

Virginia Department of Health (VDH)  
Sewage Handling and Disposal Advisory Committee (SHADAC)  
September 21, 2016

**Primary Meeting Location:**

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

**Remote Locations:**

Culpeper County Health Department  
640 Laurel Street  
Culpeper, Virginia 22701

Richmond County Health Department  
5591 W. Richmond Road  
Warsaw, Virginia 22572

**List of Attendees at Primary Meeting Location:**

SHADAC Members

Bill Sledjeski – Virginia Association of Professional Soil Scientist  
Curtis Moore – Virginia Onsite Wastewater Recycling Association  
Cody Vigil – Manufacturers  
Sean McGuigan – Manufacturers  
Valerie Rourke – Department of Environmental Quality  
Adam Feris – Virginia Environmental Health Association  
Joel Pinnix – American Council of Engineering Companies of Virginia  
Alan Brewer – Virginia Association Counties  
Mike Lynn – Home Builders Association of Virginia  
Dwayne Roadcap – VDH

VDH Staff and Members of the Public

Lance Gregory – VDH

Dave Tiller - VDH

Jay LaReche - VDH

Kate Nobsch

Reed Johnson

**List of Attendees at Remote Location:**

SHADAC Members

Channing Blackwell – Virginia Society of Professional Engineers

VDH Staff and Members of the Public

David Fridley – VDH

Dwayne Dixon - VDH

**Administrative**

1. Welcome.

Chairman Lynn welcomed the committee members, VDH staff and the public to the meeting. He discussed the rules of order for the SHADAC and the purpose of the SHADAC as listed in the Sewage Handling and Disposal Regulations.

Chairman Lynn then commented on a number of emails he had received regarding House Bill (HB) 558. He shared a list of comments and asked to add the comments as an agenda item after the discussion on HB 558.

2. Travel reimbursements.

Mr. Gregory provided members with travel reimbursement forms.

3. Approve agenda.

Curtis move to approve agenda with the addition of number 7, summary of emails from Mike. Cody second, motion carried.

4. SHADAC appointments.

Mr. Gregory announced that Laura Farley has been appointed to represent the Virginia Association of Realtors on the SHADAC. He also commented that VDH is working to fill several open positions and will be sending out information to update expiring appointments.

5. Discuss format of meeting summaries.

Mr. Gregory commented on recent complaints about meeting summaries for SHADAC meeting. Initial complaints were regarding timeliness of posting the meeting summaries. To address those comments Mr. Gregory mirrored more common practices for providing meeting summaries of providing a broad overview of discussion with bullet points. Mr. Gregory then received

complaints that readers could not attribute specific comments to individual members. Mr. Gregory asked the committee for suggestions for improving the summaries.

Mr. Pinnix commented that names should be associated with comments and members should have their organization associated with their name.

Chairman Lynn commented that would verify the committee had a quorum.

Several members commented that the summaries are not intended to be a verbatim record, aside from verbatim recording of motions. One member suggested that the meeting be recorded and the recording posted.

6. Review summary from August 3, 2016, meeting.

Chairman Lynn suggested attaching the sign in sheet from the meeting to the summary.

Mr. Moore made a motion to approve.

Mr. Brewer seconded the motion.

All members were in favor.

### **Old Business**

1. Update from Regulatory Reform Subcommittee.

Mr. Brewer stated that the subcommittee meet a few weeks ago and have a draft list of potential options for regulatory reform. The subcommittee will have a full report at the next SHADAC meeting. The goal is to get the report out before the next meeting to allow time for review.

2. Issues related to internal VDH policies and processes; *standing agenda item*.

Mr. Roadcap commented the Office of Environmental Health Services is looking to create a fourth division for data to move towards data driven decision making. That realignment is currently on hold based on the budget.

3. Update on recommendation to Commissioner; 12VAC5-613-70.

Mr. Gregory provided a response letter from the Commissioner's Office regarding the SHADAC's request to re-assess section 12VAC5-613-70 of the Regulations for Alternative Onsite Sewage Systems (12VAC5-613, the AOSS Regulations).

Mr. Brewer commented that the suggestion for the cost benefit analysis was to have it conducted before starting the regulatory process, possibly through a third party.

Mr. Roadcap commented that the Department of Planning and Budget (DPB) conducts an analysis as part of the executive branch review process, but the agency does look at cost during the development process. Generally there is a meeting between DPB and the agency proposing the regulations to discuss the potential impacts.

Chairman Lynn commented the SHADAC was asking was for a cost benefit analysis of the existing regulations to have something to compare the cost of the proposed revisions.

Mr. Pinnix comment that he believed the SHADAC could take on the task. He asked about sampling data submitted VDH, and that the time and effort to collect samples is the primary cost. He also noted that laboratories are few and far between in some areas, and the samples have a short holding time.

The SHADAC then discussed having manufacturers formalize the cost of approval, developing a subcommittee to review the matter, and reviewing existing sampling data.

#### 4. SAP policy.

Mr. Gregory walked through comments from the previous SHADAC meeting on the draft policy and discussed revisions to the policy. Revisions included the process for reviewing systems when a change in the number of bedrooms had already occurred and clarification regarding the notice of alleged violation (NOAV) process.

Comments from SHADAC members on the draft policy include:

- Some alternative onsite sewage system may have never had an operator visit.
- How will owners know that going to the private sector is an option? Need to encourage the use of the private sector.
- Why would VDH even consider granting a waiver from uncovering the system?
- VDH processing time frames should take longer, and private sector evaluations should be reduced.
- Need to define “functioning as designed”.
- The term waiver and exemption are used interchangeably.
- Process may be a drastic change in some localities, and may be a drastic increase in workload for some districts.
- Decision for waivers should be made by a manager, not an EHS.
- Once VDH puts this in policy, it creates a standard of care for the private sector, whether you intended it to or not.
- What do you do if the d-box is full of water?
- It is a mistake to put this as a priority over other types of applications.
- Maybe have a policy that depends on the request from the building official. If they just want to know about the building being over the system you go one direction, and if they want to know about functionality you have a different process.

- Need more charts and less words. Maybe a simple chart that says what results in an NOAV. Safety issues are not an option, must be corrected.
- If the homeowner is not going to uncover the system themselves, maybe the contractor could provide the evaluation service.

5. Workgroup for revisions to the Private Well Regulations.

Mr. Gregory provided a brief update on the Private Well Regulations Workgroup. The group has developed a list of issues that should be addressed in a Notice of Intended Regulatory Action.

6. Fast-track amendments to the AOSS Regulations; comparison tables.

Mr. Roadcap commented that there are thousands of systems installed under less stringent regulations. When owners seek to repair or voluntarily upgrade those systems, they cannot avoid direct dispersal. Thirty owners have asked for a variance from the regulations for direct dispersal. The language in the fast-track regulation was based on those variances.

Members of the Board of Health felt the language was confusing. Some didn't like reducing the requirements for direct dispersal and that the proposal should go through a routine regulatory process. The Board deferred action on the fast-track proposal.

The SHADAC provided the following comments on the proposal:

- How do you justify including system that go up to 10,000 gpd; seems that could have a substantial impact on groundwater.
- If you have direct dispersal, you have onerous testing. When you get a waiver or variance, then the waiver should also go to the sampling requirements. Relief from one is relief from the other.
- Think this could be done by policy.
- How did we end up with 6 inches being called direct dispersal?
- These standards are harder to meet than the discharge standards.
- Don't know of any product of the shelf that meets this standard, 10/10 is best available technology.
- Seems there is no buy in to include new construction.
- Don't think 10,000 gallons per day is a high number.
- Don't see how voluntary upgrades can apply to commercial systems; §32.1-164.3 references back to §32.1-164.1 which limits voluntary upgrades to 4 dwelling units.

Mr. Moore made a motion that the SHADAC recommend the Commissioner proceed with the fast-track amendments up to 1,000 gallons per day.

Mr. Sledjeski seconded the motion.

The motion passed. Mr. Sledjeski, Mr. Moore, Mr. Vigil, Mr. McGuigan, Mr. Feris, and Chairman Lynn voted in favor. Mr. Pinnix was opposed. Mr. Brewer abstained. Mrs. Rourke left prior to the vote.

### **New Business**

#### 1. SepticSmart Week.

Mr. Roadcap provided a quick update on VDH's efforts to promote the U.S. EPA's SepticSmart Week.

#### 2. NOIRA for AOSS Regulations.

Along with discussion about direct dispersal, the SHADAC also discussion a potential NOIRA for the AOSS Regulations. Members discussed whether to form a separate technical advisory committee (TAC) or uses a SHADAC subcommittee.

Mr. Moore made a motion to recommend VDH create a separate TAC and suggest members of the SHADAC to serve on the TAC.

Mr. Vigil seconded the motion.

Mr. Brewer asked whether the TAC would be established by VDH?

Mr. Pinnix recommended that all commenters be given an invitation to participate.

Mr. Feris seconded the motion.

Mr. Pinnix, Mr. Feris, Mr. McGuigan, and Mr. Vigil voted to include Mr. Pinnix's amendment to the original motion. Chairman Lynn, Mr. Moore, Mr. Sledjeski, and Mr. Blackwell voted against the amendment; the amendment failed.

All were in favor of the original motion to create a separate TAC.

#### 3. Revisions to Maryland's onsite regulations.

Chairman Lynn shared an article regarding recent changes to onsite sewage regulations in Maryland regarding nitrogen reduction. Mr. Johnson commented that every system in Maryland had to be an alternative system. He noted that nothing is likely to happen in the near term on the proposal.

#### 4. Voluntary upgrade and repair policy.

Mr. Tiller presented a draft policy for voluntary upgrade and repair waivers. He commented the policy is trying to help designers and staff identify the correct permit application, voluntary

upgrade or repair and which type of design would require full compliance with the regulations. If an NOAV is needed, it should be a repair. If an NOAV is not needed, it is a voluntary upgrade. The condition assessment attachment helps to determine whether the application is a repair or voluntary upgrade. One change from previous policy, there is no requirement for a hold harmless with a repair waiver.

Mr. Roadcap comments that VDH is trying to provide guidance on when someone has to comply with all of the requirements of the regulations. For example, if you are only replacing a distribution box does the absorption area also have to meet the current regulations. Attachment 2 is one of the bigger pieces of the policy. The other issue is making the distinction between voluntary upgrade and repair.

SHADAC members commented:

- A lot of distribution box replacements come from real-estate transactions, there is no one in the house but the box is damaged. Where does that fall?
- If there is a damaged component, it is a repair permit if it is integral to the function of the system.
- From the private side, what you have to anticipate is whether it is something the LHD would require to be fixed.
- On page 4, the last sentence of the first paragraph is poorly worded. Don't think we want VDH telling the private sector what their responsibilities are.
- What certification statement am I signing if I do one of these designs? The certification statement says that the system meets the regulations. Does my certification statement only apply to the component being replaced?
- Need to clarify which waivers are transferable and which are non-transferable.
- Would it help to talk about component repairs versus dispersal area repairs?
- Why require a soil study if all you want to do is improve the quality of effluent.

Mr. Sledjeski made a motion that the policy be approved.

Mr. Moore seconded the motion.

All were in favor.

5. HB 558 – Interim report #3 feedback.
6. HB 558 – Draft final report feedback.

Members voiced concern that they had not had sufficient time to review the document and there was not sufficient time left in the meeting to discuss.

Mr. Brewer made a motion that SHADAC organizations work with VDH individually to address issues with the report.

Mr. Moore seconded the motion.

Chairman Lynn stated that his concern is that VDH will have to determine whether there is consensus on the proposal and where there are differences of opinion. He suggested having another meeting of the SHADAC to discuss HB 558.

Mr. Pinnix and Mr. Blackwell agreed.

Mr. Moore made a substitute motion that the SHADAC convene another meeting to discuss HB 558.

Mr. Pinnix seconded the motion.

All were in favor.

The next meeting date was set for September 30<sup>th</sup> at 10:00, based on room availability and committee member availability.

Mr. Gregory stated he'd received concerns that the work done to date was incomplete. He asked members to share with him any information they believed to be missing in the reports.

Members provided the following feedback, with a large focus on 100% inspections:

- Major concern is replacement systems and getting them turned around quickly.
- Installers have concerns that the dual inspection process could create conflicts.
- We have to get away from the installer changing things in the field.
- Think that the OSE needs to be on site for the inspection.
- Make third party inspections an option, and VDH wouldn't be involved in the inspection.
- Maybe have VDH do the final site inspection and have the designer do the installation inspection.
- Think the modification to the certification statement puts the designer in a position that they don't have all the information. Not sure designers are qualified to say what the cost is for installation.
- Come up with one disclosure sheet for everyone.
- Need to make sure VDH modifies local agreements to remove services they are getting out of.
- Put the table of recommendation in date order rather than by category.

Adjourn

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

Date: September 21, 2016  
Time: 10 am to 3:30 pm  
Primary Location: James Madison Building  
5th Floor Main Conference Room  
109 Governor Street  
Richmond, Virginia 23219

Remote Locations: Culpeper County Health Department  
640 Laurel Street  
Culpeper, Virginia 22701

Richmond County Health Department  
5591 W. Richmond Road  
Warsaw, Virginia 22572

**Administrative (40 minutes)**

1. Welcome. (5 minutes)
2. Travel reimbursements. (5 minutes)
3. Approve agenda. (5 minutes)
4. SHADAC appointments. (10 minutes)
5. Discuss format of meeting summaries. (10 minutes)
6. Review summary from August 3, 2016 meeting. (5 minutes)

**Public Comment Period**

**Old Business (25 minutes)**

1. Update from Regulatory Reform Subcommittee. (10 minutes)
2. Issues related to internal VDH policies and processes; *standing agenda item*. (5 minutes)
3. Update on recommendation to Commissioner; 12VAC5-613-70. (10 minutes)

**Break (5 minutes)**

**Continue Old Business (65 minutes)**

4. SAP policy. (30 minutes)
5. Workgroup for Revisions to the Private Well Regulations. (5 minutes)
6. Fast-track amendments to the AOSS Regulations; comparison tables. (30 minutes)

**Break (10 minutes)**

**New Business (60 minutes)**

1. SepticSmart Week. (5 minutes)
2. NOIRA for AOSS Regulations. (15 minutes)
3. Revisions to Maryland's Onsite Regulations. (5 minutes)
3. Periodic review of the Sewage Handling and Disposal Regulations. (5 minutes)
4. Voluntary upgrade and repair policy. (30 minutes)

September 21, 2016

SHADAC Meeting

Page 10 of 10

**Break (5 minutes)**

**New Business Continued (60 minutes)**

5. HB 558 – Interim Report #3 feedback. (30 minutes)

6. HB 558 – Draft final report feedback. (30 minutes)

**Break (10 minutes)**

**New Business Continued (50 minutes)**

6. HB 558 – Draft final report feedback continued. (50 minutes)

**Adjourn**

Summary of Comments Received by S. Michael Lynn on HB 558,

Disclosure of Conflicts of Interest & APELSCIDLA Policies

Submitted to SHDAC September 21, 2016

Since the last SHDAC Committee meeting and the release of the interim report, I have received many calls and emails regarding the two matters above. Below is a summary of what was asked or presented and a question on what role the SHDAC should play in these issues.

1. VDH should acknowledge in the HB558 report there is a conflict of interest when VDH is the evaluator, designer, permit issuer, inspector and regulator and thus should automatically remove itself entirely and immediately from the evaluation and design business regardless of what business model the state is used too. Anything short of this is unacceptable.
  - a. VDH should outline in the HB 558 report how it will contract these services to a non VDH OSE/ PE to make a complete break immediately. Even phase in of underserved areas, hardship or impoverished should be handled like this.
  - b. The design market can be served by the existing OSE/PE population, we used to perform 32,000 evaluations/year. The math is simple  $\sim 14,000$  "current" evaluations/266 OSE/PE = 52/year, one per week.
    - i. Application numbers would further decrease if more repairs were deemed maintenance justifying a quick clean break in VDH providing direct services.

Should the SHDAC consider this issue and make a recommendation to the commissioner?

2. VDH should challenge DPOR / APELSCIDLA board for further limiting the scope of AOSE work and advocate for a return to joint AOSE / PE applications when only certain components of the design require a PE under the exemption. Failure to do this drives costs for services up unnecessarily and is of no benefit to the consumer, human health or the environment.

Should the SHDAC consider this issue and make a recommendation to the commissioner?

3. We don't believe VDH has any legitimate interest influencing:
  - a. Scope of practice (who can certify a report or design: site evaluation, measurement, WW characterization, design package; i.e. DPOR)
  - b. Standard of practice (what is in that package; i.e. profession, and VDH 12VAC 5-610, 613, 615, NRCS, USDA, EPA)
  - c. Standard of Care (diligence including factors of safety, testing and asset protection, i.e. independent review, tort review by Circuit Court.
  - d. Managing the training and supply of OSE (Universities, community colleges and private or professional associations,)

- e. Competing in the market (managing the COI between collecting fee and delivering design and approval)
- f. Subsidized services (requiring identification of eligible population, management of public interest, and Conflict of Interest)

Should the SHDAC consider this issue and make a recommendation to the commissioner?

- 4. I have a continuing problem with DEQ regulations. The area footprint reduction you referenced is absurd. A case of human vs. environmental health. Take your pick. The alternative SDS designs for small lot subdivisions should be considerably more conservative than larger isolated parcels. DEQ also wants a 4 ft. offset to water table to infiltrate rainwater and we're talking direct dispersal into the ground water of partially treated human waste.

Should the SHDAC consider this issue and make a recommendation to the commissioner?

- 5. Concerning Waivers or variances to install repair systems with septic effluent when treated effluent is required by the regulations.
  - a. Designing systems outside of the regulations is a conflict of interest, regardless the party seeking to assist the poor and disadvantaged by such misguided means. As a former sanitarian you've provided evidence of an undisclosed practice imposed by your managers, which compromised the integrity of the public health services. The tax payer is not willing to pay for subsidized pollution of our rivers streams or groundwater, indeed the public has not been aware of this practice unless informed by an EHS as a solution preventing their hiring of an "expensive consultant" Regardless of who is certifying the work the design must comply with the standoff to water, and other statutory boundaries.

Should the SHDAC consider this issue and make a recommendation to the commissioner?

- 6. Regarding the perceived penalty imposed on AOSS to reduce Nitrogen in the Chesapeake Bay Watershed while the majority of the e-coli and Nitrogen pollution is coming from septic systems and which far outweighs any nominal reduction gained by the regulation.
  - a. Recognize that a 50% reduction on barely 10% of the systems being constructed (today) can never satisfy this goal (of Nitrogen Reduction in the Chesapeake Bay) ; as you know we believe this conflicts with common sense and arithmetic. We also believe that overreaching authority or pragmatic goals increased the costs (design, permitting, construction, O&M and opportunity) and created a prejudice against advanced treatment systems. We also discussed how implementation of new regulations (fast track) gives relief to a subset of population, without providing relief to the general public, nor does it protect the public interest in water quality. While we accept certain homeowners have vested rights which may not be impaired, we don't believe granting relief for transferable permits is in the

public's interest and seems to conflict with the tenor of the TMDL since most of these are in or near the Bay.

Please advise whether the Fast Track Regulation is meant to support the Ches. Bay Agreement, and whether the Vol. Upgrades (transferable waivers) will apply to owners of conventional systems as well as alternative systems?

Should the SHDAC consider this issue and make a recommendation to the commissioner?

7. The Commissioner of Health designated Mike Lynn as the Chairman of the Sewage Handling and Disposal Advisory Committee, as referenced in 610 Regulations, and amended in the Budget Bill. While I'm aware of the Chair's claim that the SHAC is governed by "self adopted rules of order", what exempts a public body conducting regulatory review and offering recommendations toward changes in policy and legislation from duty to disclose? The Chairman has been a member of SHAC for 12 years, I am asking whether the Chair has ever disclosed personal interests, or recognized an obligation to do so?

There are existing requirements to disclose, furthermore effective Jan. 1, the duty to file disclosure changes, see the link: <http://law.lis.virginia.gov/vacode/title2.2/chapter31/section2.2-3118/>

I note duties to disclose association, and financial relationships have been tightened by the General Assembly. I'd also like your response to determine whether you are aware of the open meetings rules which offer guidelines in producing the minutes? The recently drafted body of records render confusion whether you are reporting the comments of the committee, the stakeholders or the staff. The minutes should at minimum disclose a summary of the discussion on matters proposed, deliberated or decided, and a record of any votes taken. Please review, and advise me whether disclosure requirements are being met, or will be met by the Commissioner's SHAC?

Should the SHDAC consider this issue and make a recommendation to the commissioner?

Mike Lynn

Chairman SHDAC



# COMMONWEALTH of VIRGINIA

*Department of Health*

P O BOX 2448

RICHMOND, VA 23218

TTY 7-1-1 OR

1-800-828-1120

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

September 20, 2016

Mike Lynn, Chairman  
Sewage Handling and Disposal Advisory Committee  
SES Mid Atlantic, LLC  
9251 Industrial Court, Suite 101  
Manassas, VA 20109

Dear Mr. Lynn:

This is in reply to the Sewage Handling and Disposal Advisory Committee's (SHADAC) recommendations to:

1. Reassess 12VAC5-613-70 of the Regulations for Alternative Onsite Sewage Systems (AOSS Regulations) to provide a cost-effective and reasonable procedure;
2. Accept stakeholder input on the current regulations;
3. Review the current staff resources to administer the AOSS Regulations;
4. Review the practices of other states;
5. Develop the framework and cost estimate for a cost-benefit analysis;
6. Develop draft language for a revised regulation;
7. Fund and complete a cost-benefit analysis of the current AOSS Regulations and the SHADAC draft language; and,
8. Begin the notice of intended regulatory action (NOIRA) process to amend the AOSS Regulations, after the cost-benefit analysis is known.

Thank you for your recommendations and please know that I have personally reviewed each of the above recommendations and have discussed them with Allen Knapp, Director, Office of Environmental Health Services. I also understand that Dwayne Roadcap, Division Director, and Lance Gregory, Environmental Health Coordinator, discussed the status of my review of the SHADAC's recommendations at its last two meetings, held on June 1, 2016, and August 3, 2016, and that staff will discuss next steps with the SHADAC on September 21, 2016, its next planned meeting.

I have asked staff to work with the SHADAC to implement all of the above recommendations to the extent possible in accordance with law and Governor Terry McAuliffe's

Mr. Mike Lynn, Chairman, SHADAC  
September 20, 2016  
Page 2 of 3

Executive Order (EO) #17.<sup>1</sup> EO #17 requires VDH to actively seek input from stakeholders, post all rulemaking on the Town Hall website, and make sure citizens have reasonable access and opportunity to participate in the regulatory adoption process. VDH has taken several steps to accept stakeholder input on the current regulations. First, a periodic review of the AOSS Regulations concluded on February 25, 2016, and the Board of Health received 34 comments. Second, staff established a subcommittee of the SHADAC called the “Regulatory Reform Subcommittee” to assess and propose regulatory change, including options for regulatory reform. As a result of these ongoing efforts, along with the SHADAC’s above recommendations, staff is developing a draft NOIRA for the SHADAC’s consideration.

