforcement when it can, given staff levels, and keeps both units co-located in the local offices. The enforcement staff inspect the properties and give notice of violations.

Based upon these discussions and the discussions of the workgroup during their meetings, the group came to a consensus recommendation for the Commissioner of separating the work unit functions of permitting and enforcement. The workgroup also recommended the Commissioner adopt the local enforcement model for implementation in the beginning and move towards a regional enforcement model when adequate resources are available.

The Commissioner reviewed the draft report and provided a final decision on [insert date]. The Commissioner's decision was to [insert Commissioner's recommendation].

Task #7.A: Creating a web-based reporting system for COSS O&M.

VDH currently has an online reporting tool for AOSS operators to submit O&M reports. This tool was developed pursuant to § 32.1-164 of the Code which requires O&M of AOSS to be provided by licensed operators, and requires operators to report the results using the web-based system. There are approximately 20,000 alternative onsite sewage systems installed throughout the state. VDH has received more than more than 50,000 O&M reports for those systems.

During development of the HB 558 Report, stakeholders commented that adding operation and monitoring reporting for conventional system would be a benefit to the program. One of the recommendations of the HB 558 Report was for VDH to create a web-based reporting system for COSS O&M, such as septic tank pump outs. This recommendation was incorporated into HB 2477. Another recommendation from the HB 558 Report was to require reporting of COSS O&M.

VDH estimates there to be over one million COSS in the Commonwealth. If reporting were required for COSS O&M, VDH would have more accurate information on onsite sewage systems in Virginia. The reports would also assist VDH in identifying and adding permitted systems not currently included in the VENIS database. DEQ and local governments would benefit by relying on improved VDH data. VDH would be able to provide information on activities related to the Chesapeake Bay Preservation Area Designation and Management Regulations, potentially reducing staff resource needs at the local level. DEQ and localities outside of the Preservation Area would also benefit by having more accurate information regarding COSS O&M that could help with Watershed Implementation Plans to improve water quality in impaired surface waters.

With over one million systems, the staff resource needs could be significant for implementing a COSS reporting system. VDH recommends that owners have systems pumped out or inspected once every five years. This means VDH could receive as many as 200,000 COSS O&M reports each year. However, since there is no required reporting, it is difficult to determine how many reports will be received.

On October 4, 2016, VDH issued a Request for Proposals (RFP) for a database system to track EH program activities. VDH's contract with the current VENIS database contractor, HealthSpace, is set to expire in 2018. One of the components of the RFP was that the proposed software programs must include modules for onsite sewage system operation and monitoring. On [insert date], [insert company] was awarded the contract for the new database which will be in place by January 1, 2019. The required COSS O&M reporting system will be part of the new database.

Task #7.B: Accepting applications and payments online.

Applications and payments for onsite sewage system and private well permits are currently submitted to VDH in paper form, with some exception (i.e. applications that do not include a fee may be submitted via email as a PDF). The HB 558 Report recommended that VDH begin accepting applications and payments online, and this recommendation was incorporated into HB 2477.

On October 4, 2016, VDH issued a RFP for a database system to track EH program activities. VDH's contract with the current VENIS database contractor, HealthSpace, is set to expire in 2018. One of the components of the RFP was that the proposed software programs must include the capability for online submittal of applications and fees. On [insert date], [insert company] was awarded the contract for the new database which will be in place by January 1, 2019. The requirement to accept applications and payments online will be part of the new system.

Task #7.C: Making onsite sewage system and private well records available online.

Many Virginians visit VDH's website on a daily basis to view restaurant inspection reports. While the capability to review reports online for some VDH programs exist, VDH does not currently have the capability to provide onsite sewage system and private well records online. However, some LHDs have made records, or portions of records, available using local database programs. The HB 558 report recommend that VDH make onsite sewage system and private well records available online, and this recommendation was incorporated into HB 2477.

On October 4, 2016, VDH issued a RFP for a database system to track EH program activities. VDH's contract with the current VENIS database contractor, HealthSpace, is set to expire in 2018. One of the components of the RFP was that the proposed software programs must include a public web portal for the public to obtain data concerning permitted facilities. On [insert date], [insert company] was awarded the contract for the new database which will be in place by January 1, 2019. The requirement to make onsite sewage system and private well records available online will be part of the new system. However, only those systems entered into the

database will be available. Ensuring that the public has access to records for all permitted onsite sewage systems and private wells will require creating a complete electronic inventory of systems.