With respect to recommendation #1, which asks for a cost effective procedure to implement 12VAC5-613-70, the SHADAC can discuss this specific issue in more detail on September 21, 2016, and establish a path forward. Staff will continue to seek the SHADAC’s thoughts on this important topic.

With respect to recommendation #2, I have asked staff to listen intently and implement consensus ideas. For example, as recommended by the SHADAC last year, staff offered a fast-track amendment to the AOSS Regulations to change the definition of “direct dispersal” and modify associated treatment requirements. While the outcome of this effort is unknown right now, I am hopeful it will improve the program. Additionally, staff has evaluated comments received during the periodic review of the AOSS Regulations and intends to work with the SHADAC to offer a draft NOIRA. The SHADAC will have opportunity to review the draft NOIRA at its upcoming meeting and offer ideas for improvement.

The staff will complete recommendations #3, #4, and #5. The staff will implement recommendations #6, #7, and #8. I believe a cost-benefit analysis, as normally provided through the regulatory adoption process, would help ensure draft revisions are appropriate, meaningful, and cost effective. I encourage the SHADAC and staff to use data to help with decision-making for these recommendations as you collaborate and discuss how to problem-solve. Also, please remember that the Department of Planning and Budget conducts an Economic Impact Analysis (EIA) during the proposed stage of each regulatory action to ensure that the cost benefit analysis considers all potentially impacted stakeholders, including small businesses. The EIA usually

---

<sup>1</sup> EO #17, effective on June 30, 2014, pursuant to Va. Code § 2.2-4017, establishes the agency’s required procedure for periodic review of the AOSS Regulations. In reviewing and revising regulations, VDH must, as a general principle, use economic incentives to encourage desired outcomes, use disclosure requirements for informed decision-making (rather than regulatory mandates); use performance standards instead of mandating by prescription; consider reasonable alternatives in lieu of regulation; and provide the most efficient, cost effective manner to protect public health, safety, and welfare. The Department of Planning and Budget must address these requirements with VDH during the regulatory review process, including the need to verify that the regulations are as cost effective as possible.

Mr. Mike Lynn, Chairman, SHADAC  
September 20, 2016  
Page 3 of 3

occurs after revisions of the regulations are proposed so the cost and benefits can be accurately considered.

I look forward to hearing from you in the future as regulatory and policy issues develop from the SHADAC's discussions on these recommendations. Please know that I appreciate the committee's diligent and hard work to improve the onsite sewage and water supply program. Thank you also for volunteering your time to help. Should you have additional questions, then please contact Dwayne Roadcap, Division Director, at [Dwayne.Roadcap@vdh.virginia.gov](mailto:Dwayne.Roadcap@vdh.virginia.gov) or (804) 864-7458.

Sincerely,

A handwritten signature in black ink, appearing to read "Marissa J. Levine MD". The signature is fluid and cursive, with a horizontal line extending from the end.

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

# **DRAFT POLICY**

## **FOR REVIEW AND FEEDBACK**

**SUBJECT:** GUIDANCE MEMORANDA AND POLICY (GMP) 2016-04

**PURPOSE:** This policy establishes the procedure for processing a building official request for a safe, adequate, and proper determination pursuant to Va. Code § 32.1-165.

**SCOPE:**

This policy identifies the minimum review and paperwork needed to process a request from the local building official pursuant to Va. Code § 32.1-165. The referenced Code section requires building officials to seek and obtain authorization from local health departments prior to issuing a building permit. Authorization to issue those permits rests upon a health department determination the existing or proposed onsite sewage system is safe, adequate, and proper for the subject building permit application designed for human occupancy. Exceptions to this policy will require approval and consultation with the Office of Environmental Health Services.

VDH receives numerous types of requests for onsite sewage inspections and some situations fall outside the scope of this policy. For example, this policy would not necessarily apply to multiple requests from a building official for a community-wide need, perhaps because of a natural disaster (flooding, tornado, or hurricane). Another possible example could be when multiple sewage systems are located close together as found in a mobile home park and there is a long history of failing sewage systems at the location. In these types of situations, processing an individual request from the building official might not necessarily protect public health or groundwater supplies unless historical failures were addressed on a community-wide scale. This policy also does not address evaluation procedures for a sewage system being sold through a real estate transfer or a sewage system being evaluated as part of a revised subdivision plat.

For pools, decks, garages, pole barns, sidewalk installations, and other structures not designed for human occupancy, the local building official may ask VDH to determine whether proposed construction will interfere with the existing sewage system's function. For these situations, VDH lacks authority to determine whether the sewage system is safe, adequate, and proper as contemplated by the Code. However, as a courtesy to the building official, and by request (see attachments 2a and 2b), VDH may process the request (see attachment 3b).

**AUTHORITY:**

Va. Code § 32.1-165, as amended and effective as of July 1, 2016, provides authority for the procedures outlined in this policy (see attachment 4). Va. Code § 32.1-165 states, "No county, city, town, or employee thereof shall issue a permit for a building designed for human occupancy without the prior written authorization of the Commissioner or his agent." "Safe, adequate, and proper" means a treatment works that complies with the Board of Health's currently effective regulations. VDH may approve an older sewage system that does not comply with current regulations provided (1) the sewage system complies with the regulatory requirements in effect at

the time of its installation, (2) is not failing, and (3) can be expected to function properly given its design and construction for the sewage flow and strength.

Additionally, Va. Code § 32.1-165 allows VDH to accept a certified evaluation from qualified private sector professionals. VDH may perform an inspection of the private sector professional's work, but is not required to do so. The law also allows an owner to voluntarily upgrade an existing onsite sewage system.

In accordance with Va. Code §§ 36-98 et seq., 32.1-12, and 32.1-163, VDH and the Virginia Board of Housing and Community Development agreed to coordinate respective jurisdictional responsibilities through a memorandum of agreement (MOA). The current MOA states when a local building official asks VDH for a determination of "safe, adequate, and proper," VDH will apply the standards required by current regulations to evaluate the request (see Attachment 8). Current regulations represent the minimum standards necessary to adequately protect public health, the environment, and groundwater supplies.

Va. Code § 32.1-164.1:1 allows owners with failing sewage systems, or those who want to voluntarily upgrade their sewage system the option to request a waiver from additional treatment and/or pressure dosing. The Commissioner shall grant any request for such waiver, unless she finds the failing system was installed illegally without a permit. Any such waivers shall be recorded in the land records of the clerk of the circuit court in the jurisdiction in which the property on which the relevant onsite sewage system is located.

#### **BACKGROUND:**

When a property owner wants to replace a mobile home, construct an addition to an existing dwelling, or replace a damaged or destroyed home, the owner must first obtain a building permit from the local building official. In certain cases, the local building official will ask VDH whether the existing sewage system is acceptable (or "safe, adequate, and proper"). In many cases, the sewage system does not comply with current health department regulations as sewage system installation was completed under prior, less stringent requirements.

As a result, some property owners could spend considerable money to upgrade the existing sewage system to comply with current regulations, even though the owner could continue using the old sewage system (without change) but for the request for a new building permit. The amendments to Va. Code § 32.1-165 provide VDH discretion to approve an older sewage system as nonconforming to the current regulatory standards, provided the status quo remains the same (i.e., there is no change in sewage flow or strength; the sewage system was installed in accordance with regulations in effect at the time of installation; the sewage system is not failing; and the sewage system can be expected to function properly).

#### **PROCEDURAL OUTLINE:**

Staff is encouraged to work with respective local building departments to ensure excellent customer service and proper implementation of the Code and this policy. See attachment 1 for a

business flow path for processing requests pursuant to Va. Code § 32.1-165; requests are expected to be processed within 7 business days of receipt as follows:

1. The local health department (LHD) receives a request from the local building official for a review pursuant to Va. Code § 32.1-165. (see attachment 2a).
  - a. Upon receipt of the request, if unaccompanied by an application from the property owner, LHD must contact the property owner within two business days to obtain the owner's permission for review (see attachment 2b).
2. LHD receives an application from the property owner for a review pursuant to Va. Code § 32.1-165. See attachment 2b.
  - a. The request from the building official and the application from the property owner (or agent) provides authority for review pursuant to Va. Code § 32.1-165 and grants permission for staff to enter the property and perform required evaluation.
  - b. If the application is incomplete, staff must deny the application by notifying the owner in writing. The denial must explain the reasons why the application is incomplete and provide an opportunity to appeal. The owner can resubmit a new application at any time. See attachment 5.
  - c. If the request and application indicates a subject structure not designed for human occupancy, staff should contact the local building official to determine whether the structure is designed for human occupancy. In the event the building official confirms the proposed structure is not designed for human occupancy, staff can use attachment 3b for the response.
3. After receiving the request from the building official, the property owner property owner (or agent) must submit the application (attachment 2b). Staff should complete a review of paper and electronic records within two business days of receiving a complete application. Staff must also request copies of septic tank pumping records or operation and maintenance (O&M) records for the conventional onsite sewage system, if available.
  - a. If the application is complete and does not contain supporting work from a licensed private sector professional, staff must schedule a site visit at a date and time acceptable to the property owner (or agent). As best practice, office support staff should schedule the site visit when the property owner (or agent) submits the completed application to the local health department.
  - b. If the application is complete and contains a certified evaluation as authorized by the Code<sup>1</sup>, VDH may perform a field inspection of the private sector work before issuing

---

<sup>1</sup> In accordance with Va. Code § 32.1-165, staff may accept certified evaluations from (i) a professional engineer licensed pursuant to Chapter 4 of Title 54.1; (ii) an onsite soil evaluator, onsite sewage system operator, or onsite

an approval, but an inspection is not required. Review of private sector work should be consistent with guidelines established in GMP #2015-01, meaning at least 10% of each licensee's work will be evaluated by completing a Level 2 (field) review. Staff is expected to process requests and complete applications within 5 business days of receipt when accompanied by a supporting private sector certified evaluation, unless the property owner (or agent) agrees to a different timeframe. Completion of attachment 3a constitutes a certified evaluation.

For commercial and multi-family dwellings greater than 1,000 gallons per day in design flow, the property owner must submit a certified evaluation from a private sector professional; otherwise, the application is incomplete.

- c. For conventional onsite sewage system requests without supporting work from the private sector, at a minimum, the property owner must uncover the septic tank and distribution box for inspection, unless the property owner requests and receives a waiver from this policy expectation. If the owner believes uncovering the septic tank and distribution box would create a financial or other hardship, the property owner may request an exemption. The property owner or agent can request a waiver from the expectation to uncover system components using the application (see Attachment 2b).

The EH Manager, Supervisor, Technical Consultant or EHS Senior may grant a waiver from uncovering components on a case-by-case basis. Staff may consider an exemption for the following reasons:

1. The owner has O&M records within the past 5 years of the request for a building permit.
2. The owner reports that uncovering system components would likely cause damage to system components or would be too costly.
3. The owner has accurate field measurements for the location of the septic tank and distribution box.
4. Other hardships that outweigh the benefit of an inspection of the system components.
5. Other facts that indicate an inspection of the system components is not necessary (e.g., the sewage system is less than 5 years old; the tank was recently pumped; accurate records exist, etc.).

Prior to the site visit, staff should make reasonable efforts to locate and obtain any previous records for the sewage system. Staff should provide any records found to help the owner locate system components. When a record of approval exists for the sewage system, that approval and permit remains effective until the system fails or there is a change in effluent flow or strength.

Lack of records does not automatically indicate the sewage system was installed without a permit and should not be used as the sole reason for denying a request pursuant to Va. Code § 32.1-165.

If records for the sewage system are found, staff shall provide those records to the property owner or agent. If the sewage system is more than five years old and the owner has no inspection or septic tank pumping records, staff should recommend the owner pump the septic tank, unless other facts dictate that pumping is unnecessary.

4. If the owner uncovers the septic tank and distribution box for inspection, staff shall observe the septic tank and distribution box's condition and recommend repairs or voluntary upgrades using best practices and professional judgment. If a repair is required, staff must notify the owner in writing a repair is required (see attachment 6).

- a. During the site visit, staff must create an accurate field sketch with "triangulated" measurements to locate system components (see attachment 3) to the extent possible. Staff may, but is not required to, perform a site and soil evaluation to determine the depth to soil-limiting features. All field measurements, soil evaluation observations, and site sketches shall be provided to the owner with the agency's case decision to approve or deny the request.

Using attachment 3a or 3b, depending whether the request is associated with a structure designed for human occupancy, staff must estimate the number and length of percolation trenches and update electronic records in the Virginia Environmental Information System (VENIS) database for the property (see attachment 7).

- b. If prior records document compliance with current regulations for dispersal of septic tank effluent and staff determines (1) the sewage system is not failing,<sup>2</sup> (2) was installed in accordance with the regulation in effect at the time of its installation, (3) there is no increase in effluent strength or flow, and (4) the sewage system can be expected function properly, then staff shall approve the request as "safe, adequate and proper" (complies with current regulations) using Attachment 3a (for requests associated with human occupancy) or Attachment 3b (for requests not associated with human occupancy).
- c. If sufficient information to determine whether the sewage system complies with current regulations is unavailable(i.e., unknown depth to limiting features, unknown

---

<sup>2</sup> 12VAC5-610-350. Failure of a sewage disposal system. For the purpose of requiring correction of a malfunctioning sewage disposal system the presence of raw or partially treated sewage on the ground's surface or in adjacent ditches or waterways or exposure to insects, animals or humans is prima facie evidence of such system failure and is deemed a violation of these regulations. Pollution of the groundwater or backup of sewage into plumbing fixtures may also indicate system failure.

depth of system installation, etc.), or where staff determines the sewage system does not comply with current regulations, then staff must approve the request as “non-conforming,” provided (1) the sewage system is not failing, (2) was installed in accordance with the regulation in effect at the time of its installation, (3) there is no increase in effluent strength or flow, and (4) the sewage system can be expected function properly, then staff must approve the request as “safe, adequate and proper” (complies with current regulations) using Attachment 3a (for requests associated with human occupancy) or Attachment 3b (for requests not associated with human occupancy).

- i. With respect to horizontal separation distances to structures already installed at the time of the site visit (shed, gazebo, sidewalk, playground set, or other landscaping feature over the footprint of the dispersal field), staff must note whether those structures could potentially have a negative impact on the proper function or ability to perform O&M. However, these features would not normally result in a denial (see paragraph 4.d below), and staff could approve the sewage system as “nonconforming” to the current regulations.
  - ii. If staff finds an existing (unpermitted, prior to 1990) well is insufficiently offset from the existing sewage system, staff should note the horizontal separation, and make appropriate recommendations with respect to testing or relocating the drinking water source. Unless a regulatory violation exists (see paragraph 4.d below), then staff may approve the use as nonconforming.
  - iii. A property owner may voluntarily upgrade the sewage system if desired.
- d. If staff determines facts warrant denial of the request for “safe, adequate and proper,” staff must issue a Notice of Alleged Violation (NOAV) accurately describing and explaining why observations indicate the property owner may be violating applicable regulation and law, and provide the property owner with a right to appeal. The owner may file a new application to repair or replace the existing sewage system, or appeal the adverse decision, in accordance with the NOAV and denial for safe, adequate and proper pursuant to Va. Code § 32.1-165.

Upon approval of a repair, staff may provide a copy of the construction permit to the local building official and issue an approval using Attachment 3a or 3b. The property owner may also request the system be evaluated according to current regulations. For systems without documentation, this requires a new site and soil evaluation.

5. For an alternative discharging sewage system or an alternative onsite sewage system, staff must perform a site visit to evaluate whether the most recent operator report (must be received w/I 12 months of site visit) accurately reflects the system’s operation and condition. Upon inspection of the system’s condition, staff may approve the system, either

**DRAFT GMP #2016-04**

EFFECTIVE DATE TO BE DETERMINED

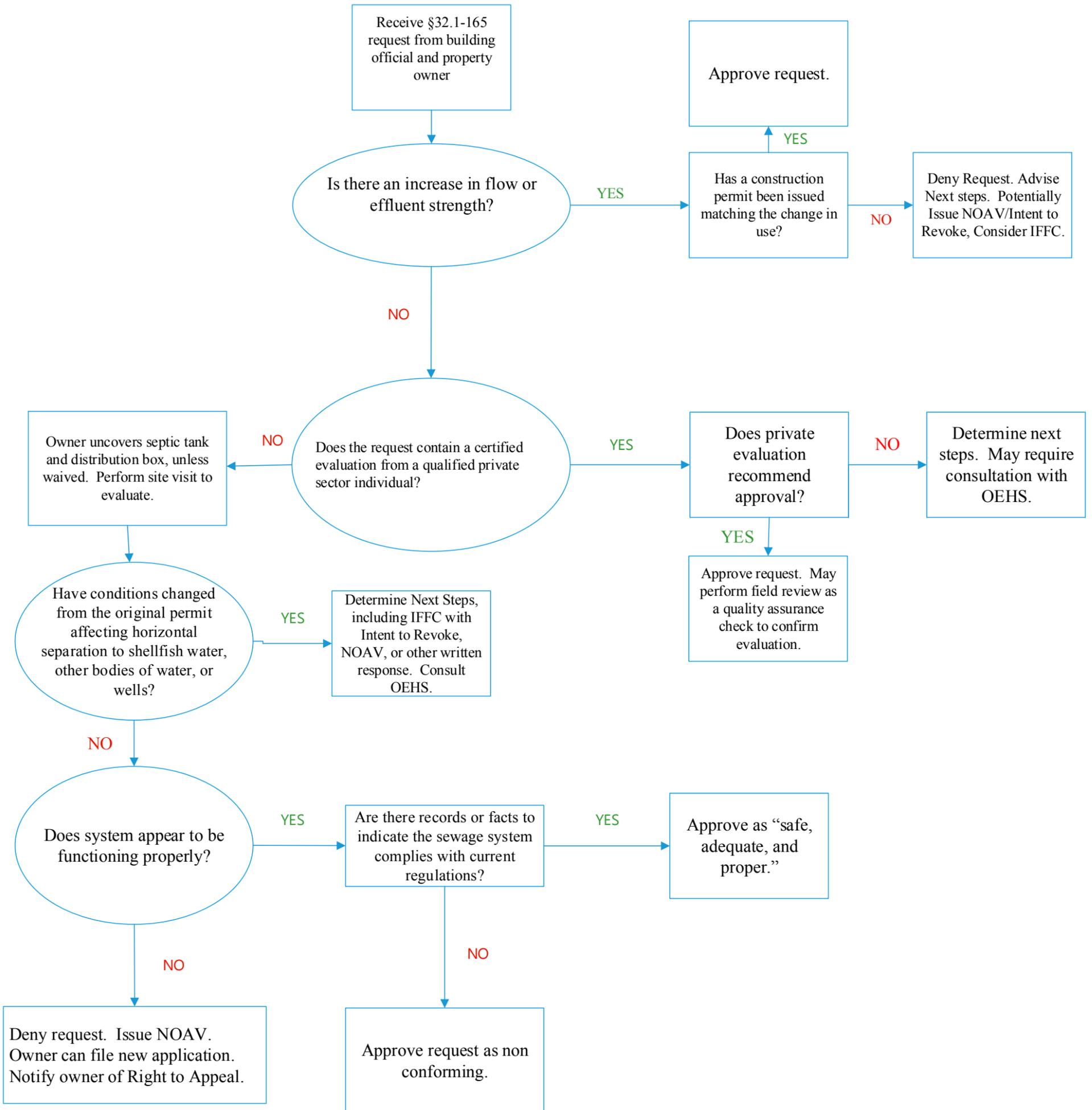
Page 7 of 7

as “non-conforming,” or meeting current regulations, depending on the facts gathered from the files and field visit.

If no current operator report for the alternative discharging system or alternative onsite sewage system is available, staff must deny the request and provide the owner with a NOAV.

- Attachment 1 - Flow Chart: SAP Review of an Existing System
- Attachment 2a - Request from local building official
- Attachment 2b - Application from property owner
- Attachment 3a - Evaluation Form (designed for human occupancy)
- Attachment 3b - Evaluation Form (not designed for human occupancy)
- Attachment 4 - Virginia Code § 32.1-165
- Attachment 5 - Denial letter
- Attachment 6 - NOAV letter
- Attachment 7 - Screenshot of data entry requirements for VENIS
- Attachment 8 - MOA between DHCD and VDH

**Flow Chart: Review of Existing Systems**



Attachment 2a: **Request for review from the local building official**



**Request for Health Department Review**

The \_\_\_\_\_ **<insert County/City Building-Zoning Department>** \_\_\_\_\_ requests the Virginia Department of Health to evaluate the onsite sewage system and/or water supply at \_\_\_\_\_ **<insert property name/description>** \_\_\_\_\_ to determine whether:

- The onsite sewage system located at the above referenced property is safe, adequate and proper pursuant to Va. Code § 32.1-165.
  - Check if the building permit for the structure is designed for human occupancy.
  
- The existing onsite sewage system and/or water supply at the above referenced property will be impacted by the proposed building permit.
  - Check if the building permit for the structure is not designed for human occupancy.

Additional Comments, if any:

---

---

---

Building/Zoning Official: \_\_\_\_\_ Date: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)



**Findings:**  
**Review pursuant to Va. Code § 32.1-165**

**Name:** \_\_\_\_\_

**Phone Number:** \_\_\_\_\_

**Subdivision:** (If Applicable) \_\_\_\_\_ **Section:** \_\_\_\_\_ **Lot:** \_\_\_\_\_

**Physical Address:** \_\_\_\_\_

**Is the existing onsite sewage system safe, adequate and proper for the proposed use?**

**(YES)** Comments: \_\_\_\_\_

\_\_\_\_\_

**(NO)** Comments: \_\_\_\_\_

\_\_\_\_\_

**Other Comments:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Turn Document Over for Site Sketch and Signature.**

**Site Sketch:**

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

An owner may challenge a denial by requesting an Informal Fact-Finding Conference (IFFC) within 30 days of receipt of a decision. All requests for an IFFC must be sent in writing to the District Health Director and cite the reason or reasons for the request.

**Attachment 3b: Findings and Worksheet for a  
Courtesy Review of Building Plans not designed for Human  
Occupancy**

**Name:** \_\_\_\_\_

**Phone Number:** \_\_\_\_\_

**Subdivision:** (If Applicable) \_\_\_\_\_ **Section:** \_\_\_\_\_ **Lot:** \_\_\_\_\_

**Physical Address:** \_\_\_\_\_

**Section 1 Courtesy Review:**

For pools, decks, garages, pole barns, sidewalk installations, and other structures not designed for human occupancy, the local building official may ask VDH to determine whether proposed construction will interfere with the existing sewage system's function. For these situations, VDH lacks authority to determine whether the sewage system is safe, adequate, and proper as contemplated by the Code. However, as a courtesy to the building official, and by request (see attachments 2a and 2b), VDH may process the request.

**Comments:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Turn Document Over for Site Sketch and Signature.**

**Site Sketch:**

**Health Department Official Signature:**

NAME: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

An owner may challenge a denial by requesting an Informal Fact-Finding Conference (IFFC) within 30 days of receipt of a decision. All requests for an IFFC must be sent in writing to the District Health Director and cite the reason or reasons for the request.



**Attachment 4:**  
**Copy of Va. Code § 32.1-165**

“§ **32.1-165**. Prior approval required before issuance of building permit; approved sewage system or nonconforming system.

- A. No county, city, town, or employee thereof shall issue a permit for a building designed for human occupancy without the prior written authorization of the Commissioner or his agent. The Commissioner or his agent shall authorize the issuance of such permit upon finding that safe, adequate, and proper sewage treatment is or will be made available to such building, or upon finding that the issuance of such permit has been approved by the Review Board. "Safe, adequate, and proper" means a treatment works that complies with applicable regulations of the Board of Health that are in effect at the time of application.
- B. The Commissioner shall develop an application and procedure for evaluating an installed treatment works and to determine whether to authorize issuance of a permit for a building designed for human occupancy.
- C. Nothing in this section shall be construed to prevent the Commissioner or his agent from approving the use of a nonconforming treatment works, provided the treatment works was installed in accordance with the Board of Health's applicable regulations in effect at the time of its installation, is not failing, and is designed and constructed for the sewage flow and strength expected from the building.
- D. Nothing in this section shall be construed to prevent an owner of real property from receiving a voluntary upgrade pursuant to § **32.1-164.1:3**, or other permit, as a condition of approval as a nonconforming treatment works.
- E. The Board, Commissioner, and Department may accept a certified evaluation from (i) a professional engineer licensed pursuant to Chapter 4 of Title 54.1; (ii) an onsite soil evaluator, onsite sewage system operator, or onsite sewage system installer licensed pursuant to Chapter 23 of Title 54.1; (iii) or other individual with an appropriate certification from the National Sanitation Foundation, or equivalent. The Department may perform an inspection of the certified evaluation but shall not be required to perform a field check prior to the issuance of the written authorization in subsection A.”

---

<LHD address>

---

<Date>

<owner>

<owner address>

**Certified Mail** \_\_\_\_\_

RE: <property address>

Dear <owner>:

This letter is to inform you that \_\_\_\_\_ has evaluated your request for a Safe, Adequate, and Proper (SAP) review pursuant to Va. Code § 32.1-165 filed on \_\_\_\_\_. Unfortunately, we are not able to approve the request for the following reason(s):

{INSERT REASONS, i.e.,

The onsite system is not designed for the expected flows.  
The proposed building plan does not meet setback requirements for the septic system.  
The existing onsite system appears to be failing.}

This decision is based on the information filed with your application and the request from the local building official. You have the right to appeal this decision. If you wish to appeal, you can submit your request to \_\_\_\_\_ at \_\_\_\_\_ within **thirty (30) days** from the date you receive this letter. Please include any facts or other data that would support your appeal.

If you have any questions or if this office may be of further service, please let us know.

Sincerely,

Environmental Health Specialist

CC: Building Official



**Attachment 6: Draft NOAV Letter**

**COMMONWEALTH OF VIRGINIA**

*VIRGINIA DEPARTMENT OF HEALTH*

<LHD address>

<Today>

**NOTICE OF ALLEGED VIOLATION**

<OwnerName>

<OwnerMailingAddress>

<OwnerMailingCity>, <OwnerMailingState> <OwnerMailingZip>

Re: (Physical Address, Location, Lot#, Tax Map #, ect)

**Certified Mail**

Dear <OwnerName>:

This Notice is to inform you that the<FacilityLocationCountry> County Health Department ("local health department") has observed certain conditions on your property that may constitute threats to public health and the environment. The following observations form the basis for the issuance of this notice:

On (**insert date**), \_\_\_\_\_, Environmental Health Specialist with the local health department conducted an inspection of your sewage treatment system ("system") pursuant to Va. Code § 32.1-165. The inspection revealed:

{INSERT FINDINGS, i.e.,

- The system appeared to discharge untreated or partially treated sewage effluent into the waters of the Commonwealth and not operating in accordance with the effluent limitation set forth in your general permit.
- Aerator appeared to not be functioning properly.
- Aerator missing.
- No disinfectant tablets were provided in the chlorinator.
- Your current operation permit appears to have expired on \_\_\_\_\_.
- It appears that a valid monitoring contract is not provided.
- It appears that a valid maintenance contract is not provided.
- The local health department has not received required monitoring and maintenance reports.
- The septic tank has collapsed

These observations, if verified, constitute real or potential threats to public health and to the ground and surface waters of the Commonwealth. This notice is to remind you that it is your responsibility, as owner of your property, to operate the facilities in accordance with the applicable laws and regulations of the State Board of Health ("Board"). {INSERT REGULATION REFERENCES AS NECESSARY, i.e.,

**12 VAC 5-610-80. Sewerage systems and/or treatment works required.**

*A. The discharge of untreated sewage onto the land or into the waters of the Commonwealth is prohibited.*

*B. No owner, person, or occupant shall discharge treated or untreated sewage onto the land, into the soil or into the waters of the Commonwealth without a valid permit from the commissioner or, as appropriate, a certificate issued by the Department of Environmental Quality in accordance with Title 62.1 of the Code of Virginia.*

*C. All buildings, residences, and structures designed for human occupancy, employment or habitation and other places where humans congregate shall be served by an approved sewerage system and/or treatment works. An approved sewerage system or treatment works is a system for which a certificate to operate has been issued jointly by the department and the Department of Environmental Quality or a system which has been issued a separate permit by the commissioner.*

**12 VAC 5-610-350. Failure of a sewage disposal system.** *For the purpose of requiring correction of a malfunctioning sewage disposal system the presence of raw or partially treated sewage on the ground's surface or in the adjacent ditches or waterways or exposure to insects, animals or humans is prima facie evidence of such system failure and is deemed a violation of these regulations. pollution of the groundwater or backup of sewage into plumbing fixtures may also indicate system failure.*

**12 VAC 5-640-430.A. Performance requirements. Discharge limits.** *All systems operated under this chapter shall meet the effluent limitations set forth by the State Water Control Board in the General Permit.*

**12 VAC 5-640-220.B. Permits; general.** *Operation permit required. Except as provided in 12 VAC 5-640-310, no person shall place a discharging system in operation, or cause or allow a discharging system to be placed in operation, without obtaining a written operation permit.*

**12 VAC 5-640-220.D. Permits; general.** *Operation permit validity. Except as provided for in 12 VAC 5-640-280, operation permits shall be valid for a period of time not longer than the General Permit and the maintenance contract required pursuant to 12 VAC 5-640-500 B or the monitoring contract required pursuant to 12 VAC 5-640-490 F, whichever expires first. The operation permit may be renewed upon written proof of a new or renewed maintenance contract or monitoring contract provided they are all valid for not less than 24 months. The period of renewal shall coincide with the expiration date of the document with the shortest period of validity.*

**12 VAC 5-640-490.A. Monitoring. General.** *Discharging systems that discharge improperly treated effluent can endanger public health and threaten environmental resources. All discharging systems shall be routinely inspected and the effluent sampled to determine compliance with the effluent limitations set forth by the State Water Control Board in the*

*General Permit. All testing requirements contained in this chapter are the responsibility of the system owner to have collected, analyzed, and reported to the department.*

**12 VAC 5-640-490.F. Monitoring.** *Monitoring contract. In order to assure monitoring is performed in a timely and competent fashion, the owner of each system shall have a contract for the performance of all mandated sampling with a person capable of performing the sampling and analysis of the samples. This requirement may be met by including the performance of all testing and monitoring as part of the maintenance contract in accordance with 12 VAC 5-640-500 C 1. Failure to obtain or renew a monitoring contract shall result in the suspension or revocation of the operation permit as described in 12 VAC 5-640-280. When the district health director or the sanitarian manager find that the homeowner is capable of collecting and transporting samples to an approved laboratory in compliance with this chapter, the requirement for having a valid monitoring contract may be waived. Waiving of this requirement shall be done only on an individual basis and shall reflect the competency of the individual based on professional, training, or other educational experience. In the event the individual for whom this section is waived fails to collect three or more of any of the required samples in any five-year period, the district sanitarian or the health director may reinstate the requirement for a monitoring contract.*

**12 VAC 5-640-500.A. Maintenance.** *General. Due to the potential for degrading surface water and ground water quality or jeopardizing the public health, or both, routine maintenance of discharging systems is required. In order to assure maintenance is performed in a timely manner a maintenance contract between the permit holder and a person capable of performing maintenance is required.*

**12 VAC 5-640-500.B. Maintenance.** *Maintenance contract. A maintenance contract shall be kept in force at all times. Failure to obtain or renew a maintenance contract shall result in the suspension or revocation of the operation permit as described in 12 VAC 5-640-280. The operation permit holder shall be responsible for ensuring that the local health department has a current copy of a valid maintenance agreement. When a maintenance contract expires or is canceled or voided, by any party to the contract, the owner shall report the occurrence to the local health department within 10 work days.*

**12 VAC 5-640-510. Information to be reported.**

*A. Who is responsible for reporting. All owners issued an operation permit for a discharging system are responsible for reporting the results of all mandated testing to the department.*

*B. What must be reported. All formal compliance testing, informal testing, repairs, modifications, alterations, expansions and routine maintenance must be reported.*

*C. When reports are due. All reports and test results must be submitted within 15 working days of the sample collection.*

*D. Where to report results. All reports and test results shall be submitted to the local or district office of the health department. When formal testing indicates a discharge limit established in*

*the General Permit is being exceeded or when informal testing indicates a discharging system may be in violation of the General Permit requirements, the maintenance provider shall be notified by the owner within 24 hours.*

**12 VAC 5-640-520. Failure to submit information.** *Failure to conduct mandatory monitoring or to report monitoring results as required in 12 VAC 5-640-490 and 12 VAC 5-640-510 may result in the suspension or revocation of the owner's operation permit.*

Violations of the Regulations and Discharging Regulations may result in enforcement actions provided under Title 32.1 of the *Code of Virginia*.

The local health department recommends that you take the following steps within the timeframes described to mitigate the effects of potential sewage discharge:

Immediately cease discharging untreated or partially treated sewage onto the ground or water of the Commonwealth.

Immediately contract with an individual who holds a valid Sewage Handling Permit from the Virginia Department of Health to pump and haul out the sewage system and dispose of the contents on an emergency basis in accordance with section 12 VAC 5-610-599.1 of the *Regulations*.

Immediately treat the ground surface that has been exposed to raw or partially treated sewage with a layer of lime in order to destroy any remaining pathogenic microorganisms and to reduce odors.

I should advise you that, while the Virginia Department of Health ("VDH") and the State Health Commissioner ("Commissioner") has not made a decision on whether to initiate enforcement action against you at this time, your failure to institute the recommendations above may affect further investigation and potential enforcement by the Commissioner and VDH.

This notice sets forth the local health department's observations and recommendations, but it is not a case decision as defined in §2.2-4001 of the *Code of Virginia*. If you have additional facts that you believe bear on this situation and you would like to schedule an informal-fact finding conference pursuant to §2.2-4019 of the *Code of Virginia*, please contact <manager>, Environmental Health Manager at <phone number> within fifteen (15) days of the receipt of this notice.

Sincerely,

<EHS>

Environmental Health Specialist

CC: <FacilityLocationCountry> County Commonwealth Attorney

<Director>Director Health District  
<Manager>Environmental Health Manager

Section 599.1 of the *Regulations* provides that VDH may authorize pumping and hauling on an emergency basis for a definite period of time. Emergency pump and haul is not an “approved” sewage system but is intended to be an intermediate action to prevent serious threats to public health and environment until an owner secures proper permits, etc. for a repair or replacement system and installs that system (i.e., an approved system).

# Attachment 7- Screenshot data entry requirements for VENIS updates

Create Save Done Cancel Parent Document

### Existing System Evaluation

**Evaluation Information**

System Name: A new test	EHS Catherine W. Cummins	
Evaluation Requested Date 16	Evaluation Date 09-May-2016 16	Reason for Evaluation 16
Next Visit Date 16		
Comments 16		

**Site and Building Information**

Designed Building Use Residential	Observed Building Use 16	Is Property currently occupied? 16	Lot Size 16
Designed Number of Bedrooms 16	Record of System on File 16	Structure Designed for Human Occupancy 16	Owner Affidavit Provided 16
	System Installed Legally 16	Complies with Current Regulations 16	
Drawing 16 <b>Import Drawing</b>			
Comments Add Canned Comment			

**Sewage System Information**

Installed Date 16	Last Pumpout 16	Sewage System Permit Number 16	Septic Type 16
----------------------	--------------------	-----------------------------------	-------------------

## MEMORANDUM OF AGREEMENT

June 27, 2013

Between the Virginia Department of Housing and Community Development (VDHCD)  
and the Virginia Department of Health (VDH)

In accordance with Va. Code §§ 36-98 et seq., 32.1-12, and 32.1-163 et seq., the VDH and the VDHCD agree to coordinate their jurisdictional responsibilities set forth in the Virginia Uniform Statewide Building Code (13 VAC 5-62, the "building code") and applicable VDH regulations ("VDH regulations")<sup>1</sup> as follows:

### Codes and Regulations: Adoption and Enforcement

1. VDHCD adopts and promulgates the building code. The local jurisdiction's building department enforces the building code.
2. The Board of Health adopts and promulgates VDH regulations. The Board of Health and VDH jointly enforce VDH regulations.

### Definitions:

"Alternative Discharging System" means a treatment works that requires a permit from VDH pursuant to 12 VAC5-640.

"Onsite Sewage System" means a conventional or alternative onsite sewage system as defined in Va. Code § 32.1-163, which requires a permit from VDH pursuant to 12 VAC5-610 or 12 VAC5-613.

"Treatment works" means any device or system used in the storage, treatment, disposal or reclamation of sewage or combinations of sewage and industrial wastes, including but not limited to pumping, power and other equipment and appurtenances, septic tanks, and any works, including land, that are or will be (i) an integral part of the treatment process or (ii) used for ultimate disposal of residues or effluents resulting from such treatment.

"Graywater system" means a treatment works that disperses untreated wastewater from bathtubs, showers, lavatory fixtures, wash basins, washing machines, and laundry tubs. A graywater system does not include wastewater from toilets, urinals, kitchen sinks, dishwashers, or laundry water from soiled diapers.

---

<sup>1</sup> VDH implements the Sewage Handling and Disposal Regulations (12 VAC 5-610); Alternative Discharging Sewage Treatment Regulations for Individual Single Family Dwellings (12 VAC 5-640); Regulations for Alternative Onsite Sewage systems (12 VAC5-613); and Private Well Regulations (12 VAC5-630).

### **Treatment works applicability**

1. The VDHCD and VDH agree on the following interpretation of their relevant regulations: The building code will apply to all internal service plumbing components of a treatment works up to the point of connection of the building drain to the building sewer.
2. The building code will apply to electrical and structural components of a treatment works, except as provided below.
  - a. The VDH regulations will apply to control panels for the treatment works and its functional treatment components, including electrical devices for pump stations, master disconnect switches, manual override switches, motor control panels, and separate motor control centers when specified by the designer or required by VDH.
  - b. VDH regulations and policies do not consider cord and plug connections associated with a treatment works. If allowed by the building code, cord and plug connections for the treatment works must be located in a weather proof box when outside of the wet well to prevent exposure to weather conditions.
3. The VDH regulations will apply to the treatment and functional components of a treatment works regardless of location (inside or outside of the building or structure), except as provided below.
  - a. The building code will apply to graywater systems not regulated by VDH, such as buildings or structures connected to a public sewer system.
4. The VDH regulations will apply to components of a treatment works that are external to the building or structure. External components include the septic tank, pump station, distribution box or mechanism, piping, or additional treatment devices such as blowers and associated electrical devices.

### **Reviews pursuant to Va. Code § 32.1-165**

The VDHCD and VDH commit to ensure no county, city, town or employee thereof shall issue a building permit for the construction of a new building designed for human occupancy without the prior written notification of the State Health Commissioner or the Commissioner's designated agent that safe, adequate, and proper sewage treatment is or will be made available to such building.

1. VDH approves a treatment works three ways; by issuing: (1) a certification letter that recognizes a treatment works can be designed sometime in the future, which does not expire; (2) a subdivision letter that describes future treatment works for each subdivision lot, which also does not expire; or (3) a construction permit,

which describes the actual construction of the treatment works and is valid for 18 months with one 18 month renewal under certain conditions.

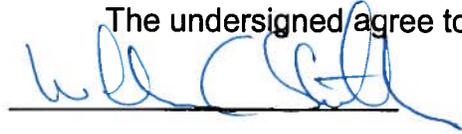
2. **Pursuant to Va. Code § 32.1-165**, the local building official may use the certification letter, subdivision letter, or construction permit to issue a building permit. The local building official understands that a treatment works cannot be constructed until the local health department issues a construction permit. The footprint of the building or structure cannot interfere with the setbacks required by the VDH regulations.
3. **Pursuant to Va. Code § 32.1-165**, the local building official will contact the local health department as provided by local and routine processes, which might differ in various jurisdictions, upon finding that issuance of the building permit might have an impact on the function of an existing treatment works already installed. If VDH requests an application for review of the installed treatment works, then the application must be completed before VDH can determine whether the treatment works is acceptable.
  - a. If the wastewater flow, capacity, or effluent strength increases for the existing treatment works, then **pursuant to Va. Code § 32.1-165**, the building official must rely on a valid construction permit from VDH before issuing the building permit. A certification letter or subdivision approval will not be sufficient.
4. VDH will only approve a treatment works if it complies with VDH regulations and associated policies. VDH will notify the local building official as soon as practical whether a treatment works was installed correctly, by issuance of an operation permit. **Pursuant to Va. Code § 32.1-165**, the local building official will not issue a certificate of occupancy until after VDH has issued the operation permit.

### **Conflict Resolution**

Both VDH and VDHCD will cooperate in resolving any technical conflicts between VDH regulations and the building code. The agencies will develop and implement procedures as needed to ensure collaboration between local building officials and local health departments. Appropriate amendments, edits, additions, or deletions will be made to the VDH regulations and the building code when necessary. This MOA is a statement of the intentions of VDHCD and VDH to coordinate their efforts in order to carry out their statutory duties. It is not a contract and it is not enforceable in any judicial or administrative forum: it does not create any rights or duties of any third party. It does not purport to modify the statutory duty of either signatory agency.

This Agreement is effective as of the date written above and is in effect until terminated either by mutual written consent of the parties or by one signatory party with 60 days' written notice to the other party. This Agreement may be amended by mutual written consent of the parties.

The undersigned agree to the Conditions of this Agreement.



William, C. Shelton, Director  
Department of Housing and  
Community Development



Cynthia Romero, MD, FAAFP  
State Health Commissioner  
Department of Health

Table 1: Review of Current Text

Current Draft Text 12VAC5-613-90.E	Meaning
When an application is filed to repair or voluntarily upgrade an existing sewage system with capacity of 10,000 gallons per day or less,	Paragraph does not apply to new construction, only to properties that have an existing sewage system with a design flow of 10,000 gallons per day (GPD) or less.
...and the existing sewage system already disperses effluent to groundwater as defined in 12VAC5-613-10,	The existing sewage system must already directly disperse effluent to groundwater.
... then the repair or upgrade shall provide TL-3 effluent and standard disinfection in accordance with 12VAC5-613-80 (13), Table 2, for system with less than 12 inches separation to groundwater.	<p>The repair or voluntary upgrade must provide the treatment expected for a brand new sewage system that disperses effluent between 6-inches and 12-inches above the groundwater; or said another way, the repair or upgrade must disperse effluent equivalent to what the Board of Health required during the effective time of the emergency regulations.</p> <p>The proposed section 12VAC5-613-E, in its entirety, would apply to any upgrade or repair of an existing sewage system that already directly disperses effluent to groundwater. Ultimately, for repairs and voluntary upgrades 10,000 GPD or less, the treatment requirements would be TL-3, standard disinfection, and 50% TN reduction, except that a large AOSS must provide 5 mg/l at the project boundary.</p>
For systems greater than 1,000 gallons per day and up to, and including 10,000 gallons per day, the sewage system shall also adhere to 12VAC5-613-90.B;	A larger repair or upgrade, between 1,000 GPD and 10,000 GPD, must discharge 5 mg/l or less total nitrogen.
....and the following requirements are not applicable to repair or voluntary upgrade applications that result in direct dispersal: 12VAC5-613.C(1) through C(7) and 12VAC5-613-100.G.	<p>Originally, this specific text was a completely separate sentence; however, legal opinion is that in order to capture all repairs and upgrades 10,000 GPD or less—then the sentences should not be separate; hence, staff changed the text to connect the two separate sentences with a semi-colon. Legal opinion is that lines 277 – 281 captures all repairs and upgrades 10,000 GPD or less.</p> <p>For repairs and upgrades 10,000 GPD or less, then high level disinfection, remote monitoring, a renewable operating permit, a hydrogeologic analysis, and treatment of 5 mg/l for TSS and BOD do not apply. If 1,000 GPD or less, then 50% TN is required. If between 1,000 GPD and 10,000 GPD, then 5 mg/l TN is required. TN for a large repair or upgrade is 5 mg/l or less at the project boundary (most often a property line).</p> <p>This new paragraph specifically refers to repairs and voluntary upgrades and legal analysis is that 12VAC5-613-D(4) also does not apply to repairs or voluntary upgrades when reading paragraph C and D together. Section 12VAC5-613-D(4) would only apply to any <u>new construction</u> application for direct dispersal in the Chesapeake Bay Watershed.</p>
The repair or voluntary upgrade shall be monitored pursuant to 12VAC5-613-100.D, 12VAC5-613.100.E, or 12VAC5-613.100.F, as appropriate.	This sentence requires adherence of the standard expectations for sampling and monitoring as is normally expected for any system that is not considered direct dispersal.



**DRAFT for advisory committee review: 9/21/16**

townhall.virginia.gov

## Notice of Intended Regulatory Action (NOIRA) Agency Background Document

<b>Agency name</b>	Virginia Department of Health
<b>Virginia Administrative Code (VAC) citation(s)</b>	12VAC5-613
<b>Regulation title(s)</b>	Regulations for Alternative Onsite Sewage Systems
<b>Action title</b>	Amend 12VAC5-613
<b>Date this document prepared</b>	September 21, 2016

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 17 (2014) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual*.

### Subject matter and intent

*Please describe briefly the subject matter, intent, and goals of the planned regulatory action.*

A periodic review of the Alternative Onsite Sewage System (AOSS) Regulations concluded on February 26, 2016, resulting in 34 comments. The goal of this planned regulatory action will be to fully address comments received during the periodic review and other issues identified by the Sewage Handling and Disposal Advisory Committee (“advisory committee,” see also 12VAC5-610-50). Working with stakeholders and interested parties through the advisory committee, the following regulations, at a minimum, will be examined and possibly changed: (1) 12VAC5-613-70 to update requirements as necessary for field testing of treatment units for TL-3 general approval; (2) 12VAC5-613-80 regarding performance requirements; (3) 12VAC5-613-90 with respect to performance requirements for systems installed within the Chesapeake Bay Watershed, including best management practices; and (4) 12VAC5-613-200.1 to clarify horizontal separation for repairs and voluntary upgrades.