Task #7.D: Creating a complete electronic record of all permitted onsite sewage systems and private wells in the Commonwealth.

As previously mentioned, VDH estimates there are more than one million onsite sewage systems in the Commonwealth. These include both COSS and AOSS. This estimate is based on U.S. Census data and information from VDH's VENIS database.

Until 1990 the United States Census Bureau collected information regarding the use of onsite sewage systems and private wells. In 1990, 707,409 homes in Virginia were reported as using an onsite sewage system. In 2003, VDH began tracking onsite sewage systems and private well records using the VENIS database. Most LHDs also maintain a hard copy of the information entered in the VENIS database. The VENIS database contains information for more than 180,000 installed onsite sewage systems. These records are in addition to thousands of other VENIS records where an application was denied, withdrawn, or the construction permit expired prior to installation.

In addition to census data and VENIS data, VDH estimates approximately 180,000 onsite sewage systems were installed from 1990 to 2003, covering the data gap between the 1990 census and current VENIS records. Adding these numbers to the census data and VENIS data we reach an estimated total of more than 1,000,000 homes served by onsite sewage systems. Most of these records are not in VENIS, and can only be found in hard copy at LHDs.

While VDH has a reasonable estimate of the total number of onsite sewage systems and private wells in Virginia, these estimates do not provide a clear picture of the number of records on file with the LHD. VDH estimates there are a total of 2,750,000 hard copy records on file at LHDs. These records include files for installed systems, permit denials, subdivision approvals, complaint investigations, and other miscellaneous records.

The filing method for these records can vary from one locality to the next locality. Generally records after 1982 are filed by a property identifier (e.g. Tax Map, GPIN, 911 address), with all of the information for one property stapled together in one package (sewage system permits, well permits, inspections, complaints, pump out records, etc.). Records prior to 1982 may just be identified by the owner's name at the time, or perhaps a road number or rural route.

Over the years, VDH has made efforts to create a complete inventory of onsite sewage systems and private wells. Some LHDs have hired contractors to scan records to create searchable electronic records; however, these processes were not uniform across the state. VDH has taken significant efforts to ensure that all AOSS are included in the VENIS database; however, those systems make up only a fraction of all onsite sewage systems in the state. Additionally, the Private Well Regulations did not go into effect until 1990, so a number of installed private wells pre-date permitting requirements.

In the HB 558 Report VDH recommended that a complete inventory of onsite sewage system and private well be completed, understanding the hurdles to create such an inventory. This recommendation was included in HB 2477.

To implement this recommendation, VDH has begun pilot projects in three health districts (Chickahominy, Henrico, and Cumberland Plateau) with the aim of creating a process that will be uniform and replicable in all localities. The concept of the pilot projects is to work with localities to get parcel data that identifies the available utilities for each property (public or private sewage and water); transform that information into a standard format; import that information into VENIS using an automated process that compares fields; and creates records only for those properties not currently in the database. The anticipated result is a complete inventory of all properties in a locality which have buildings for human occupancy that do not have access to public water or sewer. These properties would be assumed to have an onsite sewage system and/or private well. LHD staff would review the transferred information in a testing data base, conduct necessary data clean up, and then the records would be moved into the live database. While this would not provide complete information on the components of the installed system, it would provide reliable location data for the properties served by onsite sewage systems and private wells. As LHD staff pull files, receive complaint and applications, and perform other duties related to specific properties they could easily verify in the databased that the property is served by an onsite sewage system and/or private well, and include additional information about the system. Once the pilot projects are complete and show that process works, VDH will share the template with other localities to complete similar projects on a county by county basis.

It should be noted that all the necessary data may not be available in every county. VDH selected the Cumberland Plateau Health District because they don't maintain utility data for developed parcels. Working with Cumberland Plateau will help to identify other mechanisms for creating complete inventories in localities that also lack utility data to connect with property records.