### Legal basis

*Please identify the (1) the agency (includes any type of promulgating entity) and(2) the state and/or federal legal authority for the proposed regulatory action, including the most relevant citations to the Code of Virginia or General Assembly chapter number(s), if applicable. Your citation should include a specific provision, if any, authorizing the promulgating entity to regulate this specific subject or program, as well as a reference to the agency's overall regulatory authority.*

Va. Code §32.1-12 authorizes the Board to make, adopt, promulgate, and enforce regulations that protect, improve, and preserve public health and the environment for the general welfare of the citizens of the Commonwealth. Va. Code §§32.1-164 A. and B. authorize the Board to adopt regulations governing the collection, conveyance, transportation, treatment, and disposal of sewage, including sewerage systems and treatment works as they affect public health and welfare. Va. Code §32.1-20 vests the Commissioner with all of the authority of the Board when not in session, and Va. Code §32.1-16 provides that the Virginia Department of Health shall be under the supervision and management of the Commissioner of Health.

### Purpose

*Please describe the specific reasons why the agency has determined that the proposed regulatory action is essential to protect the health, safety, or welfare of citizens. In addition, please explain any potential issues that may need to be addressed as the regulation is developed.*

The proposed regulatory action is essential to protect public health, safety, and welfare of the citizens because improper sewage treatment can cause numerous diseases such as cholera, hepatitis, gastro-intestinal disease, and methemoglobinemia (blue baby syndrome). The AOSS Regulations took effect on December 7, 2011, pursuant to legislation passed in 2009 to create regulations (HB 2551, 2009 General Assembly session), and establish performance and operation and maintenance requirements for AOSSs, including treatment levels, loading rates, and nitrogen (N) limits. VDH estimates there are over one million sewage systems, of which about 20,000 are AOSSs. In the Chesapeake Bay Watershed, VDH estimates there are 550,000 sewage systems.

VDH will work with the advisory committee to address potential issues with the proposed regulatory action. Despite extraordinary efforts to understand and find agreement among stakeholders, several contentious issues remain. For example, some stakeholders want less agency oversight, fewer prescriptions, and different sampling and reporting frequencies while others advocate for a complete prohibition of dispersal to groundwater and wetlands. These remaining contentious issues and broad spectrum of viewpoints resulted in four bills being introduced during the 2012 General Assembly session: [SB356](#), [SB442](#), [HB942](#), and [HB1071](#); two during the 2013 General Assembly session, [HB1611](#) and [HB1726](#); and one in 2016, [HB1080](#), which would have exempted all small AOSS (less than 1000 gallons per day) from all effluent and groundwater sampling requirements unless a Notice of Violation has been issued.

The 2008 General Assembly session approved [HB1166](#), which created Va. Code §32.1-163.6. The legislation allowed a professional engineer to design an AOSS that met the performance requirements of 12VAC5-610 (the *Sewage Handling and Disposal Regulations*, or *SHDR*), complied with standard engineering practice, and met horizontal setbacks that protected public health and the environment. The designs did not have to comply with the prescriptive regulations normally required by the *SHDR* and the legislation took effect on July 1, 2008.

Soon thereafter, licensed professional engineers began proposing and designing sewage systems that would have been denied historically under the *SHDR*. For example, the *SHDR* prohibits installations into flood plains subject to intermittently flooding, into rock, into the water table, and into transported deposits with extended periods of saturation (see [12VAC5-610-593](#)). The *SHDR*'s regulatory prescriptions also require at least 12-inches of naturally occurring, unsaturated soil to install a sewage system.

Stakeholders soon realized the *SHDR* were not sufficient to implement Va. Code §32.1-163.6. As a result, some local governments began instituting additional local ordinances to prevent systems from being installed into sensitive receiving environments where shallow groundwater or shellfish waters were found. Other groups became concerned about how the local ordinances were being implemented, resulting in three separate Attorney General's Opinions (See 2010 Op. Atty. Gen. 53 at <http://ag.virginia.gov/files/Opinions/2010/10-061-Martin.pdf>; 2012 Op. Va. Atty Gen. No. 11-100 at <http://ag.virginia.gov/files/Opinions/2012/11-100-Lingamfelter.pdf>; and 2012 Op. Atty. Gen. 45 at <http://ag.virginia.gov/files/Opinions/2012/12-045-Martin.pdf>). Additionally, some manufacturers of proprietary equipment became concerned about how their equipment was being used by the professional engineering community. Equally concerned were environmental groups because of the potential for development in sensitive receiving environments in the Chesapeake Bay Watershed.

In 2009 the General Assembly amended Va. Code §32.1-163.6 via [HB 2551](#) and [SB 1468](#). The legislation required the Board of Health to implement emergency regulations to establish performance requirements for all AOSS, including designs pursuant to Va. Code §32.1-163.6). The legislation also required the Board to implement other mandates of the *Code of Virginia*, specifically Va. Code [§§32.1-164.H-I](#) (operation and maintenance of AOSS), which the 2007 General Assembly approved ([HB 3134](#)). Other legislation approved in 2009 ([HB 1788](#)) prevented a locality from prohibiting the use of AOSSs and also prohibited local governments from adopting maintenance standards and requirements that exceeded those of the Commonwealth.

## Substance

Please briefly identify and explain the new substantive provisions that are being considered, the substantive changes to existing sections that are being considered, or both.

A fast track amendment is being considered to address performance requirements and operation and maintenance requirements associated with direct dispersal through a separate regulatory action. Currently there is no single technology that can comply with all of the performance requirements for direct dispersal. Different technologies must be combined to meet the current regulation. However, the proposed fast-track regulation would allow the possibility to use a single treatment technology to meet the performance requirements, thereby reducing costs but still being protective of public health. When the final regulations were first adopted in 2011, the general sentiment at that time was to require best available technology and that costs would reduce over time. However, costs have not substantially decreased; and to date, no property owner has submitted an application to comply with the requirements for direct dispersal. Homeowners can waive additional treatment or pressure dosing pursuant to [Va. Code §32.1-164.1:1](#) and continue to discharge untreated septic effluent into groundwater.

If the fast track amendment is not possible or approved, then the fast track amendment will be incorporated into this regulatory action.

The advisory committee made several recommendations with respect to the AOSS Regulations, including a need to review 12VAC5-613-70 and 200.1. This regulatory action will address issues identified by the advisory committee.

The regulations for nitrogen (N) limits should be consistent with the U.S. EPA's model program for onsite wastewater treatment systems in the Chesapeake Bay watershed. See [http://executiveorder.chesapeakebay.net/130627\\_Ches\\_Bay\\_Tech\\_Assist\\_Manual.pdf](http://executiveorder.chesapeakebay.net/130627_Ches_Bay_Tech_Assist_Manual.pdf) for more information. By amending 12VAC5-613-90 D(1)(b) for new construction activity, TN concentration should be 30 mg/l instead of 20 mg/l measured prior to application to the soil.

The Virginia Department of Health (VDH) has worked with the U.S. EPA and neighboring states to develop best management practices (BMPs) for small AOSSs through an expert review panel. Unless Virginia designers use an approved BMP, EPA will not provide a credit (or N reduction) for the total maximum daily load (TMDL) for the Chesapeake Bay Watershed. As such, 12VAC5-613-90 D (1) b should be amended because it is not consistent with the TMDL and the requirements of 90 D(1)(b)(2) will be moved into a BMP to allow for reporting to the EPA and receive credit for the TMDL.

## Alternatives

*Please describe any viable alternatives to the proposal considered and the rationale used by the agency to select the least burdensome or intrusive alternative that meets the essential purpose of the action. Also, include discussion of less intrusive or less costly alternatives for small businesses, as defined in § 2.2-4007.1 of the Code of Virginia, of achieving the purpose of the regulation.*

A viable alternative would be to retain and keep the regulation without change. However, the periodic review, the draft fast track amendment, and recommendations from the advisory committee indicate a need to revisit and update the AOSS Regulations. The least burdensome

alternative is to update and revise the regulations to better address stakeholder concerns, including small businesses. This regulatory action will consider, at a minimum, each of the following methods of reducing the effects of the proposed regulation on small businesses:

1. The establishment of less stringent compliance or reporting requirements;
2. The establishment of less stringent schedules or deadlines for compliance or reporting requirements;
3. The consolidation or simplification of compliance or reporting requirements;
4. The establishment of performance standards for small businesses to replace design or operational standards required in the proposed regulation; and
5. The exemption of small businesses from all or any part of the requirements contained in the proposed regulation.

**Public comment**

*Please summarize all comments received during the public comment period following the publication of the Notice of Periodic Review, and provide the agency response. Please indicate if an informal advisory group was formed for purposes of assisting in the periodic review.*

<b>Commenter</b>	<b>Comment (Quotes from Periodic Review)</b>	<b>Agency response</b>
Wesley B. Lower	<p><b>Federal CWA Compliance-</b>                      whether 12VAC5-613 complies with EPA Safe Drinking Water Act (SDWA) establishing minimum federal requirements for state and tribal Underground Injection Control (UIC) Programs to protect underground sources of drinking water from contamination caused by Class V injection wells or septic systems?</p> <p>Do regulations includes inventory of construction, operation, and closure of injection wells? Does the inventory delineate source water protection areas affected by such facilities?</p>	<p>VDH will work with the advisory committee to address this comment through the regulatory process. A specific change to the regulation was not offered by the commenter.</p>
Beau Martin	<p><b>Prescriptive versus Performance</b></p> <p>Current scientific research appears to confirm that a properly constructed drainfield with 18 inches of separation can perform effectively for about 25 years. Does virginia department of health have data to support the current seperation distances?</p>	<p>VDH will work with the advisory committee to address this comment through the regulatory process. The commenter did not offer a specific change to the regulations.</p>

<p>Unlicensed Contractor</p>	<p><b>Licensing</b></p> <p>"if it aint broke, don't fix it".</p> <p>It is an owners legal rights to has a system installed on their property and you don't have any choices to say in that! just bunches of vovra complainers</p>	<p>VDH will work with the advisory committee to address this comment through the regulatory process. The commenter did not ask for a specific change to the regulations.</p>
<p>VDH Monopoly</p>	<p><b>Conflict of Interest</b></p> <p>Marcia Degen Virginia Department of Health staff engineer continues to write public policy which makes alternative system use less economical to the consumer. Another overreach by an agency monopoly in the onsite service industry.</p> <p>A glaring conflict of interest does exist in that Ms. Degens staff only designs conventional onsite sewage systems while she intentionally increases costs to alternative systems.</p>	<p>VDH will work with the advisory committee to address this comment through the regulatory process. The Board of Health has authority, with executive branch approval, to adopt regulations developed through the regulatory process.</p>
<p>Alicia Gast</p>	<p><b>Shellfish Area Impacts</b></p> <p>There are consequences of water contamination by human pathogens.</p> <ol style="list-style-type: none"> <li>1. A significant proportion of the closures of Virginia shellfish beds is due to the presence of coliform contamination.</li> <li>2. Nationally, one quarter of all shellfish beds are closed due to coliform contamination.</li> </ol> <p>It is not known what part of this contamination is due to OSWDS, however, as the incidence of OSWDS contamination increase, it is reasonable to assume that the proportion of closures due to OSWDS will also increase.</p> <p><i>The closure of shellfish beds has significant economic impact and often these impacts are quite localized, so the associated hardships are very unevenly distributed.</i></p> <ol style="list-style-type: none"> <li>1. Does VDH know the economic impact allowing septic tank effluent (STE) to be dispersed into shallow groundwaters on the shellfish industry?</li> </ol>	<p>VDH will work with the advisory committee to address this comment through the regulatory process. The Department of Planning and Budget will perform an economic impact analysis through the regulatory adoption process. The commenter did not offer a specific change to the AOSS Regulations.</p>

	<p>2. Does VDH know what extent alternative onsite sewage systems are impacting the shellfish are?</p>	
Thomas Bixler	<p><b>Existing Sample Data in Virginia (AOSS)</b></p> <p>Does VDH post grab sample findings for all existing installed AOSS systems?</p> <p>What do the current numbers indicate?</p> <p>How many AOSS required samples does VDH have record of in the Commonwealth?</p>	<p>VDH will work with the advisory committee to address this comment through the regulatory process. The commenter did not offer a specific change to the regulations.</p>
Mary Friedman	<p><b>Alternative Systems</b></p> <ol style="list-style-type: none"> <li>1. The consumer cost for alternative systems is being manipulated by "additional" testing requirements set forth by the Virginia Department of Health (VDH) with no benefit to consumers.</li> <li>2. With no "state" benefits of testing, owners are being forced to purchase goods from a limited number of dealers. On their face, the regulations appear to set the Virginia marketplace as an entity exempt from Federal Commerce Clause requirements.             <ol style="list-style-type: none"> <li>1. Suggest removing TL3 requirements.</li> <li>2. Suggest removing VDH from product approvals while participating in the marketplace.</li> <li>3. Suggest requiring all product approvals to at minimum, possess a Virginia licensed engineer stamp with appropriate supporting calculations.</li> </ol> </li> <li>3. Recommend that all systems designed in coastal plain shall be designed to the estimated 75 year mean sea level rise estimate.</li> <li>4. Recommend that all systems installed in the coastal plain province be supported by disinfection.</li> </ol>	<p>VDH will work with the advisory committee to address this comment through the regulatory process.</p>
Jim Bell	<p><b>Field Testing Requirements of 12VAC5-613</b></p> <p>Beginning in 2009, Bio-Microbics has been listed as "Evaluation Complete" or approved for GMP 147 for</p>	<p>VDH will work with the advisory committee to address this comment through the regulatory</p>

	<p>TL-3. Bio-Microbics has participated with the VDH in the development of the Emergency Regulations of 2010 and the current regulations 12VAC5-613 effective since 2011. Bio-Microbics has further assured that our Distributor, Dealers, Installers and Service Providers have followed these Regulations since 2011 and know of no negative health or environmental impact, or formal complaint from VDH on any of the 400+ installations over this time period.</p> <p>12VAC5-613-30.L states that the approvals Bio-Microbics received for TL-3 of 2009 are effective for 5 years from December 7, 2011, or up till December 7, 2016. The process for re-evaluation is covered in 12VAC5-613-70, which states that the division (VDH) shall develop a protocol to verify the performance. However, when one looks for the testing requirements for GMP 147, the 2009 testing procedures are all that can be found on the VDH website. There have been discussions and drafts of a new GMP 147 testing protocol, but this new testing protocol has not been approved. Field testing is a very expensive proposition for both a manufacturer and its Virginia Distributor and Dealers. Without a formally approved testing protocol for GMP 147, it is not a safe investment to make knowing that this can be changed by VDH at any time.</p> <p>In addition VDH issued a Guidance Memorandum and Policy 156 in December of 2013 for nitrogen reduction in the Chesapeake Bay Watershed. BMP#5 of this GMP requires field testing for all GMP 147 TL-3 systems for nitrogen reduction. This GMP further states that a new listing procedure to develop this field testing would be completed no later than June 7, 2014. To our knowledge no field testing procedure for GMP 156 has been approved by VDH. Again the economic impact of this is substantial for both a manufacturer and its Virginia Distributor and Dealers. In order to obtain the most value for money expended for field testing, it would make sense to test for both GMP 147 and 156 at the same time.</p> <p>The lack of any VDH approved testing protocol does</p>	<p>process.</p>
--	---	-----------------

	<p>not make it feasible to expend substantial amounts of money and resources without knowing that the testing procedures suggested by the VDH are approved. Based upon the facts as we see them, the December 7, 2016 deadline for 12VAC5-613-30.L is impractical and cannot be met by any manufacturer. This would make the use of any previously approved TL-3 system unavailable for use in the protection of the environment. In contrast, every MicroFAST® system that has been installed in Virginia reduces nitrogen by 50% or more. So the economic and environmental impact upon the Commonwealth of Virginia would be devastating. For this reason we are requesting that the VDH modify 12VAC5-613 to account for the lack of any approved direction for field testing so that existing systems approved for TL-3 be “grandfather in” or a new deadline be established only after testing protocols are approved.</p>	
<p>Jeff Walker</p>	<p><b>Department of Planning and Budget Regarding Economic Review</b></p> <p>Department of Planning and Budget is advised to take notice of economic impacts related to these regulations. Small Business interests have been neglected or given little consideration during prior regulatory reviews. As have impacts upon homeowners affected by damage to their natural resources including ground or surface water.</p> <p>Economic impact of onsite system design, permitting, installation, and operation under regulations include:</p> <ol style="list-style-type: none"> <li>1. Assurances of reliable development of real property improvements and infrastructure,</li> <li>2. Valuation and tax assessment of real property,</li> <li>3. Expectation of future transactions including transfer of title,</li> <li>4. Effects of restrictions on advanced systems, including stigmatization and penalization of owners,</li> <li>5. Anti-competitive effects on small business, such as- dual standards, impacts of subsidized services or unregulated monopolies,</li> <li>6. Mitigation of ground water pollution, and need</li> </ol>	<p>VDH will work with the advisory committee to address this comment through the regulatory process.</p>

	<p>for performance bonding,</p> <ol style="list-style-type: none"> <li>7. Adequacy of regulatory review and approval preventing contamination of economic resources,</li> <li>8. Loss of use through condemnation proceedings,</li> <li>9. Responsibility for threats to health, welfare and safety accruing via product approval.</li> </ol> <p>In summary please consider the value of real estate served by functioning onsite systems, as opposed to the cost of mitigating failed or non-compliant systems.</p> <p>I assert the avoided cost of properly designed and operated systems has not been properly established; some seem confused by the misconception that septic systems are temporary solutions until the big pipe is built. In most cases this is impractical, a broken model. The value of reliable decentralized onsite systems in support of rural development should be recognized and supported by any future regulation.</p>	
<p>Mike Lynn</p>	<p><b>Complete Regulation Needed</b></p> <p>The current AOSS regulations are in addition to or a supplement to the 610 regulations. This and the continued existence of hundreds of GMPs makes it almost impossible for designers to navigate the maze of overlapping regs and policies and equally hard for VDH staff to review and regulate. Since the AOSE regs are not in effect there is no regulatory standard for submissions, soil evaluations and there is absolutely no guidance or regulation dealing with the nearly 800,000 existing septic systems all nearing 40 years plus in age. A complete and thorough re-wirte with legislative changes is long overdue.</p>	<p>VDH will work with the advisory committee to address this comment through the regulatory process. There are currently 47 active policies in place, from 1990 through 2016, covering 6 sets of regulations. GMP 2015-01 addresses minimum application requirements, including soil and design criteria.</p>
<p>Jeff Walker</p>	<p><b>Repeal AOSS Regulations, Reconsider Nutrient Reduction</b></p> <p>VDH is well advised to repeal the 12VAC5-613 Regulations. These regulations have become an impediment to reliable review and approval of applications for Sewage System Permitting. 12VAC5-610 (Sewage Handling &amp; Disposal Regulations, of 2000) established process for</p>	<p>VDH will work with the advisory committee to address this comment through the regulatory process.</p>

	<p>determining standoffs to limitations but do not interfere with proprietary specifications for products conveying, treating and dispersing sewage and effluent.</p> <p>12VAC5-613-90. (Performance requirements; ground water protection.) are especially problematic. Consider the consequences of policies developed under 613-90:</p> <p><i>D. The following additional nutrient requirements apply to all AOSSs in the Chesapeake Bay Watershed:</i></p> <p><i>1. All small AOSSs shall provide a 50% reduction of TN as compared to a conventional gravity drainfield system; compliance with this subdivision may be demonstrated through the following:</i></p> <p><i>a. Compliance with one or more best management practices recognized by the division such as the use of a NSF 245 certified treatment; or</i></p> <p><i>b. Relevant and necessary calculations provided to show one or both of the following:</i></p> <p><i>(1) Effluent TN concentration of 20 mg/l measured prior to application to the soil dispersal field; or</i></p> <p><i>(2) A mass loading of 4.5 lbs N or less per person per year at the project boundary provided that no reduction for N is allotted for uptake or denitrification for the dispersal of effluent below the root zone (&gt;18 inches below the soil surface).</i></p> <p>Applying the results of calculations by the US EPA's "Onsite Wastewater Treatment System Expert Panel" (Panel) results in a net change of nutrient loading to the Bay of almost zero. At a cost reported by VDH of over \$800/lb N removed. Without getting into the weeds the Panel refused to consider Nitrogen mineralized and fixed into organic matter as being isolated, nor did it recognize nutrient losses accruing from many miles of transport through inorganic and microbial influences. Thus developing guidance resulting in onsite installations over 400 miles from the Bay being regulated to as stringent a standard as sites on the waterfront. Compounding the matter</p>	
--	---	--

	<p>“conventional” systems are completely unregulated despite installation in proximity to surface, ground and even tidal waters.</p> <p>VDH is operating under an erratic and ill considered policy resulting in almost no improvement of statewide N loading to the Chesapeake Bay from onsite systems, but resulting in a wholesale avoidance of "alternative" systems, on a misconstrued assumption that only systems benefitting from treatment should be held to a higher and more expensive standard of regulation. The resulting prescriptive solutions under GMP156 have virtually eliminated acceptance by the ordinary consumer of advanced treatment systems despite the proven performance advantages of virtual elimination of pathogens and organic loads. Erratic in that VDH staff are providing approval of "voluntary upgrades" and "conventional" designs which disperse Septic Tank Effluent (STE) into soils with high groundwater.</p> <p>While VDH staff provides design and approval for these permits to pollute, the community should also be cognizant of the distribution of shellfish water closures. These reports of coliform bacteria (associated w/ STE) leading to closure seem circumstantially associated with subdivisions on tributaries to the Bay especially along the Three Rivers and Eastern Shore Districts.</p> <p>Surely the VDH recognizes the need to restore it's primary duty toward oversight by policy and action of the environmental impact of development. To do otherwise continues to undermine it's authority over these matters.</p>	
<p>Jeff Walker</p>	<p><b>Elimination of the Faux Standard TL-3</b>                  As a member of the Sewage Handling Disposal Advisory Committee I have advocated the elimination of Treatment Level 3 status. There is little likelihood manufactured treatment units achieve a BOD or TSS of &lt;10mg/l consistently under long term operation and realistic field conditions. And yet each have been shown to attain 30mg/l TSS &amp; BOD,</p>	<p>VDH will work with the advisory committee to address this comment through the regulatory process.</p>

	<p>and substantial reductions in pathogens, benefiting the long term acceptance of treated effluent into native soil or engineered media. These treatment systems have a history of sustained reliable service in improvement to real property. However TL-3 provides no appreciable improvement, the committee approved a motion to communicate our concerns regarding this issue to the Commissioner of Health.</p> <p>The cost of TL-3 listed equipment is not balanced by improvement in performance or reduction of risk. It is questionable whether TL-3 provides substantial (&gt;20mg/l) margin of improvement over TL-2 effluent. Or whether VDH has shown this distinction to be statistically sound. The manufacturers protest over the pass through cost to the consumer of additional testing is well founded.</p> <p>Secondary effluent (TL-2) is readily achievable and suitable for disinfection meeting the EPA/DEQ discharge quality standards. This should be a practical and attainable standard for dispersal into the soil under the oversight of a licensed designer, and can be assured under oversight of a licensed operator.</p> <p>VDH should have abundant sampling reports (under 12VAC5-613-100, 120) to prove this assertion, it is unfortunate we cannot rely upon the release of compiled statistical evidence in discussion of future regulations. If these testing protocols were not intended to be punitive the data should have been already been released to the public. The Regulation ought not be used to grant competitive advantage to any party. It seems unusual that VDH wished to invoke greater oversight and scrutiny of specification for products which have been tested and certified by independent authorities.</p> <p>The AOSS Regulations pertaining to product review and approval might be viewed as fostering anticompetitive practices, creating barriers to market entrance for proprietary products and their specification by licensed professionals. In aggregate these should be viewed as burdensome regulations.</p>	
--	---	--