Task #7.E: Creating procedures for tracking Notices of Alleged Violations and corrective actions.

One component of VDH's Onsite Sewage and Water Services program is enforcement of regulations, such as correction of improper system installation, correction of failing system, and compliance with AOSS O&M requirements. Enforcement actions begin with the issuance of a Notice of Alleged Violation (NOAV) and can ultimately result in civil penalties and court cases. EH Managers report issuing an average of 556 NOAVs statewide each year regarding possible OSS violations. EH Managers report taking an average of 15 cases to court statewide each year regarding OSS violations. The HB 558 Report recommended that VDH implement specific procedures for tracking NOAVs and corrective actions in the EH database.

On October 4, 2016, VDH issued a Request for Proposals (RFP) for a database system to track EH program activities. VDH's contract with the current VENIS database contractor, HealthSpace, is set to expire in 2018. One of the components of the RFP was that the proposed software program must improve operational efficiency by standardizing reporting and program

monitoring. On [insert date], [insert company] was awarded the contract for the new database which will be in place by January 1, 2019. The required tracking of NOAVs and corrective actions will be part of the new database.

Task #8: Transfer of valid construction permits.

Historically, construction permits for onsite sewage systems and private wells were not transferrable to new property owners. The HB 558 Report recommended VDH revise agency policy to allow the transfer of valid construction permits to new property owners provided no permit change is necessary. Allowing permits to transfer would decrease demand on agency resources. VDH would only need to ensure no change to the permit was necessary. This recommendation was incorporated into HB 2477.

To implement this requirement, VDH revised GMP 2015-01 with input from the SHADAC and EH Managers. OEHS staff also discussed draft revisions to the policy with LHD staff at four face-to-face meetings throughout the state. VDH's revised policy, GMP 2017-01, allows valid construction permits for onsite sewage systems and private wells to transfer to new property owners provided no permit changes are necessary.

2. Implementation

Task #1: *Require, in cases in which site evaluations and design services for onsite sewage systems and private wells are provided by private sector service providers, that such site evaluation and design service providers disclose to the property owner when a conventional onsite sewage system is an option.*

VDH has issued a policy to require private sector service providers and VDH staff to certify on their design that options for conventional and AOSS were discussed with the property owner.

Task #2: *Revise agency regulations and policies to require VDH staff to inspect all onsite sewage systems and private wells designed by private sector service providers.*

VDH has issued a policy requesting that contractors provide VDH 24 hour notice before commencing construction of onsite systems designed by the private sector. Once notified, the VDH inspection will take place at any point during the construction and staff will confirm the location, treatment level, depth, and sizing of the installation.

Task #3: *Expand efforts to educate the public concerning the design, operation, and maintenance of onsite sewage systems and private wells.*

VDH has developed an outline for onsite sewage and private well education and outreach program, and is using the outline for two pilot projects: one on a statewide level and one on a local level.

Task #4: *Expand efforts to incorporate onsite sewage systems and private well data into community health assessments.*

OEHS staff worked with LHDs to develop a list of possible EH stakeholders to include in community health assessments; developed a list of external environmental data sources that can be used as part of a community health assessment; and provided training on a national protocol for conducting community based EH assessments.

Task #5: *Enhance quality assurance checks and inspection procedures for the review of evaluations, designs, and installations by private sector service providers and update VDH's quality assurance manual to reflect this change in the agency's business model.*

VDH has issued an updated Onsite Quality Assurance Manual that includes new procedures for inspections and incorporates an improved method for tracking adherence to quality assurance measures.

Task #6: *Consider separating work unit functions regarding permitting and enforcement for onsite sewage systems and private wells to ensure that staff reviewing evaluations and designs for permitting purposes are separate and independent from staff performing enforcement functions.*

[Insert commissioner's recommendation]

Task #7: *Improve the collection and management of data about onsite sewage systems and private wells, including (i) creating a web-based reporting system for conventional onsite sewage system operation and maintenance, (ii) accepting applications and payments online, (iii) making onsite sewage system and private well records available online, (iv) creating a complete electronic record of all permitted onsite sewage systems and private wells in the Commonwealth, and (v) creating procedures for tracking Notices of Alleged Violations and corrective actions.*

On [insert date], VDH awarded [insert company] with a contract for a new EH database which will be in place by January 1, 2019. The new database will include: a web-based reporting system for conventional onsite sewage systems (COSS); a method for accepting applications and payments online; a method for making onsite sewage and private well records available on line; and tracking Notices of Alleged Violations and corrective actions. VDH has also instituted several pilot projects to develop a process for creating a complete inventory of onsite sewage systems and private wells.