<p>Bob Marshall</p>	<p><b>Repeal these regulations</b></p> <p>The regulation:</p> <p><i>(i) is necessary for the protection of public health, safety, and welfare or for the economical performance of important governmental functions;</i></p> <ul style="list-style-type: none"> <li>• <b>Failing on many levels as evidenced by increased closings of shellfish waters.</b></li> </ul> <p><i>(ii) minimizes the economic impact on small businesses in a manner consistent with the stated objectives of applicable law; and</i></p> <ul style="list-style-type: none"> <li>• <b>Conflicting prescriptive requirements failing to address performance objectives of applicable law.</b></li> </ul> <p><i>(iii) is clearly written and easily understandable.</i></p> <ul style="list-style-type: none"> <li>• <b>VDH is failing to enforce mandatory O&amp;M throughout the Commonwealth.</b></li> </ul>	<p>VDH will work with the advisory committee to address this comment through the regulatory process.</p>
<p>Jeff Walker</p>	<p><b>Product Approval</b></p> <p>In undertaking review and approval of proprietary products the VDH must have adequate standards.</p> <p>The unfortunate loss of life in Pulaski County was adjudicated to be due in part to the failure of a child safe lid, the department listed for use across the Commonwealth. Having assumed an obligation for product approval does the state have capacity to review product performance and safety for use?</p> <p>In the future the Commonwealth would be well advised to rely upon accepted engineering standards and testing results such as NSF or Underwriters Labs. Or establish a comprehensive and verifiable set of standards applied uniformly without granting any form of competitive advantage.</p> <p>This emphasizes a conflict of interest which must be managed in providing in-house design services for development of private property which requires</p>	<p>VDH will work with the advisory committee to address this comment through the regulatory process.</p>

	specification of listed products, but conflict with the ministerial duties.	
Jim Slusser	<p><b>Economic Burden</b></p> <p>The agency should scratch the testing program set forth by DR. MARCIA DEGEN as identified in the AOSS Regulations. We recently were involved with discussions regarding Dr. Degen and Mr. Dwayne Roadcap requiring one manufacturer to produce "additional" testing without any proper justification. Such testing cost nearly sixty thousand dollars (60,000.00) and nearly a two month delay in obtaining product approval. Additional testing only burdens those manufactures trying to bring innovation into the marketplace by delays and being cost prohibitive. (Maybe the cesspool isn't so bad afterall?)</p> <p>When did public health outcomes become dependent on political affiliation?</p> <hr/> <p>FYI: This form of policy breach failed the citizens of in FLINT, MICHIGAN; is Virginia hoping for a better outcome?</p>	VDH will work with the advisory committee to address this comment through the regulatory process.
Colin Bishop	<p><b>Repeal current regulation and develop risk-based design/operation approach incorporating HACCP</b></p> <p><b>Repeal the current regulation and develop a risk-based design and operation approach incorporating HACCP.</b></p> <ol style="list-style-type: none"> <li>1. Develop regulations that incorporate the seven principles of HACCP.             <ol style="list-style-type: none"> <li>a. Principle 1: Conduct a hazard analysis.</li> <li>b. Principle 2: Determine the critical control points.</li> <li>c. Principle 3: Establish critical limits.</li> <li>d. Principle 4: Establish monitoring procedures.</li> <li>e. Principle 5: Establish corrective actions.</li> </ol> </li> </ol>	VDH will work with the advisory committee to address this comment through the regulatory process.

# DRAFT for advisory committee review: 9/21/16

Town Hall Agency Background Document

Form: TH- 01

	f. Principle 6: Establish verification procedures.	
Colin Bishop	<p><b>12VAC5-613-100. Performance requirements; laboratory sampling and monitoring</b></p> <p><b>12VAC5-613-100. Performance requirements; laboratory sampling and monitoring.</b></p> <p>1. Section D. should be removed. This frequency of sampling provides little value and is unnecessarily costly to owners. An alternative is to have the service provider</p>	VDH will work with the advisory committee to address this comment through the regulatory process.
Colin Bishop	<p><b>12VAC5-613-80. Performance requirements; general - Comments 6. - 7.</b></p> <p><b>12VAC5-613-80. Performance requirements; general.</b></p> <p>6. Allow fill sand, soil, or soil-like material is used to meet the 12” vertical separation for seasonal high water table and possibly other conditions.</p> <p style="text-align: center;"><i>Reason: Fill sand or soil is very reliable in meeting performance requirements and does not break or need maintenance like a disinfection unit.</i></p> <p>7. Consider the concept of soil depth credits for reduction in the vertical separation distance (Table 2).</p> <p style="text-align: center;"><i>Reason: Since adoption of AOSS regulations, disinfection devices have proliferated. This may be an unintended consequence of regulation.</i></p>	VDH will work with the advisory committee to address this comment through the regulatory process.
Colin Bishop	<p><b>12VAC5-613-80. Performance requirements; general - Comments 2. - 5.</b></p> <p>2. Add a section that states the following or something similar:</p> <p>“All treatment units used for an intermittent use facility, such as a seasonal cottage, cabin, home, church, school, camp or other such facility, shall demonstrate the ability to perform under intermittent use conditions.”</p>	VDH will work with the advisory committee to address this comment through the regulatory process.

	<p><i>Reason: Some treatment units do not perform adequately when intermittently loaded. In some cases, they will not even meet the <math>\leq 60</math> mg/l BOD5 referenced in 12VAC5-613-80.10.d. in order to qualify for increased soil loading rates. Therefore, the designer should show calculations and operating requirements in order to meet expected performance requirements.</i></p> <p>3. Add a section that states the following or something similar:</p> <p>“Timed dosing, preceding the treatment unit, or effluent by-pass protection shall be incorporated into all treatment units meeting TL-3.”</p> <p><i>Reason: Per the Sewage Handling and Disposal Regulations (12VAC 5-610-800):</i></p> <p><i>“Where an activated sludge process is used to produce a secondary effluent, provisions shall be made to protect the drainfield from bulking solids.” Since TL-3 is used on more marginal sites than TL-2, it is imperative that the public health and the environment (and the drainfield) is adequately protected through a fail-safe mechanism. Also, TL-3 effluent needs to be assured through our comment #1 above. Lastly, NSF Standard 40 make the following statement on influent dosing regimen:</i></p> <p><b>8.2.2.1 Design loading note</b></p> <p>NOTE – The individual dosage shall be no more than 10 gallons per dose, unless the dosage system is based on a continuous flow, and be uniformly applied over the dosing periods.</p> <p>4. Modify section 10. to incorporate Table 1 soil loading rates from GMP #147 for TL-3 and create an additional table for soil loading rates for TL-2 in a format like GMP #147.</p> <p><i>Reason: Many designers are unsure about soil loading rates for other types of dispersal, like pads. Adding additional tables will provide clarity for designers.</i></p> <p>5. An alternative to field verification specified in</p>	
--	--	--

	<p>12VAC5-613-70 (repealing this section) is the acceptance of third party test center data or third party field data to establish minimum performance threshold for meeting TL-3 for the requirements of Table 1 soil loading rates. This is similar to what many other states do for establishing performance. Two other state tables were submitted via email to VDH.</p>	
<p>Colin Bishop</p>	<p><b>12VAC5-613-10. Definitions.</b></p> <p>1. Add definition for CBOD5 with ratio of BOD5 wherever BOD5 is mentioned.</p> <p><i>Reason: NSF Standards 40 and 245 report effluent results in CBOD5. Also, some manufacturers, as part of their evaluation process, have field sampled for CBOD5.</i></p> <p>2. Add definitions for ammonia, nitrate, TKN and alkalinity.</p> <p><i>Reason: The constituents are valuable for gauging field performance and troubleshooting. Furthermore, some of these constituents could be used to gauge compliance as part of a testing protocol, service using field test kits, or compliance with protocols or service using in situ sensors.</i></p> <p>3. Add definitions for Fats, Oils, and Grease (FOG) and High Strength Waste.</p> <p><i>Reason: Many residential units or other technologies are misapplied to a variety of commercial situations. In addition to definitions, criteria needs to be developed in the AOSS to address high strength wastewater and FOG. This is crucial since many commercial properties have very limited land area and the risks associated with public health are higher should a system malfunction or fail</i></p>	<p>VDH will work with the advisory committee to address this comment through the regulatory process.</p>
<p>Colin Bishop</p>	<p><b>12VAC5-613-30. Applicability and scope.</b></p> <p>1. Revise section L. per below:</p> <p>“L. Treatment units for small AOSSs that are recognized by the department as generally approved</p>	<p>VDH will work with the advisory committee to address this comment through the regulatory process.</p>

	<p>for TL-2 or TL-3 as of December 7, 2011, shall retain</p>	
<p>Joel Pinnix</p>	<p><b>TL-3 and General Approval</b></p> <p>VDH needs to get out of the product approval business. VDH's efforts to affect a rational and statistically robust testing program has failed. The entire concept of General Approval and Treatment Level (TL-3) needs to be rationally evaluated.</p> <p>Puraflo failed its testing program yet was granted General Approval. Both Advantex and Ecoflo used sampling lysimeters that filtered out the bacterial contaminants used as the pass/fail criteria – yet were granted General Approval.</p> <p>The statistical model used in GMP-147 is fundamentally flawed. Dr. David Edwards of VCU found that the use of standard error and confidence intervals for the mean were not appropriate when interest lies in where treatment unit performance will fall. He further added, the tolerance intervals computed by VDH are too low as a large percentage of treatment units will fail the criterion.</p> <p>The raw data shows that each of the three units above had <b>average</b> BOD levels ranging from 6.9 to 8.3 mg/l but had a <b>99% confidence limit range of 28.5 to 43.2 mg/l</b>. This data demonstrates that the units work well most of the time, but cannot achieve the treatment levels of 10/10 more than about 50% of the time. Similar data exists for TSS.</p> <p>Treatment Level 2 Effluent should be replaced with – <i>“Secondary Effluent” means effluent that has been treated to produce BOD5 and TSS concentrations equal to or less than 30 mg/l each.</i></p> <p>Treatment Level 3 Effluent – should be removed for small systems. There are no manufactured treatment units that can achieve a BOD of 10mg/l consistently. This standard is superfluous – TL-2 (Secondary) is achievable and allows for disinfection and meets the EPA/DEQ discharge quality standard. TL-3 is a contrived standard.</p>	<p>VDH will work with the advisory committee to address this comment through the regulatory process.</p>

<p>Joel Pinnix</p>	<p><b>Direct Dispersal to Groundwater</b></p> <p><i>Property owners in the Coastal Plain need balanced requirements. If it's reasonable public policy to permit the discharge of septic effluent into shallow groundwater, then allowing the same option for an engineered system that meets the EPA/DEQ discharge quality standard is reasonable public policy - on steroids.</i></p> <p>In December 2011 the Virginia Department of Health (VDH) promulgated regulations that created restrictive, and effectively, prohibitive rules governing seasonal high groundwater. A new category of system was created, Direct Dispersal to Ground Water. For the past 4years, VDH has issued <b>no construction permits</b> for this category of alternative systems, although VDH has issued at least <b>21 construction permit variances</b> for repairs or voluntary upgrades.</p> <p>It is important to be mindful that there are two statutory provisions that require VDH to issue non-complying construction permits (§ 32.1-164.1:1 “Waivers” and § 32.1-164.1:3 “Voluntary Upgrades”). In both instances, VDH is required to, and has written, numerous construction permits that discharge septic tank effluent in violation of current separation requirements and many instances, directly into the seasonal high ground water.</p> <p>In addition, current regulations (12VAC5-610-280) allow VDH to issue construction permits for failing systems that “complied to the greatest extent possible, ...however, not necessary to substantially comply with the requirements...”.</p> <p>In summary, there are several options available for VDH to issue legal, yet non-conforming construction permits.</p> <p>A limited review of permits found:</p> <p><b>Mathews County</b> - between November 2008 and June 2010 (20 months) VDH had issued 26 repair permits out of 39 reviewed (<b>67%</b>) resulting in discharges directly into the shallow groundwater.</p>	<p>A fast track amendment has been drafted. VDH will work with the advisory committee to address this comment through the regulatory process if the fast track amendment is not approved or a qualified objection reverts the fast track amendment into this routine regulatory process.</p>
--------------------	--	--

	<p><b>Mathews County</b> – between April 2010 and January 2013 (32 months) VDH had issued an additional 26 repair permits out of 100 reviewed (<b>26%</b>) that violated the required separation distance or discharged directly into the shallow groundwater.</p> <p><b>Isle of Wight County</b> – between January 2010 and January 2013 (36 months) VDH had issued an additional 31 repair permits out of 47 reviewed (<b>66%</b>) that violated the required separation distance or discharged directly into the shallow groundwater.</p> <p>Ironically, none of the above systems were designed by engineers, yet it is engineered systems that undergo the most scrutiny and must comply with the State's most rigorous performance requirements.</p> <p>As long as VDH issues permits and designs systems that discharge SEPTIC EFFLUENT directly to groundwater the following rule should apply:</p> <p><b><i>IF YOU CAN TREAT WASTEWATER AND DISCHARGE IT TO A DITCH, CREEK OR STREAM, YOU SHOULD BE ABLE TO DISCHARGE IT INTO THE GROUND.</i></b></p> <p>The regulations related to Direct Dispersal to Groundwater need to be amended.</p>	
Tom Ashton	<p><b>Open the AOSS Regs</b></p> <p>I pretty much agree with most of the previous comments, particularly requiring license number and signature on all VDH documents and further informing citizens of the requirement for utilizing licensed individuals.</p> <p>The AOSS regs need some editing for enhanced clarification and interpretation. The use and presentation of the loading rate chart needs to be revisited as well as additional guidance regarding hydraulic assessment and lateral flow analysis in the case of small AOSS's with shallow limitations. The utilization of soils with various degrees of “mixed” clay mineralogy needs to be addressed.</p>	VDH will work with the advisory committee to address this comment through the regulatory process.

# DRAFT for advisory committee review: 9/21/16

Town Hall Agency Background Document

Form: TH- 01

Paul Small	<p><b>Amend (12VAC 5 613)</b></p> <p>A simple solution to protecting the public from unlicensed installers would be the requirement of VDH to require the installers licence number on the construction completion statement. This solution is <b>cost effective, easily implemented, and immediately enforceable</b>. All certification letters, permits and completion statements should have a statement notifying all of this requirement.</p>	VDH will work with the advisory committee to address this comment through the regulatory process.
John Powell	<p><b>Amend [12VAC 5-613]</b></p> <p>"VDH should inform owners of their obligation to use licensed designers, installers, and operators on all permits and certification letters that are issued."</p>	VDH will work with the advisory committee to address this comment through the regulatory process.
John Powell	<p><b>Amend [12VAC 5-613]</b></p> <p>"In 2009, DPOR adopted licensure requirements for onsite sewage systems professionals, including installers. Part of the reason for licensure was to recognize that onsite systems are becoming increasingly complex and require specialized training of individuals involved in designing, installing, and operating them. VDH does not require that an installer provide their onsite installer license number on construction completion statements. As a result, installations are being done by unlicensed individuals. There is no incentive for unlicensed installers to obtain their license. VDH should amend the regulations to require an installer to provide their onsite installer license number on construction completion statements. This will ensure that only properly trained and licensed persons install onsite systems in Virginia."</p>	VDH will work with the advisory committee to address this comment through the regulatory process.
Mike Burch	<p><b>Conflicts with AOSS regulations</b></p> <p>As an owner of a small business that provides wastewater treatment in the Commonwealth of Virginia, I urge a review and revision of the Regulations for Alternative Onsite Sewage Systems (12VAC 5-613). There are conflicts and inconsistencies with GMPs and the guidance communicated by the Onsite Division staff.</p>	VDH will work with the advisory committee to address this comment through the regulatory process.

	<p>I believe that the AOSS regulations enacted on December 7, 2011 made a significant departure from the Emergency Regulations published on June 3, 2010 without adequate public comment.</p> <p>In 2009, the General Assembly directed VDH to adopt emergency regulations to address three issues pertaining to the AOSS (alternative onsite sewage systems) regulations: Performance, Horizontal Distances and Operations and Maintenance. Although the Emergency Regulations were considered interim, they did establish a framework to supplement the Sewage Handling and Disposal regulations (12VC 5-610-20)</p> <p>The goal of the Emergency Regulations was to protect public health and the environment by establishing a performance requirement and ensuring that all AOSS are operated in accordance with those regulations. Any systems, AOSS or conventional, that were failing or malfunctioning in ways that threaten public health and the environment were to be the priority. While the basic Sewage Handling and Disposal Regulations did not address performance and O&amp;M, there was in place GMP 147 that established a path for approval of TL2 and TL-3 AOSS systems based on performance. The Division offered two options to AOSS manufactures: in state testing or submission of performance data from testing protocols other than Virginia. We have not been informed that there have been any health or environmental issues with the TL-3 systems installed per GMP 147.</p> <p>The Emergency Regulations did implement a requirement that every AOSS, whether TL2 or TL3 had to be tested via a BOD effluent sample within the first 180 days of operation and thereafter, every five years for systems with “general approval”. Presumably the laboratory data was to be collected by the VDH Onsite Division and analyzed to identify failing or malfunctioning systems that could endanger public health or the environment. As a local distributor for an AOSS manufacturer, I have never received notice that any of the 400 + AOSS systems installed since the enactment of the Emergency Regulations have impacted public health or the environment.. Whenever we have attempted to</p>	
--	---	--

	<p>obtain the 180 day data, we have had to file FOIA requests at county or state levels to obtain even partial data. The 180 effluent sampling adds to the cost of a homeowners' O&amp;M program with apparently very little benefit to either the homeowner to make corrections to their AOSS and/or protect public health. The requirement itself is ambiguous since it is possible to take an effluent sample on day-one of the system being put into operation. The performance grab sample has not been used as an effective tool that justifies the cost to the homeowner.</p> <p>In a review of the AOSS regulations there needs to be an in depth review of the success/failure of the O&amp;M program during its first four years with emphasis on a cost analysis and benefits to both the homeowner and the Commonwealth. As with any business, supply and demand drives the price of a product or service. As of this writing, the AOSS operators list has only 59 licensed operators statewide. Homeowners tend to ignore the O&amp;M requirement because of cost and availability of a licensed operator. The AOSS regulation review should include a survey of homeowners regarding their experiences with O&amp;M providers to include the cost of the annual inspection and the responsiveness of the O&amp;M provider. The survey will be key in moving toward a reasonable program to identify violations and enforcement. There needs to be a better path in the DPOR licensing program.</p> <p>12VAC 5-613-70 stated that the division "shall develop a protocol to verify expected performance of small AOSS treatment units.." The requirement that performance data must be from systems installed in the Commonwealth of Virginia was a significant departure from the Emergency Regulations and GMP 147. I can't recall a mandate from the stakeholder meetings to accept only in-state data. Later, the Onsite Division said that out-of-state data could be considered, but that was part of an intended revision to GMP 147 that was drafted, distributed for comment but never signed. As the Virginia distributor for a TL-3 AOSS, I am not certain as to</p>	
--	--	--

	<p>the authority of a GMP that is still in revision.</p> <p>A further complication of the AOSS regulation is the requirement for 50% total nitrogen reduction for systems in the Chesapeake Bay watershed. The performance requirement is not part of the in-state testing of 20 systems. Separate from the AOSS regulation is GMP 156 and subsequent Division guidance that there may be a requirement for in-state testing of as many as 12 systems to meet an EPA inter-state requirement. We have asked if any nitrogen testing could be done concurrent with AOSS testing. We would not want to engage in a nitrogen testing program without assurance that it will meet the eventual EPA mandate.</p> <p>The Onsite Division, in creating the AOSS regulations did not give appropriate consideration to the financial impact of an in-state testing program that replicates testing done in other states, and internationally. The third-party protocol, without nitrogen testing, will cost AOSS manufacturers and their distributors a minimum of \$50,000.00 to produce data already available from other sources. It's a business expense that will be passed on to property owners who have to have an AOSS. Without including a definitive nitrogen testing program, the cost of separate follow-on testing, at a later date could double.</p> <p>The Sewage Handling Advisory Committee voted on and sent a letter to the Commissioner of Health pointing out the significant cost of third-party in-state testing that does not further the performance data already available. The AOSS manufactures have already invested heavily in other testing programs. The VDH assumption is Virginia's wastewater is somehow different than that of New England, Florida or other regions. The point can be made that the health department does not require in-state testing of prescription pharmaceuticals or health appliances. The SHADAC 's letter has been ignored by the Commissioner.</p> <p>To summarize, a revision of the AOSS regulation is</p>	
--	--	--

# DRAFT for advisory committee review: 9/21/16

Town Hall Agency Background Document

Form: TH- 01

	<p>needed. There are requirements in the regulation that should be reviewed and improved with the knowledge and data collected since the Emergency Regulations were adopted. There are significant ambiguities with GMP 147 (and the proposed revisions that were never signed) and GMP 156. I ask that the requirement for third-party in-state testing be waived until the AOSS regulation is reviewed and revised.</p>	
<p>Sean McGuigan</p>	<p><b>TL-3</b></p> <p>If TL-3 is not resinded two things should happen.</p> <p>First all TL-3 products should go through recertification in VA with units that are less than a year old. There have been many changes to the original products that 'passed' before. Geotextiles have changed, legs added, media from a different source etc. The state also needs to survey the testing participants (homeowners) to make sure nothing special was done before sampling day. The state should also monitor at least one cycle.</p> <p>Second. If TL-3 is not resinded, or made not generally approved, there should be a choice, closer to the water table or restrictive with UV <b>OR</b> smaller footprint, never both.</p>	<p>VDH will work with the advisory committee to address this comment through the regulatory process.</p>
<p>Trapper Davis</p>	<p><b>Standards of Practice</b></p> <p>Since 12VAC5-615 did not get repealed, look at pulling the Standard of Practice section into the AOSS regulations.</p> <p>I know that this would be required to change / amend 12VAC5-610, but look at requiring a license number be required on ALL completion statements from AOSE and Installers and require a license number for issuance of a Sewage Handling Permit to prove that the company can in fact pump a COSS and an AOSS!</p>	<p>VDH will work with the advisory committee to address this comment through the regulatory process.</p>
<p>Sean McGuigan</p>	<p><b>TL-3</b></p> <p>TL-3 Sizing for any product should not be considered "Generally Approved" The loading rates are way too high for the worst of conditions! Why would you take</p>	<p>VDH will work with the advisory committee to address this comment through the regulatory process.</p>

	<p>the worst conditions and make the systems smaller and lower? Systems in TL-3 conditions should be raised up and larger.</p> <p>Sites that have less than 6” of suitable in situ soil should be raised up to 12” above restriction and use an approved UV device and loaded at TL-2. Sites that have 6” of suitable in situ soil should be raised up 6” and loaded at TL-2.</p> <p>If a site requires a deviation from this an engineer may make a plan that fits the constraints of the site as a custom engineered plan, which would not be considered “Generally Approved”.</p>	
<p>W.F. Sledjeski</p>	<p><b>UPDATE and MODIFY SITE CHARACTERIZATION</b></p> <p><b>Periodic updates are required to stay consistent with soil and landform related references, e.g.</b></p> <p>G. Each application under § 32.1-163.6 of the Code of Virginia shall include a site and soil characterization report using the Field Book for Describing and Sampling Soils, <del>Version 2.0, National Soil Survey Center, Natural Resources Conservation Service, U.S. Department of Agriculture, September 2002.</del> <b>Version 3.0 National Soil Survey Center, Natural Resources Conservation Service September 2012.</b> The report may contain such information that the designer deems appropriate; however, it must describe the following minimum attributes of the site of the proposed soil treatment area: 1. Depth to limiting features, seasonal or perched water tables, pans, restrictions, or pervious or impervious bedrock; 2. <del>Slope of the project area;</del> <b>Surface Morphometry</b> 3. Ksat or percolation rate at the proposed installation depth and at depths below the soil treatment area to demonstrate compliance with this chapter. <del>Ksat or percolation rate may be estimated for small AOSSs.</del> <b>The Ksat or percolation rate must be measured using an appropriate device for all AOSE's large AOSSs;</b></p> <p><i>Do geotech P.E.'s provide slope stability analyses, structural P.E.'s design footings, VDOT P.E.'s design pavement cross sections or civil P.E.'s</i></p>	<p>VDH will work with the advisory committee to address this comment through the regulatory process.</p>

	<i>design infiltration trenches using a field technician's estimate of soil texture and density?</i>	
Janet Swords	<p><b>AOSS (12VAC5-613)</b></p> <p>These Regulations need to be amended to allow the use of alternative systems for voluntary upgrades and malfunctioning seage disposal systems, to be used in soil conditions that do not meet regulation due to high seasonal water table. As it stands now if a alternative system is proposed for a site with seasonal water table indicators present at or near the surface the system must meet the AOSS regulations. This includes all the testing requirements. There also is a required 10' horizontal separation to the existing system with an alternative proposal. In many cases the separation both vertical and horizontal cannot be met and the owner must now go through the months of variances and waivers. This only forces the owner to go back with a system dispersing primary effluent back into the water table. No treatment is not helping to protect the public health in conditions such as these. Amend the Regulations to exempt all voluntary upgrades and repairs to existing sewage disposal systems from all the AOSS requirements.</p>	<p>A fast track amendment is being considered. VDH will work with the advisory committee to address this comment through the regulatory process if the fast track amendment is not approved or a qualified objection occurs.</p>

**Public participation**

*Please indicate whether the agency is seeking comments on the intended regulatory action, including ideas to assist the agency in the development of the proposal and the costs and benefits of the alternatives stated in this notice or other alternatives. Also, indicate whether a public hearing is to be held to receive comments. Please include one of the following choices: 1) a panel will be appointed and the agency's contact if you're interested in serving on the panel is \_\_\_\_\_; 2) a panel will not be used; or 3) public comment is invited as to whether to use a panel to assist in the development of this regulatory proposal.*

The agency is seeking comments on this regulatory action, including but not limited to: ideas to be considered in the development of this proposal, the costs and benefits of the alternatives stated in this background document or other alternatives, and the potential impacts of the regulation. VDH will work with the advisory committee to develop changes through this regulatory action.