Task #8: *Revise agency policies to allow the transfer of valid construction permits for onsite sewage systems and private wells to new property owners.*

VDH issued a policy that allows the transfer of valid construction permits.

3. Recommendations

The tasks listed in HB 2477 were part of the agency's larger strategic vision laid out in the HB 558 report. While VDH has taken steps to implement the requirements of HB 2477, it is necessary to implement the additional recommendations from HB 558 to fully implement the agency's vision. In order to meet that vision, VDH recommends the following:

Recommendation #1

The General Assembly may wish to give well drillers the authority to perform sanitary surveys for locating wells and submitting work to VDH.

VDH recommends allowing DPOR certified water well system providers to provide private well evaluations for all well types. This recommendation provides property owners with additional options for service providers that can provide private well evaluations. Evaluations should be required to meet the same standards as those provided by private sector OSEs and PEs. Accepting private well evaluations from certified water well system providers would reduce demand on agency resources to provide site evaluations and would have a corresponding increased demand on resources to conduct Level I and Level II reviews.

Recommendation #2

The General Assembly may wish to amend § 32.1-163 of the Code of Virginia to revise the definition of maintenance, such that paperwork is reduced for certain types of repairs or voluntary upgrades.

VDH recommends expanding the definition of maintenance to streamline processing for simple repairs and voluntary upgrades. Incorporating simple repairs and voluntary upgrades under maintenance would allow licensed operators (or installers with appropriate authority) to make simple improvements to onsite sewage systems without the need for an evaluation, design, and permit. VDH recommends limiting maintenance to in-kind replacement of components. This would require an amendment to the definition of maintenance in § 32.1-163 of the Code. Revising the definition of maintenance would decrease the demand on agency resources to review site evaluations and designs. With this change, a number of property owners would avoid additional evaluation and design costs. VDH recommends maintenance activities be reported electronically; otherwise this work would be performed without oversight.

Recommendation #3

The General Assembly may wish to amend § 32.1-164 of the Code of Virginia to establish an O&M program and reporting for COSS, which will improve program oversight.

VDH recommends requiring operators to report to VDH all inspections and maintenance activities performed on COSS. This recommendation would require an amendment to § 32.1-164 of the Code. Requiring reporting of inspections and maintenance activities for COSS may increase costs for private sector providers. However, having VDH manage this data may provide

long-term savings for localities and enhance the Commonwealth's ability to reduce failures and more quickly respond to problems. VDH should provide aggregated data to stakeholders.

Ongoing O&M of onsite sewage systems is necessary to ensure sewage systems function properly. Many homeowners have septic tanks pumped and there is no reporting or tracking mechanism. Establishing an O&M program could extend the life of COSS, saving owners money on the cost of system repairs. This recommendation may also help the Commonwealth and localities meet Chesapeake Bay Watershed Implementation Plan goals since conventional system pump outs are listed as one of the possible nitrogen credits for the onsite sewage sector.

Recommendation #4

The General Assembly may wish to shift onsite sewage system evaluations and design services which are not associated with a building permit or the repair of a failing system (i.e., subdivision reviews, certification letters, and voluntary upgrades) to the private sector by July 1, 2018.

There are three evaluation and design services which are voluntary in nature because a building permit is not required: subdivision reviews, certification letters, and voluntary upgrades. VDH recommends continuing to require that all subdivision reviews include supporting private sector work. This requirement is currently in place through policy. Starting July 1, 2018, VDH recommends requiring all applications for a certification letter or voluntary upgrade also be accompanied with private sector work.

Requiring private sector evaluations for all certification letters would result in a decreased demand on agency resources to provide site evaluations and a corresponding increased demand on resources to conduct Level I and Level II reviews. Requiring private sector evaluations for all voluntary upgrades would also result in a decreased demand on agency resources to provide site evaluations and designs and a corresponding increased demand on resources to conduct Level I and Level II reviews.

Recommendation #5

The General Assembly may wish to shift new construction evaluations and designs which are not for a principle place of residence to the private sector by July 1, 2018.

Starting July 1, 2018, VDH recommends requiring all applications for new OSS construction not intended as a principle place of residence to be accompanied by work from the private sector. VDH does not anticipate this recommendation to impact a large volume of applications.

Recommendation #6

The General Assembly may wish to require VDH to establish guidelines to help property owners with a specific hardship and be a provider of last resort.

No later than July 1, 2019, VDH should develop guidelines for evaluating the hardship of receiving private sector help. VDH should continue to provide services as the provider of last resort. VDH should work with stakeholders to develop the specific guidelines for determining hardship. Considerations should include the ability for the owner to receive timely services, needs of the applicant, and criteria for services in the absence of a repair fund.

Recommendation #7

The General Assembly may wish to require applicants to petition VDH to provide evaluation and design services for new construction, repairs, and SAP evaluations.

The first step in transitioning direct services for new construction, repairs, and SAP evaluations is to establish a process where owners must specifically request VDH services. VDH recommends requiring applicants to petition VDH to process bare application services for new construction, repairs, and SAPs starting July 1, 2018.

Recommendation #8

The General Assembly may wish to ensure the orderly transition of evaluations and designs for new construction, repair, and SAP evaluations over a five-year period based on a sliding scale of income eligibility.

Once a process is in place for owners to petition VDH for services, then the limits for service must be set. VDH recommends transitioning evaluation and design services for new construction of OSS and private wells over a five-year period based on income eligibility. This process should begin on July 1, 2019, by requiring means testing of applicants that petition VDH for services. Applicants that do not meet the income eligibility criteria could still receive services if a hardship exists in accordance with guidelines developed by VDH.

Starting July 1, 2019, VDH should provide services only to applicants below 400% of the federal poverty guidelines (FPG) or who demonstrate a hardship. Starting July 1, 2020, the income eligibility should drop to applicants below 300% of the FPG. Income eligibility should then drop to 200% of the FPG on July 1, 2021, and to 100% of the FPG on July 1, 2022. Starting July 1, 2023, VDH should provide services only to those applicants that demonstrate a hardship in accordance with the guidelines developed by VDH.

Gradually requiring private sector evaluations for new onsite sewage system and private well construction would decrease demand on agency resources, except for review of private sector work. Means testing would increase resources for performing eligibility assessments. VDH estimates each eligibility review would add one-half hour to application processing. Not every applicant would request an eligibility review and the largest volume of requests would likely be in FY 2018.

Property owners will see an increase in the cost of evaluation and design services. However, owners that meet income eligibility requirements or that demonstrate a hardship would receive

VDH services without this additional cost. Allowing water well system providers to provide well evaluations would reduce costs to owners.

VDH recommends transitioning SAP evaluations based on income eligibility. This process should begin on July 1, 2019, by requiring means testing of property owners that petition VDH to provide SAP evaluation services. Owners that do not meet the income eligibility criteria could still receive services if they are able to demonstrate a hardship in accordance with guidelines developed by VDH.

Starting July 1, 2019, VDH should provide services only to applicants below 400% of the FPG or demonstrating a hardship in obtaining private sector evaluation design services in a timely manner. Starting July 1, 2020, the income eligibility should drop to applicants below 300% of the FPG. Income eligibility should then drop to 200% of the FPG on July 1, 2021, and to 100% of the FPG on July 1, 2022. Starting July 1, 2023, VDH should provide services only to those applicants that demonstrate a hardship in accordance with the guidelines developed by VDH.

Gradually requiring private sector evaluations for SAP would result in decreased demand on agency resources to provide site evaluations. Means testing would increase resources needs for performing eligibility assessments. VDH anticipates this impact would be greatest in FY 2018.

VDH recommends transitioning evaluation and design services for the repair of onsite sewage systems and private wells based on income eligibility. This process should begin on July 1, 2019, by requiring means testing of applicants that petition VDH to provide evaluation and design services for the repair of OSS and private wells. Applicants who do not meet the income eligibility criteria could still receive services for a hardship in the absence of a repair fund (see recommendation #10).