The agency is also seeking information on impacts on small businesses as defined in Va. Code § 2.2-4007.1 of the Code of Virginia. Information may include: projected reporting, recordkeeping, and other administrative costs; the probable effect of the regulation on affected

small businesses; and the description of less intrusive or costly alternatives for achieving the purpose of the regulation.

Anyone wishing to submit comments may do so via the Regulatory Town Hall website (<http://www.townhall.virginia.gov>), or by mail, email, or fax to **Dwayne Roadcap, Division Director, 109 Governor Street, 5<sup>th</sup> Floor, Richmond, Virginia 23219; [Dwayne.Roadcap@vdh.virginia.gov](mailto:Dwayne.Roadcap@vdh.virginia.gov), or by facsimile at (804) 864-7475.** Written comments must include the name and address of the commenter. In order to be considered, comments must be received by midnight on the last day of the public comment period. A public hearing will not be held following the publication of the proposed stage of this regulatory action.

**Periodic review/small business impact review announcement**

*If you wish to use this NOIRA to announce a periodic review (§ 2.2-4017 & EO-17 (2014)) and a small business impact review (§ 2.2-4007.1) of this regulation, keep the following text. Modify as necessary for your agency. Otherwise, delete this section.* In addition, pursuant to Executive Order 17 (2014) and § 2.2-4007.1 of the Code of Virginia, the agency is conducting a periodic review and small business impact review of this regulation to determine whether this regulation should be terminated, amended, or retained in its current form.

Public comment is sought on the review of any issue relating to this regulation, including whether the regulation (i) is necessary for the protection of public health, safety, and welfare or for the economic performance of important governmental functions; (ii) minimizes the economic impact on small businesses in a manner consistent with the stated objectives of applicable law; and (iii) is clearly written and easily understandable.

Approximately 20,000 onsite sewage systems could be affected. VDH estimates that approximately 250 of the 20,000 systems are owned by small businesses. The known possible change through this regulatory action is found below.

<b>Current section number</b>	<b>Proposed new section number, if applicable</b>	<b>Current requirement</b>	<b>Proposed change, intent, rationale, and likely impact of proposed requirements</b>
12VAC 5-613-90 D(1)(b)		b. Relevant and necessary calculations provided to show one or both of the following:  (1) Effluent TN concentration of 20 mg/l measured prior to application to the soil dispersal field ; or	b. Relevant and necessary calculations provided to show <del>one or both of the following:</del>  (1) [an] Effluent TN concentration of <del>20</del> <u>30</u> mg/l measured prior to application to the soil dispersal field [ . ] <del>;</del>  (2) A mass loading of 4.5 lbs N or less per person per year at the project

		<p>(2) A mass loading of 4.5 lbs N or less per person per year at the project boundary provided that no reduction for N is allotted for uptake or denitrification for the dispersal of effluent below the root zone (&gt;18 inches below the soil surface).</p>	<p><del>boundary provided that no reduction for N is allotted for uptake or denitrification for the dispersal of effluent below the root zone (&gt;18 inches below the soil surface).</del></p> <p>The proposed change would allow the Department to move the D(1)(b)(2) regulatory requirements into a BMP to provide TMDL credits. Unless Virginia designers use an approved BMP, EPA will not provide a credit (or N reduction) for the TMDL. Further, 12VAC5-613-90 D (1) b is proposed to be amended to allow for 30 mg/l of TN effluent in accordance with the EPA Model Program and consistent with the actual performance statistics recorded for systems currently permitted by the agency.</p>
--	--	---	--

DRAFT

# Hogan repeals reg requiring less-polluting septic s

≈ Requirement stands for homes built in Critical Area adjacent to Chesapeake Bay.

By RONA KOBELL

The Hogan administration is rolling back a 4-year-old regulation that required less-polluting but costlier septic systems for all new homes in Maryland that aren't connected to sewers. The move seems sure to please builders, rural politicians and their constituents, but critics say it's a step backward in trying to clean up the Chesapeake Bay.

Gov. Larry Hogan told the Maryland Association of Counties annual meeting in Ocean City that his administration would exempt new homes and commercial dwellings in most of the state from having to install the high-tech septic systems, which are designed to reduce the amount of nitrogen from human waste that's allowed to escape.

The state would still require systems using "best available technology" in new construction within the state's "Critical Area," a 1,000-foot strip of land bordering the Chesapeake Bay and its tidal tributaries. Those systems reduce the amount of nitrogen from human waste that's allowed to seep into groundwater, and ultimately to streams, rivers and the Bay.

Households using conventional septic systems leak up to 10 times as much nitrogen compared with homes hooked up to a modern municipal sewage treatment plant, state officials have long said. The high-tech systems reduce the nitrogen release by about half, but they cost several thousand dollars more to install and operate than conventional systems, and need more frequent maintenance.

Realtors, home builders and rural legislators have complained the mandate hurt rural economies because having to install high-tech systems drove up home prices.

In a press release about Hogan's speech, the governor's office called the septic requirement a "cost-prohibitive burden" for homeowners and businesses.

Ben Grumbles, the secretary of the Maryland Department of the Environ-



Maryland Gov. Larry Hogan has proposed rolling back rules requiring state-of-the-art septic systems on new homes. Photo / Dave Harp

ment, called the change his agency is making "a measured step to reduce regulatory burden and build public support for a smarter and more effective septic program across the state."

In a brief interview, Grumbles acknowledged that the rollback would allow more nitrogen pollution to enter the Bay, but he called the increase "insignificant." He said state officials would figure out how to offset it as they devise a plan for keeping nutrient pollution from increasing with future growth and development in Maryland.

MDE spokesman Jay Apperson said the state would expand its efforts to crack down on failing septic systems and work with local communities to help connect more homes to sewer systems.

In a prepared statement released by the MDE, Grumbles said, "We are customizing the statewide requirement to meet local watershed needs more effectively while still insisting on excellent environmental results."

The man who had the job before him disagrees.

Robert Summers, who worked at the MDE for 30 years and served as

environment secretary under former Gov. Martin O'Malley, said nitrogen from septic systems everywhere, not just those closest to the Bay, threatens water quality.

"I fail to see how it is an unfair regulatory burden on septic owners that they treat their wastewater when those of us on sewage systems are paying more and more for upgrades to collection systems and treatment plants," Summers said. "The whole population needs to do its share to control pollution. Why should rural residents get a free pass?"

It's not known exactly how many new homes will be built on septic systems, but most of those with them to date have been away from the Bay. According to the state, of about 500,000 septic systems in Maryland, only about 10 percent are near the Bay and its tidal tributaries. Since 2013, an average of 703 homes have been built annually outside the Critical Area, the MDE said.

In an economic analysis of the draft regulation that was provided to a legislative committee, the MDE predicted it would decrease the cost of new housing in those rural and suburban areas where

## SHAD FROM PAGE 18

and other rivers. Those sources are no longer available, as their shad stocks have become depleted.

"We just try to produce as much as we can from what we get," said Josh Tryninewski, a fisheries biologist who manages the commission's stocking efforts.

a fisheries biologist with that state's Department of Natural Resources and Environmental Control. The state has released about 500,000 annually since its stocking effort began in 1999.

Moore said the Nanticoke River shad run appeared slightly stronger than last year, but stocking efforts were hampered by low water temperatures that reduced larvae production

of optimal temperature for us, and we think that just really slowed down production," Moore said.

No shad were stocked in the Anacostia River in the District of Columbia, where about 1 million a year are typically released, because of water problems at the district's hatchery.

The mixed results around the Bay left the Potomac fishery commission's



less-polluting septic systems are no longer required. On average, high-tech systems cost \$7,500 more than conventional ones, the MDE estimated, but they also require electricity to operate, costing about \$112 per year. After their first five years, the more sophisticated systems require \$150 to \$300 a year in maintenance, the MDE said.

Systems using "best available technology" for treating nitrogen had been required only in the Critical Area before. But in 2012, the MDE extended the mandate statewide. At the time, Summers said it was needed to reduce water pollution expected from future growth in rural areas that would not be served by sewer systems.

The statewide regulation came on the heels of legislation passed that year at O'Malley's urging that also restricted where development could occur that relied on septic systems. That law, aimed at preserving farmland and limiting suburban sprawl, remains in effect, though rural areas also have complained that it has hurt development.

The septic issue has long been controversial because less-polluting systems cost more. And nitrogen from such systems is generally not as large of a source of Bay pollution as runoff from farms, stormwater and discharges from sewage treatment plants.

Even with the rollback, MDE spokesman Apperson said that officials expect Maryland to meet its 2017 nutrient reduction goals under the Bay pollution diet, or total maximum daily load, set by the U.S. Environmental Protection Agency for all watershed states.

Dropping the requirement for less-polluting septic systems outside the Critical Area will increase the amount of nitrogen reaching the Bay by a total of 50,000 pounds over the next decade, the MDE estimates. State officials say that amounts to less than 1 percent of the remaining nitrogen reductions the state needs to make to comply with the TMDL.

But septic pollution can reach significant levels in some local areas and contribute to increased levels of bacteria that can shut down swimming and make fishing risky.

Making new homes pay for less-polluting septic systems and restricting where they could be built was intended to steer development into urban cores and reduce land fragmentation, said Richard Hall, who was secretary of planning under O'Malley.

Changing the regulations is "just 360 bad," Hall said. "You're polluting and you're not paying to remove that nutrient pollution, unlike the people on sewer, who are paying."

*Bay Journal staff writer Timothy B. Wheeler contributed to this story.*

of-  
r  
1  
it  
ns  
gu-  
hey  
us  
and  
ms  
.  
s  
ld  
.  
00  
ut  
lal  
703  
de  
aft  
is-  
d it  
ing  
ere  
.  
n  
r-  
n-  
e  
y  
n's  
y  
e'll

**DATE:** DRAFT

**TO:** District Health Directors and Environmental Health Managers

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

**THROUGH:** Allen L. Knapp, Director  
Office of Environmental Health Services

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

**SUBJECT:** GUIDANCE MEMORANDA AND POLICY 2016-04

## **Introduction**

GMP-2016-04 revises and combines GMP 2004-01 (GMP-128) and GMP 2011-02 (GMP-155). **GMP 2004-01 and GMP 2011-02 are hereby rescinded.**

## **Purpose**

The purpose of this policy is to (1) aid staff in correctly identifying permit applications as voluntary upgrade or repair permit applications; (2) clarify what type of voluntary upgrade or repair activities require full compliance with the State's regulations; (3) identify when a permit application may require a treatment waiver under the Code of Virginia; and (4) provide staff with a clear process for issuing treatment waivers.

## **Definitions (From 12VAC5-620)**

"Voluntary upgrade" means an improvement to an existing onsite sewage disposal system or alternative discharging system that (i) is not required for compliance with any law or regulation and (ii) results in no net increase in the permitted volume or strength of sewage dispersed by the system.

"Repair" means the construction or replacement of all or parts of a sewage disposal system or private well to correct a failing, damaged, or improperly functioning system or well when such construction or replacement is required by the board's regulations.

## **Legislative Background**

The 2004 General Assembly passed House Bill 930 (Acts of Assembly, Chapter 916, 2004) which amended § 32.1-164.1:1 of the Code of Virginia (Code). GMP-128 outlined procedures for processing applications for repair permits (construction permits) pursuant to Code § 32.1-164.1:1.B and 12VAC5-610-280.C.2. Waivers to treatment and pressure dosing were

made available to owners repairing failing sewage systems. Legislation approved in 2011 (Acts of Assembly, CH. 394) amended and reenacted Code § 32.1-164.1:1 and added Code § 32.1-164.1:3, which governs permits for voluntary system upgrades. Permits issued pursuant to Code § 32.1-164.1:3 are subject to the provisions of Code § 32.1-164.1:1. Waivers issued by the Virginia Department of Health (VDH) pursuant to these Code sections must be recorded in the land records of the jurisdictional circuit court. GMP 2011-02 (GMP-155) outlined procedures for issuing voluntary upgrade permits. Waivers to treatment and pressure dosing were made available to owners electing to upgrade non-failing sewage systems. Legislation approved in 2015 (Acts of Assembly, CH. 111) amended and reenacted Code § 32.1-164.1:1. Waivers for voluntary upgrades were made available to owners who received repair waivers between July 1, 2004, and December 6, 2011. GMP-2016-04 outlines procedures for issuing repair permits and voluntary upgrade permits in accordance with Code §§ 32.1-164.1:1 and 32.1-164.1:3, respectively. In addition to treatment waivers for reductions in BOD<sub>5</sub>, TSS, and pathogens, treatment waivers may also be used for requirements to reduce nitrogen.

### **General – Repair permits**

Repair permits are issued when either a system is failing pursuant to 12 VAC5-610-350 (Failure of a sewage disposal system: *Sewage Handling and Disposal Regulations* 12VAC5-610-10 et seq., as amended July 1, 2000 (SHDR)), or when required to restore the system to normal function as defined in the construction and operation permit pursuant to 12VAC5-610-340 (Issuance of the operation permit). A Notice of Alleged Violation (NOAV) should always be associated with a repair permit. If the activity is not required and an NOAV is not appropriate, then a repair permit is not appropriate. When a repair permit is issued prior to a NOAV being issued, then the NOAV format found in Attachment 1 is appropriate which acknowledges the owner's willingness to initiate the repair. Proactive replacement, not required by the Department, of existing components with like components may qualify as a voluntary upgrade if the system is still functioning as designed. Owners who receive repair permits may qualify for waivers from the SHDR and the *Regulations for Alternative Onsite Sewage Systems* (AOSS Regulations) (12VAC5-613-10 et seq., effective December 7, 2011) collectively, the "Regulations". See Attachment 2 to determine the type of system repair that triggers compliance with current regulations. Not all repair determinations are straight forward, and occasionally distinguishing between a repair and a voluntary upgrade requires an investigation of both department records and a system evaluation. Completing the Condition Assessment form will aid in this determination (Attachment 3). See GMP 2016-02 for additional guidance on identifying the appropriate permit type. The Process Flow Charts in Attachment 4 will also aid in determining the appropriate permit type and the associated process.

Section 32.1-164.1:1.B of the Code offers financial relief (a waiver) to the current owner of a property whose onsite system is failing, and a repair includes new requirements for additional treatment, pressure dosing, or both provided the sewage system is on or serves real property consisting of not less than one nor more than four dwelling units. In practical terms, a system originally permitted (in either primary or reserve areas) to disperse treated effluent (advanced treatment beyond a conventional system), as opposed to septic tank effluent, must be repaired using similarly advanced treatment. The owner of such a system is ineligible for a waiver from the same *treatment* requirements of the Regulations. That owner, however, would

be eligible for a waiver from additional treatment requirements or pressure dosing, as long as the original permit did not require pressure dosing in either the primary or reserve areas. The obverse applies to a system originally permitted for pressure dosing in either the primary or reserve areas - the owner is ineligible for a waiver from pressure dosing. Finally, an owner with a system originally permitted for both pressure dosing and advanced treatment in either the primary or reserve areas may be ineligible for a waiver, dependent upon the level of treatment originally required.

A qualified owner may request a waiver and the State Health Commissioner shall grant same unless the Commissioner finds “the failing system was installed illegally without a permit.” Except as provided in Code § 32.1-164.1:1.C, waivers shall not be transferable and shall be null and void upon transfer or sale of the property on which the onsite sewage system is located. Additional treatment or pressure dosing requirements shall be imposed when the waiver through transfer or sale of the property is rendered null and void. To obtain a new operating permit, the new owner must comply with the waived regulatory requirements, as well as any subsequent requirements imposed since recordation of the waiver.

An owner must submit an application for a repair permit. No fee is required.

Any owner who receives a waiver must record the waiver in the land records of the clerk of the jurisdictional circuit court.

Historically, 12VAC5-610-280.C.2 of the SHDR provided the district health director or environmental health manager discretion, in cases of economic hardship, to waive the requirement for pre-treating effluent in the case of a construction permit for repair. This policy shall be used in lieu of 12VAC5-610-280.C.2 when processing an application to repair a failing sewage system, as Code § 32.1-164.1:1 specifically authorizes VDH to waive certain regulatory requirements when addressing failing onsite systems.

To ensure the Commissioner provides the financial relief intended by law, VDH personnel will continue to design, to the extent possible, regulatory compliant, gravity-flow or simple pump septic tank effluent systems if requested by the owner. This policy shall not be construed as imposing any obligation on VDH staff to provide consulting services, minimize or maximize an owner’s financial liability, or guarantee any system designed and permitted by VDH will function for a specified period of time. All stakeholders must understand that systems designed with a waiver under Code § 32.1-164.1:1.B does not comply with the regulatory requirements for new construction, nor do those designs meet the industry’s current expectations for system designs. The owner is responsible for determining whether he is best served with a repaired system in accordance with Code § 32.1-164.1:1.B and this policy, or adhere to new construction standards for onsite systems.

### **Procedures - Repair**

The responsible Environmental Health Specialist (EHS) will determine whether an owner qualifies for a waiver under § 32.1-164.1:1.B as part of the routine processing of a repair application, in consultation with an Environmental Health Specialist Senior (EHSS).

For bare applications, Attachment #5 is a letter notifying the owner of the requirement(s) for additional treatment and/or pressure dosing, if applicable, and opportunity to request a waiver to those requirements. This letter should be sent to the owner after receipt of a bare application. This suggested letter should be applicable to the majority of cases local health departments resolve, but should not be sent when an application is received with supporting private sector documentation. When an owner chooses to hire a private sector designer to prepare plans and specifications for the repair system, it is the private sector designer's responsibility to notify their client of the treatment waiver option.

Prior to sending a letter by certified mail notifying an owner he is eligible for a waiver, the EHS must determine whether the failing system was installed illegally without a permit. If the EHS finds substantial evidence indicating the system was installed illegally without a permit, he should immediately inform the appropriate VDH supervisory personnel to initiate enforcement proceedings. As mentioned earlier, such determinations are not always straightforward and occasionally require a vigorous investigation, including document review and a site and soil evaluation. The letter in Attachment #5 does not apply to systems installed illegally without a permit.

The responsible EHS should make reasonable efforts to educate owners about the public health and environmental benefits of advanced treatment and/or pressure dosing, and also the possible benefits of going to the private sector for design and financial consultation. Such reasonable efforts to inform the owner must not, however, unnecessarily delay owners from obtaining a permit to construct a repair. VDH staff shall not advise owners whether to request a waiver; but only provide information as to the option. Staff should encourage owners to seek advice from private advisors such as attorneys, designers, or real estate professionals.

An owner seeking a waiver must return the properly executed waiver request and agreement found in Attachment #6. When properly executed by the owner, Attachment #6 constitutes the request for waiver and the waiver itself. The waiver must be properly executed before a construction permit is released. When the owner produces written proof (certification) he recorded the waiver in the land records in accordance with Code § 32.1-164.1.B, VDH will issue the construction permit.

An owner may receive multiple repair permits under a waiver until the waiver is null and void upon transfer or sale of the property. Owners granted a repair permit for a failing system with a waiver are ineligible for a voluntary upgrade permit, since the system does not meet current requirements (i.e. failing). An owner may, at any time, bring a system into full compliance by completing repairs originally waived and complying with any additional regulatory requirements promulgated by VDH since the date of waiver recordation.

Exception:

Any owner who (a) obtained a waiver to repair a failing onsite sewage system pursuant to Code § 32.1-164.1:1.B on or between July 1, 2004, and December 6, 2011, (b) completed such repair, and (c) desires to voluntarily upgrade the system, may request, and shall receive, a

voluntary upgrade waiver in accordance with Code §§ 32.1-164.1:1 and 32.1-164.1:3. Any such waiver shall be recorded in the land records of the clerk of the circuit court in the jurisdiction where the onsite sewage system is located and shall supersede any prior waiver recorded pursuant to Code § 32.1-164.1:1.B.