Starting July 1, 2019, VDH should provide services only to applicants below 400% of the FPG or who have a hardship. Starting July 1, 2020, the income eligibility should drop to applicants below 300% of the FPG. Income eligibility should then drop to 200% of the FPG on July 1, 2021, and to 100% of the FPG on July 1, 2022. Starting July 1, 2023, VDH should provide services only to those applicants that demonstrate a hardship.

Recommendation #9

The General Assembly may wish to provide VDH authority to assess additional fees which would allow VDH to retain its current level of funding during and after the transition of direct services to private sector service providers. This recommendation would allow VDH to maintain a staffing level to provide necessary oversight, improve O&M of AOSS and alternative discharging sewage systems, improve management of onsite sewage system and private well data, and incorporate onsite sewage systems and private wells into community health planning.

In order to fully implement the previous recommendations and the tasks outlined in HB 2477, VDH recommends no change in staffing level. VDH also recommends charging fees for several services that are currently provided for free. Starting July 1, 2019, VDH recommends charging

an application fee of up to \$225 for onsite sewage system repair applications with flows less than or equal to 1,000 gpd, and up to \$1,400 for onsite sewage system repair applications with flows greater than 1,000 gpd. Repair fees should be waived for all property owners that are eligible for the repair fund recommended below.

Starting July 1, 2019, VDH recommends charging an application fee of up to \$225 for onsite sewage system voluntary upgrade applications with flows less than or equal to 1,000 gpd and up to \$1,400 for onsite sewage system voluntary upgrade applications with flows greater than 1,000 gpd. The fee waiver for new OSS construction permits contained in the Fee Regulations should be extended to voluntary upgrade applications.

Lastly, starting July 1, 2019, VDH recommends charging a fee of up to \$100 for SAP evaluations. The fee waiver criteria contained in the Fee Regulations should be extended to SAP evaluations.

The recommendation to establish new fees for repairs, voluntary upgrades, and SAP evaluations would offset a portion of revenue losses from other recommendations to shift services to the private sector.

Recommendation #10

The General Assembly may wish to create a fund to cover the cost of designing and installing repairs for failing onsite sewage systems and private wells for income eligible property owners.

A repair fund should be created to cover the cost of design and installation of onsite sewage system and private wells for qualifying property owners. VDH does not recommend a specific source for funding; however, a number of options are presented in the background section for consideration. The specific funding source would determine resource needs and fiscal impacts.

More information regarding the background, development, and cost to the agency and stakeholders for these recommendations can be found in the HB 558 Report.

4. Conclusion

VDH's strategic vision is to shift evaluation and design services for sewage systems and private wells to the private sector in an orderly manner over a five-year period so limited VDH resources can be focused on improving public health and groundwater supplies. The strategic vision includes VDH having a more traditional regulatory role. VDH is unique among state and federal agencies in that it provides some of the same services offered in the private sector. VDH's dual role of service provider and regulator creates numerous difficulties with enforcement, plan review, and work product expectations. The strategic vision includes VDH providing adequate programmatic oversight with a proper "check and balance" system.

While the tasks outlined in HB 2477 do implement portions of VDH's strategic plan to focus on improving public health and groundwater supplies, the strategic plan and these tasks can only be fully realized by incorporating the additional recommendations from the HB 558 Report. VDH should not provide evaluation and design services when and where a sufficient number of licensed private sector professionals are available to perform evaluation and design services. VDH should focus its limited resources on risk assessment, policy development, population health (strengthening efforts in health monitoring), data collection and dissemination, community health assessments, creating a complete inventory of wells and sewage systems throughout the Commonwealth, understanding viral and nutrient impacts to drinking water and recreational water, providing quality assurance inspections of private sector work, educating the public on O&M needs and drinking water quality, developing necessary policies to improve health, and providing reasonable enforcement and programmatic oversight. VDH cannot currently perform these higher priority needs to the extent necessary because the law requires VDH to perform soil evaluations and designs.