Responsibility and authority for implementing Code § 32.1-164.1:1.B is hereby delegated to the district environmental health manager and/or the environmental health supervisor.

### **General – Voluntary Upgrade Permits**

Owners of onsite and alternative discharging sewage systems may also upgrade those systems operating as designed and not failing. Requests to voluntarily upgrade typically arise during real estate transactions when a private inspector indicates an existing sewage system is not performing optimally, an individual component exhibits signs of wear, or when an owner desires to enhance the performance or extend the life of a system. Historically, VDH was unable to issue permits to many owners as site conditions did not meet the minimum regulatory requirements and the repair clauses of controlling regulations were inapplicable; as by definition, the systems did not fail. The change to the Code allows VDH to issue construction permits for voluntary upgrades of non-failing, properly functioning systems using the same rules already in place for failing systems. See GMP 2016-02 for additional examples and discussion of voluntary upgrades. The Process Flow Charts in Attachment 4 will also aid in distinguishing between repairs and voluntary upgrade applications.

Under Code § 32.1-164.1:3, a voluntary upgrade must conform to the laws and regulations for repairing failing systems and requires compliance with current regulations. Where compliance with the Regulations would require the use of additional treatment or pressure dosing not required by the original construction permit, the property owner may request a waiver from additional treatment and/or pressure dosing provided the sewage system is on or serves real property consisting of not less than one nor more than four dwelling units. Upon request, the Commissioner shall grant a waiver if these requirements are met unless the system was installed illegally without a permit. Unlike waivers granted to repair failing onsite sewage systems, waivers granted for voluntary upgrades are fully transferable upon sale of the property. All voluntary upgrades must be for the purposes of reducing threats to public health or to ground and surface waters. Proactive replacement of system components reduces threats to public health or to ground and surface waters. See Attachment 2, to identify voluntary upgrade construction permits eligible for a waiver to current regulations.

### **Applicability for Voluntary Upgrades Permits**

This policy section provides guidance for VDH staff and the public for implementing the provisions of Title 32.1 regarding voluntary upgrades of onsite and alternative discharging sewage systems. This policy applies to the voluntary upgrade of any legally installed onsite sewage disposal system or alternative discharging sewage system that is **not failing**. Upgrades shall be for the purposes of reducing threats to public health or to ground and surface waters. VDH personnel must review voluntary upgrade applications mindful of the considerations below:

- An owner may receive multiple voluntary upgrade permits under a waiver until the waiver becomes null and void upon system failure.
- Owners who receive a voluntary upgrade waiver are eligible for a repair waiver in the event of system failure.
- Existing dwellings may or may not be occupied.
- There shall be no proposed increase in flow or strength of sewage from that currently permitted. Any increase in sewage flow or strength requires the owner to modify an existing system, thereby making it ineligible for a permit under the voluntary upgrade statute.
- System modifications or upgrades required *for any reason*, including the authorization of building permits pursuant to Code § 32.1-165, building expansions, replacement of faulty components, returning the system to function as designed, and the repair of failing systems are involuntary and are ineligible for a voluntary upgrade construction permit.
- Voluntary upgrade permits cannot be used as a means to approve new construction activities. Voluntary upgrade decisions are independent and do not commit VDH to future decisions concerning sewage system approvals.
- Owners who request conditional permits to limit occupancy, reduce flow, etc. are proposing changes to their dwellings (not simply upgrading their sewage systems); therefore, the proposals are not voluntary (require a conditional permit and permit fee) and are ineligible for voluntary upgrade permits.
- All applications for voluntary upgrade permits must include a Condition Assessment of the system components using the form in Attachment 3. All bare applications for voluntary upgrades require a site visit by an EHS to ensure compliance with the statute and to complete the Condition Assessment. The site visit may range from a drainfield walk-over and consultation with the owner or owner's agent, to a full level II review depending on the nature of the proposed upgrade. This procedure is to ensure the system is not failing, was not installed illegally, the proposed activity is not required by law, and the proposed system modification or construction qualifies for a voluntary upgrade permit. Applications for voluntary upgrade permits with supporting documentation from private designers must include the Condition Assessment. An EHS should conduct a site visit for a voluntary upgrade application from a private designer when a new or modified drainfield is proposed. For other proposals, the EHS may use their discretion, depending on the completeness of the supporting documentation, including the Condition Assessment.
- Proposals to relocate remote drainfields to the owner's property or a different site are not automatically voluntary upgrades; and are generally new construction. The Code requires a voluntary upgrade design to be for the purposes of reducing threats to the public health or to ground and surface waters. If the current site and system design meet the regulations to a

greater extent than a new site with a design that includes a treatment or pressure dosing waiver, the waived design on the new site may not reduce threats to public health or to ground water. On the other hand, a design with treatment, pressure dosing, shallow placement, etc. may reduce threats, as would a new drainfield site with significantly better soils for treating and dispersing effluent. The answer is design dependent and requires in depth evaluation. Merely relocating a system to another site does not necessarily reduce threats to public health or to ground and surface waters and as a result, may be ineligible for a voluntary upgrade permit.

## **Procedures – Voluntary Upgrade Permits**

VDH accepts applications and designs for voluntary upgrades of onsite and alternative discharging sewage disposal systems. **Bare applications must include a description of the nature of the voluntary upgrade requested.** Application fees are waived following 12VAC5-620-80.C and GMP 2016-02. Applications will be reviewed following current VDH policy. . Voluntary upgrade applications may be granted an exception for site and design items not covered by the waiver in accordance with 12VAC5-610-280.C.2. Substantial compliance is required concerning setback distances to shellfish waters and drinking water wells unless the existing sewage system is already closer, in which case the upgraded system shall not be closer than the existing system. In determining whether a proposed upgrade complies with 12VAC5-280.C.2 (i.e. complies to the greatest extent possible) it is acceptable to include the existing non-failing drainfield in any calculation of required trench-bottom area when continued use of the existing drainfield is proposed.

If site conditions in any new soil absorption area require additional treatment or pressure dosing not required by the original permit for the existing sewage system, the owner may request a waiver provided the sewage system is on or serves real property consisting of not less than one nor more than four dwelling units.

When staff receive a bare application and determine that additional treatment and/or pressure dosing are required, the responsible EHS is to send the letter in Attachment #7 to the owner notifying the owner of the requirement(s) for additional treatment and/or pressure dosing and that a waiver is available. This suggested letter should be applicable to the majority of cases local health departments resolve. In these cases the owner may elect to ask VDH to design a system eligible for voluntary upgrade permitting because the system requires additional treatment or pressure dosing. The owner may also choose to hire a private sector designer to prepare plans and specifications for the voluntary upgrade system.

An owner requesting a waiver must return the properly executed waiver request and agreement found in Attachment #8. When properly executed by the owner, Attachment #8 constitutes the request for waiver and the waiver itself. The waiver must be properly executed before VDH issues a construction permit. The owner must produce written proof (certification) of waiver recordation in the land records in compliance with Code § 32.1-164.1:1.B, prior to issuance of the construction permit.

Owners who apply for voluntary upgrade permits must indemnify and hold harmless VDH prior to the issuance of a construction permit. Release, hold harmless and indemnification agreements (see Attachments #9A and 9B) are not required to be recorded, though endorsements shall be notarized. Attachment 9A is the agreement when a waiver is issued and 9B contains the agreement for when there is no waiver. All construction permits issued for voluntary upgrades shall have the following statement attached: **"The upgrades specified in this construction permit are voluntary and not required by law."**

Attachment #10 is an informational letter for any owner who (a) obtained a waiver to repair a failing onsite sewage system pursuant to Code § 32.1-164.1:1.B. on or between July 1, 2004, and December 6, 2011, (b) completed such repair, and (c) wishes to voluntarily upgrade their system.

### VENIS Entries

Repairs and voluntary upgrade permits with waivers are entered the same as any other construction permit. The construction permit is entered as either 'repair' or 'voluntary upgrade'. Update the status on the waiver (requested /granted).

Sewage Treatment System		
Administrative	Design	Installed
<b>Facility Information</b>		
Name 123456789000000	EHS x Unassigned	Administrative Status Active
Facility ID LGRY-95LKLR	Hide From web Yes No	Facility Operation Hours Open Closed
<b>Licensee/Owner</b>		
<input type="button" value="New"/> <input type="button" value="Choose Existing"/> <input type="button" value="View"/> <input type="button" value="Open In Business View"/>		
*Choose from the existing Licensees/Owners first. If not listed create a new Licensee/Owner.		
Name Bob Joe	ID LGRY-8WHL9E	
<b>Application Details</b>		
Application Type Construction Permit	Permit/Letter Status Installed	Health Department ID 12-123-4321
Conditional Construction Permit No	Voluntary Upgrade Yes Waiver Requested Yes Waiver Granted No	
Construction Permit Number		
Application Dates		

**Attachment 1** – Recommended NOAV when repair permit is issued

---

<OfficeName>  
<OfficeAddress>  
<OfficeCity>, <OfficeProvince>  
<OfficePostalCode>  
<OfficePhone> Voice  
<OfficeFax2> Fax

---

<Today>

<OwnerContactFirst> <OwnerContactLast>  
<OwnerMailingAddress>  
<OwnerMailingCity>, <OwnerMailingProvince> <OwnerMailingPostalCode>

**Certified Mail**

---

Re: Tax Map/GPIN #: <LegalDescriptionTaxID> <LegalDescriptionGPIN>  
Address: <PhysicalBuilding> <PhysicalStreet>,  
<PhysicalCity>, <PhysicalMunicipality> County <PhysicalProvince>  
<PhysicalPostalCode>

Dear <OwnerContactFirst> <OwnerContactLast> :

Thank you for contacting this office regarding the failure of your sewage system. You report certain conditions on your property that may constitute threats to public health and the environment. They include the following :

- On \_\_\_\_\_<YD#Today>, property owner \_\_\_\_\_ sent concerns about the discharge of raw or partially treated sewage on the ground surface of her property to \_\_\_\_\_the local health department.
- On \_\_\_\_\_<YD#Today>, the local health department received a call from property owner \_\_\_\_\_ concerning the presence of raw or partially treated sewage on the ground’s surface of his property.
- On \_\_\_\_\_, <YD#Today> \_\_\_\_\_ Environmental Health Specialist with the local health department visited the affected properties to investigate. During his visits, \_\_\_\_\_ observed that the onsite sewage system serving the properties appeared to have discharged raw or partially treated effluent onto the ground surface.

These observations, if verified, constitute real or potential threats to public health and to the ground and surface waters of the Commonwealth.

Please be aware, that it is your responsibility, as owner of your property, to operate the facilities in accordance with the applicable laws and regulations of the State Board of Health (“Board”) and that violations of the laws and regulations may result in enforcement actions provided under Title 32.1 of the *Code of Virginia. The Sewage Handling and Disposal Regulations* (12 VAC 5-610-20 et seq., the “Regulations”) contain the following provisions:

**12 VAC 5-610-80. Sewerage systems and/or treatment works required.**

- A. *The discharge of untreated sewage onto the land or into the waters of the commonwealth is prohibited.*
- B. *No owner, person, or occupant shall discharge treated or untreated sewage onto the land, into the soil or into the waters of the Commonwealth without a valid permit from the commissioner, or as appropriate, a certificate issued by the Department of Environmental Quality in accordance with Title 62.1 of the Code of Virginia.*
- C. *All buildings, residences, and structures designed for human occupancy, employment or habitation and other places where humans congregate shall be served by an approved sewerage system and/or treatment works. An approved sewerage system or treatment works is a system for which a certificate to operate has been issued jointly by the department and the Department of Environmental Quality or a system which has been issued a separate permit by the commissioner.*

**12 VAC 5-610-350. Failure of a sewage disposal system.** *For the purpose of requiring correction of a malfunctioning sewage disposal system the presence of raw or partially treated sewage on the ground's surface or in adjacent ditches or waterways or exposure to insects, animals or humans is prima facie evidence of such system failure and is deemed a violation of these regulations. Pollution of the groundwater or backup of sewage into plumbing fixtures may also indicate system failure.*

The local health department recognizes that you have obtained a repair permit to correct the reported violations of the Regulations. This repair must be completed and all documents required to issue the operation permit be submitted to the local health department within 60 days of receipt of this letter . This letter serves as your Notice of Alleged Violation (NOAV), if you do not complete the repairs within the applicable time frame, you may be subject to enforcement action pursuant to Title 32.1 of the Virginia Code. Should you require more than 60 days to complete your repair, please contact <EH Manager> at <>.

This letter sets forth the local health department's observations and recommendations and provides notice that if you fail to proceed with your repair permit and correct the reported and/or observed regulatory violations, the Commissioner may pursue enforcement action in accordance with Title 32.1 of the Code of Virginia. This letter it is not a case decision as defined in §2.2-4001 of the *Code of Virginia*. If you have additional facts that you believe bear on this situation and you would like to schedule an informal-fact finding conference (IFFC) pursuant to §2.2-4019 of the *Code of Virginia*, please contact <HealthDirector> <HealthRegion> Director, at <OfficePhone> within fifteen (15) days of the receipt of this letter. The purpose of an IFFC is to determine if the regulatory violations alleged above occurred, and to discuss options to gain compliance. During the proceeding, you may be accompanied by counsel to assist you with the informal presentation of factual data, arguments or proof associated with the case. Additionally, you are entitled to receive advance notice of any facts, documents, or information in VDH's possession that could be relied upon in making an adverse determination.

Please feel free to call me at <OfficePhone> if you have any questions or if you wish to discuss this matter.

Sincerely,

<EHO>  
<EHOPosition>

## Attachment #2 - Identifying When Compliance with Current Regulations is Required

The following table is intended as guidance to determine when an upgrade to current regulations is triggered for a proposed project. The worst case scenario will dictate whether compliance with current regulations is required and waivers to treatment or pressure dosing may apply.

<b>Application Type</b>	<b>Example Work</b>	<b>Must the sewage system comply with current regulations*?</b>
Repair or Voluntary Upgrade	Replace one or more of the following sewage system components: sewer line, septic tank, tees in the septic tank, distribution box, conveyance line, or header line.	No (new component must comply with current regulations, for example, septic tank should have 48 hour detention time.)
Repair or Voluntary Upgrade	Replace or add to the dispersal field.	Yes (waivers may apply)
Repair or Voluntary Upgrade	Replace or repair dispersal field piping with no change to soil loading rate or soil infiltrative surface	No
Repair or Voluntary Upgrade	Replace a TL-2, TL-3 treatment unit (same treatment level, does not have to be the same manufacturer)	No
Repair	Improve the treatment level (no change to dispersal field)	Yes – site and soil analysis needed to determine level of treatment required – waivers may apply
Voluntary Upgrade	Improve the treatment level (no change to dispersal field)	Yes – site and soil analysis needed to determine level of treatment required – waivers may apply
New Construction	Installation of new treatment works in its entirety	Yes
Minor Modification	Add a new connection to an existing sewage system to serve a garage bathroom, such as a new sewer line or septic tank.	No
Conditional Permit (paper expansion)	No change in system design or system components	No

\*Exceptions for design components other than pressure dosing or treatment level, granted in accordance with 12VAC5-610-280.C.2., can be used to obtain compliance.

**Attachment 3** Condition Assessment

## Existing System Condition Assessment

<b>VDH Use Only</b> HDIN: _____
------------------------------------

<b>Application Information</b>			
Name: _____		Address: _____	
Phone: _____		_____	
<b>Location Information</b>			
Tax Map/GPIN #: _____		Property Address: _____	
Subdivision: _____		Section: _____ Block: _____ Lot: _____	
Directions: _____			
<b>General Information</b>			
Property Type (e.g. residential): _____		Number of Bedrooms: _____	
Daily Flow: _____ gpd		Conditions: _____	
Number of Occupants: _____		Date System Installed: _____	
Garbage Disposal: <input type="checkbox"/> Yes <input type="checkbox"/> No    Water Softener: <input type="checkbox"/> Yes <input type="checkbox"/> No    Jacuzzi/Hot Tub: <input type="checkbox"/> Yes <input type="checkbox"/> No			
Date of Last Septic Tank Pump Out: _____		Date of Last Operator Visit _____	
System Type: <input type="checkbox"/> Conventional <input type="checkbox"/> Alternative    If Alternative, Treatment Mfg. & Model: _____			
Dispersal Method: <input type="checkbox"/> Gravity <input type="checkbox"/> Pump to Gravity <input type="checkbox"/> Pressure Dispersal			
Dispersal Media: <input type="checkbox"/> Gravel <input type="checkbox"/> Gravelless Material <input type="checkbox"/> Tire Chips <input type="checkbox"/> Sand			
Gravelless Type: _____		Notes: _____	
Permit Type: <input type="checkbox"/> Onsite Disposal <input type="checkbox"/> Stream Discharging System (VPDES)			
<input type="checkbox"/> Attach a Copy of As-built drawing or drawing of system layout			
<b>Condition Information</b>			
Failure Observed or reported by owner: <input type="checkbox"/> Yes <input type="checkbox"/> No: <input type="checkbox"/> Backup into home <input type="checkbox"/> Effluent on the ground surface			
If failure observed or reported by owner. <b>REPAIR</b> permit <b>REQUIRED</b> .			
Component	Assessment (Non-functional= repair permit required) (Functional, poor condition= voluntary upgrade recommended)		
Sewer Line	<input type="checkbox"/> Functional	<input type="checkbox"/> Non-functional	<input type="checkbox"/> Functional, poor condition
Septic Tank	<input type="checkbox"/> Functional	<input type="checkbox"/> Non-functional	<input type="checkbox"/> Functional, poor condition
Septic Tank Tees	<input type="checkbox"/> Functional	<input type="checkbox"/> Non-functional	<input type="checkbox"/> Functional, poor condition
Treatment Unit	<input type="checkbox"/> Functional	<input type="checkbox"/> Non-functional	<input type="checkbox"/> Functional, poor condition
Pump Chamber	<input type="checkbox"/> Functional	<input type="checkbox"/> Non-functional	<input type="checkbox"/> Functional, poor condition
Pump	<input type="checkbox"/> Functional	<input type="checkbox"/> Non-functional	<input type="checkbox"/> Functional, poor condition
Conveyance Line	<input type="checkbox"/> Functional	<input type="checkbox"/> Non-functional	<input type="checkbox"/> Functional, poor condition

Distribution Box/Headworks	<input type="checkbox"/> Functional	<input type="checkbox"/> Non-functional	<input type="checkbox"/> Functional, poor condition
Header Trench	<input type="checkbox"/> Functional	<input type="checkbox"/> Non-functional	<input type="checkbox"/> Functional, poor condition
Dispersal Pipe	<input type="checkbox"/> Functional	<input type="checkbox"/> Non-functional	<input type="checkbox"/> Functional, poor condition
Dispersal Media	<input type="checkbox"/> Functional	<input type="checkbox"/> Non-functional	<input type="checkbox"/> Functional, poor condition
Disinfection	<input type="checkbox"/> Functional	<input type="checkbox"/> Non-functional	<input type="checkbox"/> Functional, poor condition
Other _____	<input type="checkbox"/> Functional	<input type="checkbox"/> Non-functional	<input type="checkbox"/> Functional, poor condition
Other _____	<input type="checkbox"/> Functional	<input type="checkbox"/> Non-functional	<input type="checkbox"/> Functional, poor condition
Other _____	<input type="checkbox"/> Functional	<input type="checkbox"/> Non-functional	<input type="checkbox"/> Functional, poor condition
Other _____	<input type="checkbox"/> Functional	<input type="checkbox"/> Non-functional	<input type="checkbox"/> Functional, poor condition

**Recommended Action(s)**  Repair  Voluntary Upgrade

If Repair, Identify Probable Cause of Component Malfunction (check all that apply):

Unknown  Damaged/Compromised  Deterioration  Hydraulic Overload  Organic Overload  
 Improper Maintenance  Root Infiltration

Describe recommended action(s) and purpose of action(s): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

If Voluntary Upgrade,  
 Describe recommended action(s) and the 'improvement' associated with the voluntary upgrade:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

If Voluntary Upgrade, owner must provide signature to following statement:

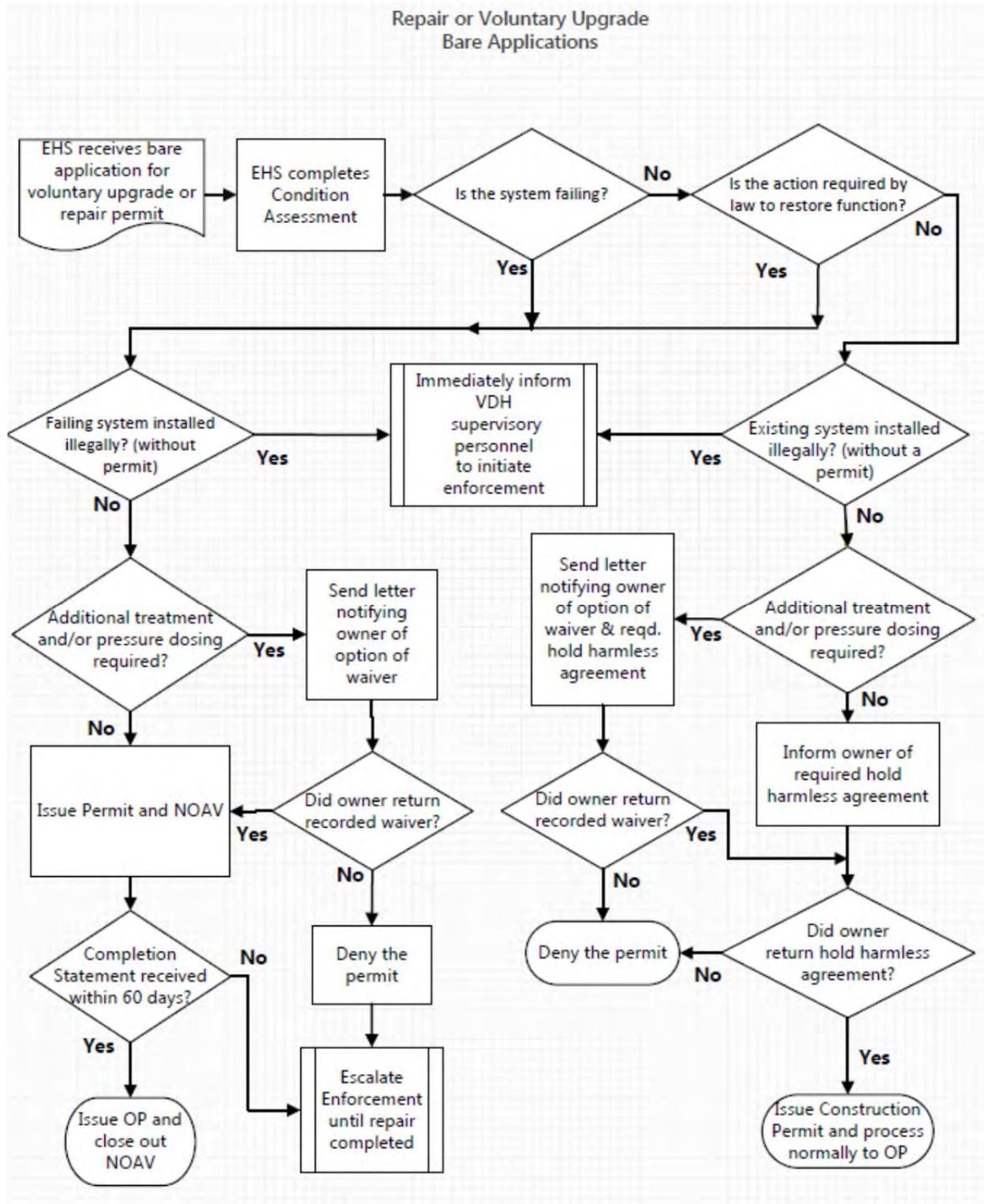
As the owner, I have not observed any sewage on the ground or experienced a backup of sewage into my home.