VDH should be adequately staffed in order to protect public health while it is implementing this shift of direct services to the private sector in order to ensure adequate staffing. This may include re-evaluation of programmatic priorities to ensure that higher priority needs, such as 100% inspection of onsite sewage systems, can be completed with limited agency resources. Full implementation of the agency's strategic plan and the tasks outlined in HB 558 may actually require dedicating more resources to the agency. VDH looks forward to working with the General Assembly and stakeholders to ensure that the tasks outlined in HB 2477 and the agency's strategic vision are fully implemented.

5. References

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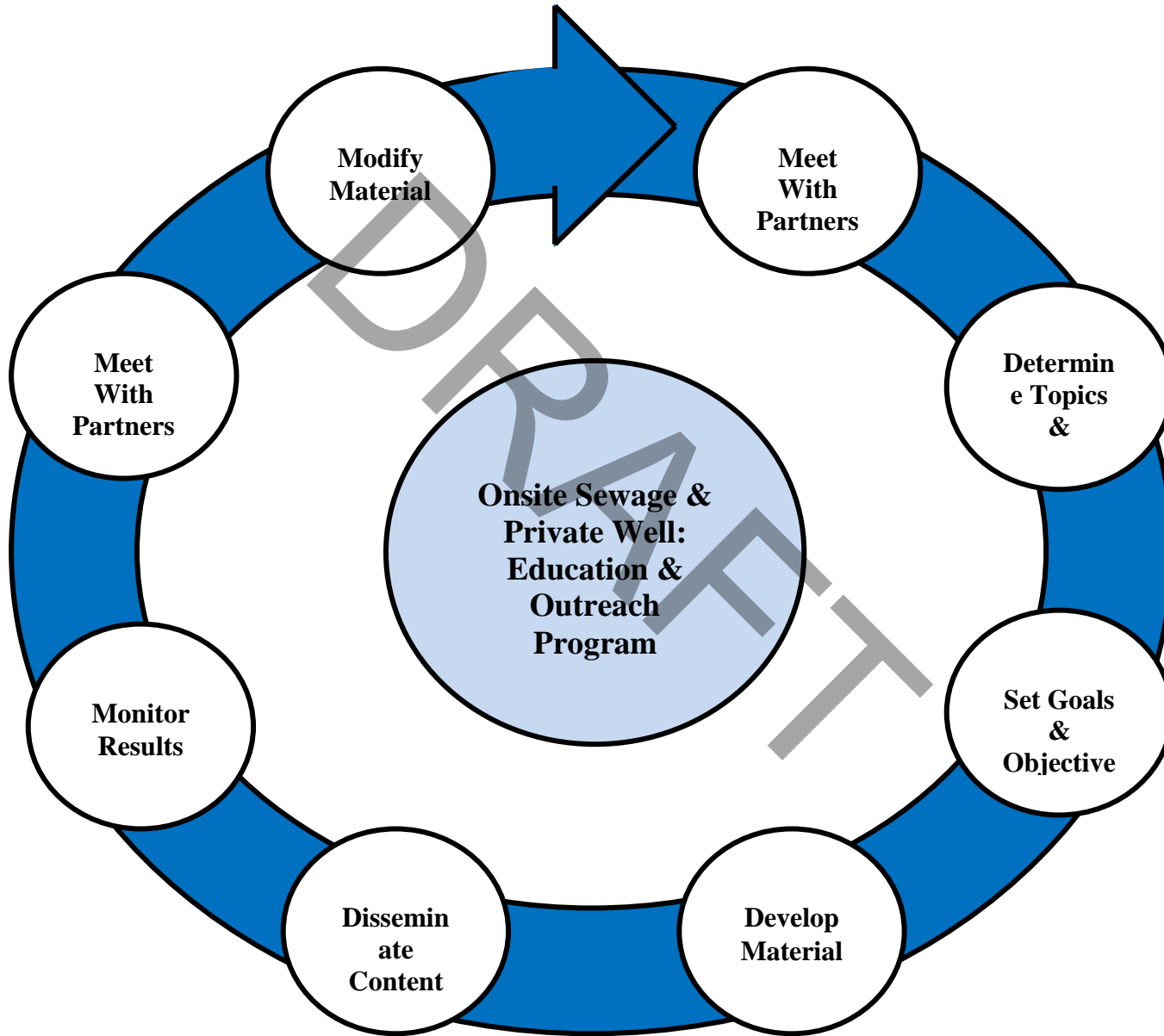
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6. Appendices

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Appendix A



I. Purpose

The purpose of the onsite sewage and private well education and outreach program is to provide citizens of the Commonwealth of Virginia with a basic understanding of onsite sewage and private well systems, with a focus on key messages that promote improvements to individual and community health.

II. Target Audience

The target audience is individuals using onsite sewage and/or private well systems.

III. Objectives and Goals

The objective is to change the out-of-site out-of-mind paradigm for onsite sewage and/or private well system users by increasing their basic understanding of how these systems function, how to care for these systems, and having users understand that these systems have a direct impact on their health and the health of their community. The overall goal is healthier Virginians in healthier communities.

IV. Methods of Delivery

The program will be broken in to a multitude of small education and outreach programs; each with a unique message, objective, and goal. These small programs will be delivered using a series of methods.

1. **Social Media:** We will use social media platforms such as Twitter and Facebook to disseminate the overall message and direct interested citizens to view 2-3 minute YouTube videos to deliver the message through an educational component. YouTube viewers will see videos of onsite sewage and private well system simulators, as well as photos and real-world videos taken by VDH staff and industry partners. Likewise, similar messages and material posted by industry partners will be re-posted on VDH social media platforms.
2. **Website Content:** Messages and educational material (as well as links to social media outlets) specifically directed to the general public will be posted on a more user-friendly portion of the onsite sewage and water services website. Content will be available for publication on industry partner websites, and links to similar messages and material on industry partner websites will be added.

3. **Outreach-in-a-box:** Messages and educational material will be packaged for easy access and easy use by local health department staff and industry partners. Electronic materials will be posted in a dedicated location on the onsite sewage and water services website. Materials and visuals, such as system simulators, will be made available to local health department staff upon request once staff have completed any necessary training (which will be provided by OEHS upon request). Local health departments will also be encouraged to share “outreach-in-a-box” projects which they have created. Projects will be peer reviewed to assure they are not locality or district specific, and to assure they align with the overall program purpose of promoting improvements to individual and community health.

V. Monitoring Effectiveness

Initial monitoring will focus on the number of citizen viewing online educational material and attending “outreach-in-a-box” events. However, staff will seek input from partners to develop more effective measures of each individual programs impact on individual and community health.

VI. Funding Need

Staff and partners should be able to produce much of the content with specific funding. However, funds may be necessary to create videos and purchase booth space for “outreach-in-a-box” events. Detailed funding needs will be identify as the project starts underway. Initial project efforts will focus on education and outreach programs that do not require funding beyond staff time.

VII. Project Outline

This project will be a combination of small education and outreach programs. To being the process of creating these small programs, OEHS will first:

1. **Meet with partners:** Partners will be local health department staff, VDH media specialist, other interested agencies, and industry partners such as: the Department of Environmental Quality, the Virginia Household Water Quality Program, the Virginia Water Well Association, the Virginia Onsite Wastewater Recycling Association, among others.

OEHS and our partners will then set out to:

2. Determine topics and messages: This will begin the process of selecting the different small education and outreach programs that will form the overall onsite sewage and private well education and outreach program. Each individual program will have its own unique message, under the umbrella of the overall program message of “Improving individual and community health.”

Once topics and messages are determine the group will then set out to:

3. Set goals and objectives: Again, each individual program will have its own unique goals and objectives, under the umbrella of the overall program objective and goal.

Partners will then be asked to help:

4. Develop material:

And;

5. Disseminate content: (Focus groups may be utilize prior to dissemination to a wider audience)

Once the individual programs are underway, OEHS will:

6. Monitor results: The method for monitoring results will be established by the group during initial development of the program. Results will be shared with partners.

OEHS will then:

7. Meet with partners: These meetings will be to discuss results of the program and determine whether modifications to the individual or overall program are necessary.

Finally, OEHS and partners will:

8. Modify material: Material will need to be keep up to date to improve results and to incorporate any statutory or regulatory changes in the onsite sewage or private well program.