Name: \_\_\_\_\_ Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_

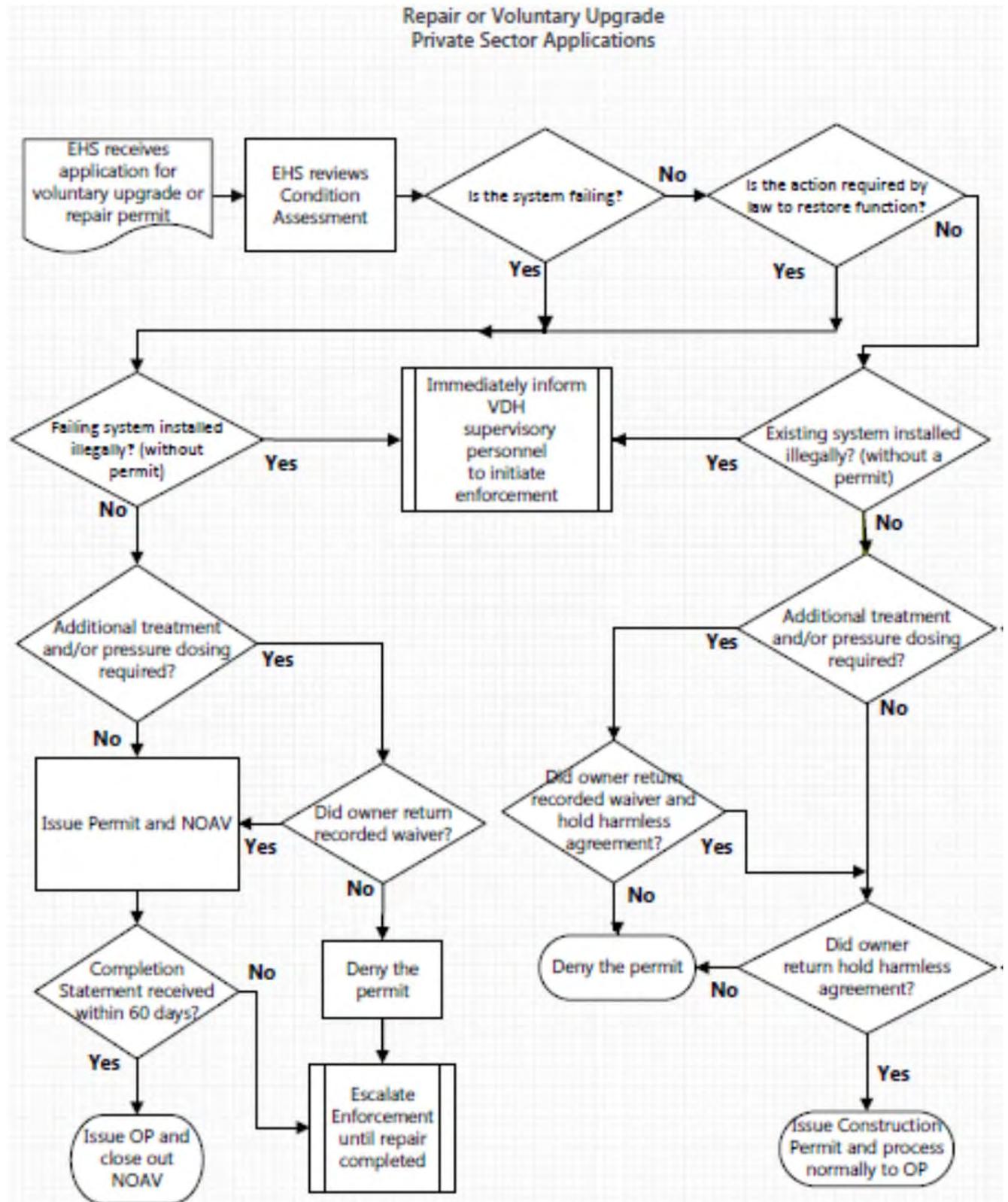
<b>Form Completed By</b>	
Name: _____	Signature: _____
Date: _____	
Professional License Type and Number: _____	

DRAFT

Attachment 4A Process Flow Diagram – Bare Applications



Attachment 4B Process Flow Diagram – Private Sector Applications



**Attachment #5- (Repairs)**

Date

Owner Name  
Address  
City, State Zip

**Certified Mail**

Dear [Owner]:

On [date], the [ ] Health Department received your application for a sewage system repair permit which did not include supporting documentation from a licensed onsite soil evaluator (“OSE”) or professional engineer (“PE”). Based on our site and soil evaluations (copy attached), the conditions on your lot may not substantially comply with the minimum requirements of the *Sewage Handling and Disposal Regulations* (12VAC5-610-10 et seq., as amended July 1, 2000) (“SHDR”) and the *Alternative Onsite Sewage System Regulations* (12VAC5-613-10 et seq., effective December 7, 2011 ) (collectively, the “Regulations”) for the following reasons:

(Choose one or more or add as appropriate.)

1. Insufficient depth to a limiting factor such as the seasonal water table, a restrictive horizon, rock, etc.
2. Insufficient horizontal separation from well, shellfish waters, etc....
3. Insufficient area of suitable soil.

The repair system for your property must have advanced treatment, pressure dosing, or both as part of your repair system’s design. **[Note: modify this paragraph to fit the specific situation]** These requirements assure public health and groundwater supplies are protected and that the risk for human disease transmission is minimized.

Employees of the Virginia Department of Health (“VDH”) typically do not design sewage systems with advanced treatment or pressure dosing because of the complexity of these designs and the wide variety of brand-name products and equipment available. These types of designs require extensive consultation between the owner and an OSE/PE to assure that the owner’s needs are met. VDH does not have the resources to provide this extensive consultation and cannot choose specific products because of our regulatory relationship with product manufacturers.

Pursuant to Code of Virginia § 32.1-164.1:1.B, whenever an onsite sewage system is failing and it is on or serves real property consisting of not less than one and not more than four dwelling units, an owner may request a waiver from requirements for advanced treatment, pressure dosing, or both, as long as such a level of advanced treatment or pressure dosing was

not required by the original permit and approval documents. Furthermore, the State Health Commissioner shall issue such a waiver if the request meets the statutory prerequisites, including there being no finding by the Commissioner that the current system was installed illegally without a permit. Based upon the review of documents regarding your current onsite system, you are eligible for the waiver should you choose to apply for one.

If you choose to request a waiver, VDH staff will design your system at your request, as long as the requirements are relatively simple. If you do not obtain a waiver or decline to request that VDH design your system, you must hire a qualified consultant to design your repair or replacement system. Currently, VDH recognizes PEs (Professional Engineers licensed by the Virginia Department of Professional and Occupational Regulation) for any type of system design, and OSEs (Onsite Soil Evaluators licensed by the Virginia Department of Professional and Occupational Regulation) for certain system designs that do not require the practice of engineering. If you request a waiver and **do not** want VDH to design the repair system, please complete the enclosed Waiver Request and return it to this office with your OSE/PE plans for the repair or replacement system - **do not check the box requesting VDH to design your system**. If you request a waiver and prefer VDH to design your system, complete the waiver, check the design request box, and return it to our office (address noted on the letterhead). As soon as VDH receives this information, it will process your application and issue you a repair permit if the statutory requirements are met.

If you are signing the waiver agreement, have your signature notarized. This is a legal document so review it carefully. You may wish to seek legal advice from an attorney to explain the waiver and future consequences should you transfer the property to a new owner. The law requires you to record the waiver in the land records of the clerk of the circuit court in the jurisdiction in which the onsite sewage system is located. A repair waiver is only transferable in certain circumstances as identified under the Code of Virginia § 32.1-164.1:1.C.

Unless covered by an exception contain in Code of Virginia § 32.1-164.1:1.C, a waiver and the operating permit for your system are both null and void upon transfer or sale of the property on which the onsite sewage system is located. It is unlawful to operate an onsite sewage system without a valid operating permit (12VAC5-610-240). Unless transfer occurs pursuant to an exception in Code of Virginia § 32.1-164.1:1, a new owner will be unable to lawfully occupy the dwelling/structure and operate the sewage system until obtaining a new operating permit. Such new owner will need to apply for, and obtain, a new construction permit that complies with those parts of the Regulations to which you were previously granted a waiver (i.e. advanced treatment and/or pressure dosing) and any new requirements adopted after the waiver was granted. The operating permit for the system can only be reinstated after the required upgrades are completed. Pursuant to Code of Virginia § 32.1-164.1:1.D, you are required to deliver to the purchaser a written disclosure prior to the acceptance of a real estate purchase contract. The written disclosure statement shall be in a separate document, developed by the Real Estate Board. *These requirements apply to your system, even if it does not appear to be failing at the time of transfer.*

If you want an OSE/PE to design your system after requesting a waiver, please discuss with your consultant so he may submit plans incorporating your wishes. VDH will not change your expert's design and an OSE/PE must approve the system's final construction.

If you request a waiver and ask for VDH to design the new system, please remember that VDH lacks the resources to consider, inform, and consult with you about all design options available in the marketplace for a repair. Hundreds of design options and potentially hundreds of products exist from which to choose within each possible design. Depending on your specific needs, please consider that VDH could design a system inconsistent with your immediate or long-term interests due to VDH's lack of resources and inability to provide you with complete consultation services. VDH regulates the onsite sewage industry and approves (or denies) requests from product manufacturers. VDH cannot recommend one product over another, just as VDH cannot design or recommend a specific proprietary pre-engineered system. VDH is unable to recommend certain products or proprietary designs because of VDH's unique position as a regulator and having scarce resources to provide you with detailed consultation. Consequently, it is possible VDH could not provide a design that is as well-tailored to your needs as compared to a private consultant. A private consultant would not necessarily have VDH's limitations, and could propose specific products and provide more in-depth consultation.

Also, VDH cannot advise you regarding how a system under a waiver may affect your ability to transfer the property given the restrictions on the transferability of a waiver. Additionally, VDH cannot advise you about liability issues should your system fail and adversely impact drinking water supplies. A system installed under a waiver may not comply with the Regulations regarding the level of treatment and/or pressure dosing requirements.

You will soon receive (or have already received) a letter from this office notifying you that the failure of your sewage system may constitute a violation of the Regulations. Please follow any directions contained in that letter and carefully heed any time limits for repairing your failing system. As I mentioned earlier in this letter, you are required to have an operating permit in order to use an onsite sewage system. I encourage you to complete the system repairs necessary to get a new operating permit as quickly as possible.

You have the right to challenge the results of VDH's site and soil evaluations and the decisions made regarding your repair application (see the first and second paragraphs of this letter) by requesting an informal fact-finding conference (IFFC). Your written request for an IFFC must be received in this office within 30 days from your receipt of this letter. Thank you for your prompt attention and action in this matter. Please call me at (\_\_\_\_) \_\_\_\_-\_\_\_\_ if you have more questions.

Sincerely,

EHSS

**Attachment #6 – (Repairs)**

REQUEST FOR WAIVER and WAIVER FOR A REPAIR PERMIT

This document, which includes a REQUEST FOR WAIVER AND WAIVER (collectively, “AGREEMENT”), is made and entered into this \_\_\_\_ Day of \_\_\_\_\_, 201\_, by \_\_\_\_\_ <Insert Owner(s)> \_\_\_\_\_, and, without limitation, their heirs, successors, devisees, agents, assigns, representatives and interests (hereinafter “OWNER”) and the COMMONWEALTH OF VIRGINIA, acting through the Department of Health (hereinafter “DEPARTMENT”), including, without limitation, any and all of its agencies, boards, and commissions, their insurer(s), officers, directors, employees, representatives, and agents (hereinafter “COMMONWEALTH”).

WHEREAS, OWNER owns \_\_\_\_<Insert Address/Tax Map number>\_\_\_\_\_ (hereinafter “PROPERTY”); and

WHEREAS, OWNER requested a construction permit to repair the PROPERTY’S existing onsite sewage system; and

WHEREAS, the DEPARTMENT, in accordance with the *Sewage Handling and Disposal Regulations* (12VAC5-610-10 et seq., as amended July 1, 2000) (“SHDR”) and the *Alternative Onsite Sewage System Regulations* (12VAC5-613-10 et seq., effective December 7, 2011 (collectively, the “Regulations”), has determined that the onsite sewage system serving the PROPERTY is failing and must be repaired or replaced; and

WHEREAS, the DEPARTMENT determines that the REGULATIONS require additional treatment or pressure dosing in order to adequately protect public health and ground and surface water resources; and

WHEREAS, Code of Virginia § 32.1-164.1:1 provides that whenever any onsite sewage system is failing, and it is on or serves real property consisting of not less than one nor more than four dwelling units, and the Board's regulations impose (i) a requirement for treatment beyond the level of treatment provided by the existing onsite sewage system when operating properly, or (ii) a new requirement for pressure dosing, the owner may request a waiver (hereinafter "WAIVER") from the requirements of the REGULATIONS pertaining to additional treatment and or pressure dosing for a repair system; and

WHEREAS, if the above stated requirements for an owner to request a waiver have been met, the State Health Commissioner (hereinafter, the "COMMISSIONER") shall grant such WAIVER, unless the COMMISSIONER finds that the existing sewage system was installed illegally without a permit. and

WHEREAS, OWNER affirms, and the COMMISSIONER has not found to the contrary, that the existing sewage system was installed legally with a valid permit; and

WHEREAS, OWNER, by executing this AGREEMENT, hereby requests that the COMMISSIONER grant the WAIVER from additional treatment and/or pressure dosing requirements provided at Code of Virginia § 32.1-164.1:1.

NOW, THEREFORE, in exchange for the mutual promises contained herein, the OWNER and the COMMONWEALTH agree as follows: the WAIVER provided at Code of Virginia § 32.1-164.1:1 is hereby granted 24 hours after OWNER provides certification to the DEPARTMENT that this AGREEMENT has been recorded in the land records of the clerk of the circuit court in the jurisdiction in which the property on which the relevant onsite sewage system is located. Except as provided in Code of Virginia § 32.1-164.1:1.C, waivers granted hereunder shall not be transferable and shall be null and void upon transfer or sale of the

property on which the onsite sewage system is located. Additional treatment or pressure dosing requirements shall be imposed in such instances when the property is transferred or sold.

#### REQUEST FOR DEPARTMENT TO DESIGN A REPAIR SYSTEM

Check Here if this Section Applies.

OWNER hereby requests that an employee of the Virginia Department of Health design OWNER's sewage system. OWNER understands that the DEPARTMENT cannot serve as OWNER's consultant and that there are design choices that, depending upon OWNER's needs, may increase costs in the long run because of the requirement to upgrade OWNER's sewage system at the time the PROPERTY is transferred. If OWNER request a waiver and ask the DEPARTMENT to design the new system, please remember that the DEPARTMENT lacks the resources to consider, inform, and consult with OWNER about all design options available in the marketplace for a repair. Hundreds of design options and potentially hundreds of products exist from which to choose within each possible design. Depending on OWNER's specific needs, the DEPARTMENT could design a system inconsistent with OWNER's immediate or long-term interests due to the DEPARTMENT's lack of resources and inability to provide OWNER with complete consultation services. The DEPARTMENT regulates the onsite sewage industry and approves (or denies) requests from product manufacturers. The DEPARTMENT cannot recommend one product over another, just as the DEPARTMENT cannot design or recommend a specific proprietary pre-engineered system. The DEPARTMENT is unable to recommend certain products or proprietary designs because of the DEPARTMENT's unique position as a regulator and having scarce resources to provide OWNER with detailed consultation. Consequently, it is possible the DEPARTMENT could not provide a design that is as well-tailored to OWNER's needs as compared to a private consultant. A private consultant would not necessarily have the DEPARTMENT's limitations, and could propose specific products and provide more in-depth consultation.

\_\_\_\_\_  
Environmental Health Manager

\_\_\_\_\_  
Date

COMMONWEALTH OF VIRGINIA

CITY / COUNTY OF \_\_\_\_\_

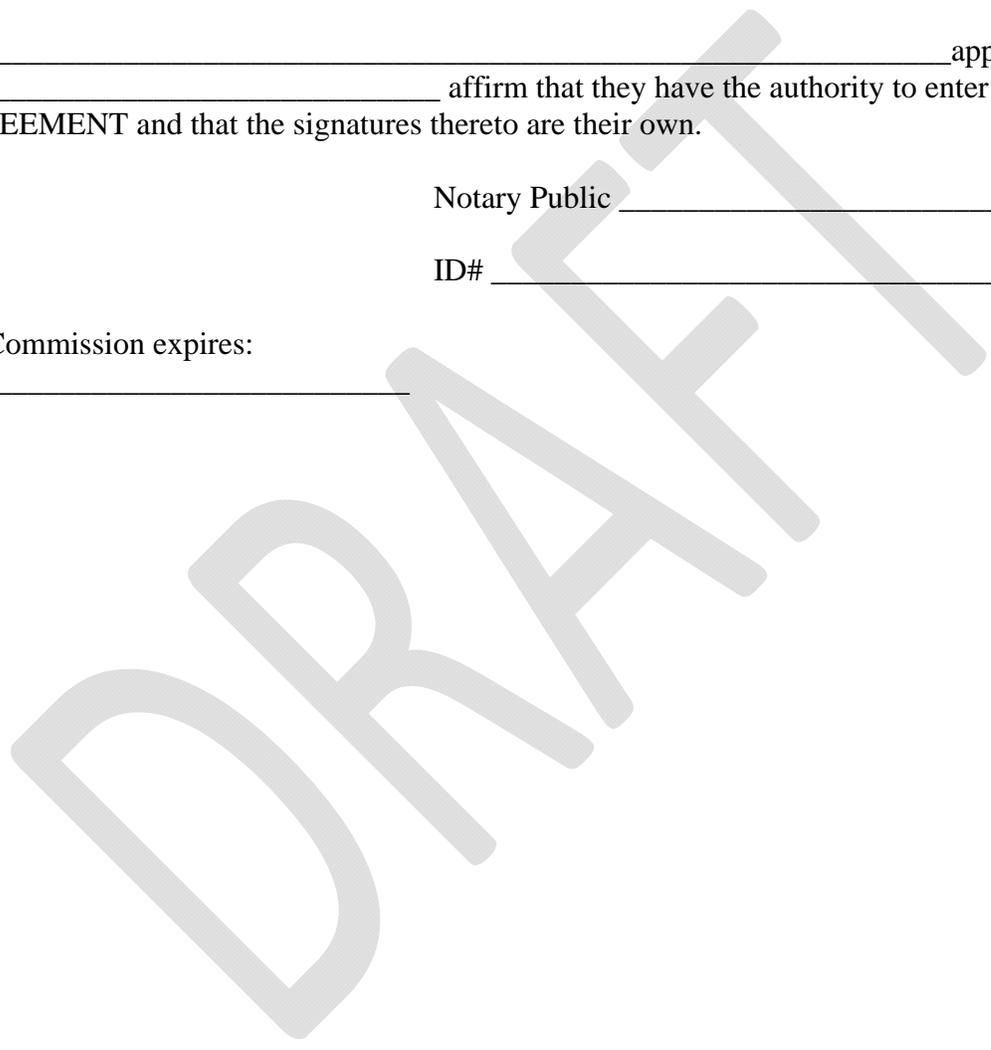
On this the \_\_\_\_\_ day of \_\_\_\_\_, 201\_

\_\_\_\_\_ appeared before  
me. \_\_\_\_\_ affirm that they have the authority to enter into this  
AGREEMENT and that the signatures thereto are their own.

Notary Public \_\_\_\_\_

ID# \_\_\_\_\_

My Commission expires:  
\_\_\_\_\_



Understood and Accepted

\_\_\_\_\_  
OWNER

\_\_\_\_\_  
Date

COMMONWEALTH OF VIRGINIA

CITY / COUNTY OF \_\_\_\_\_

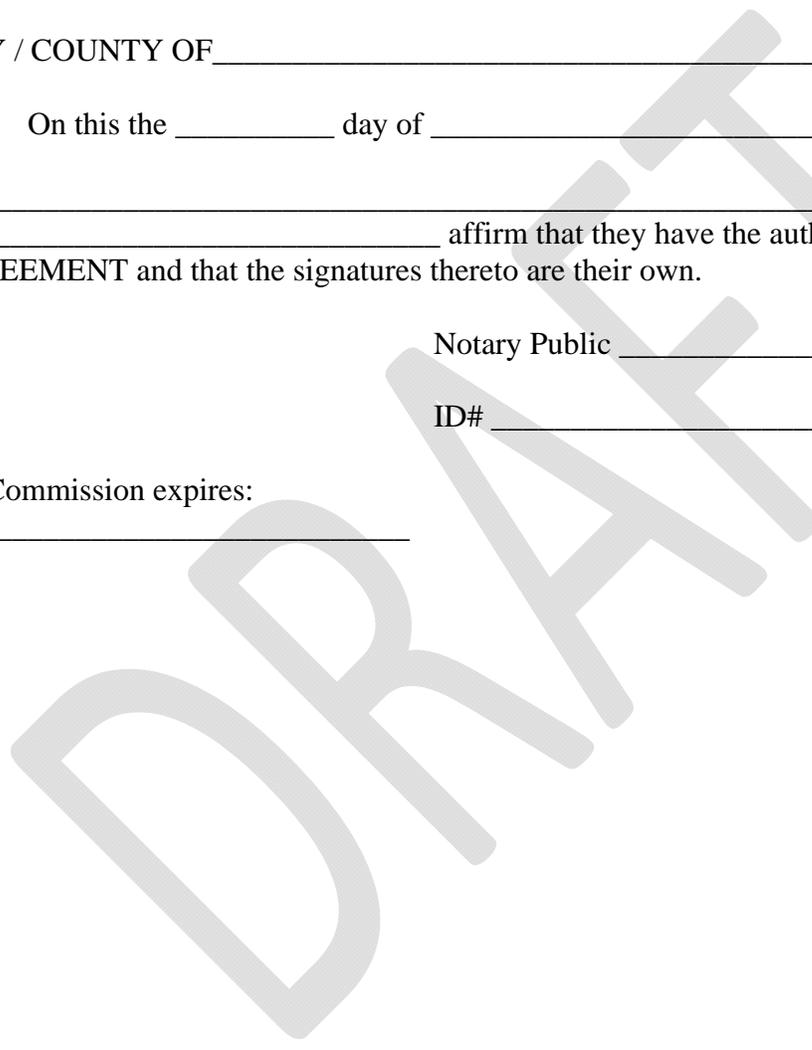
On this the \_\_\_\_\_ day of \_\_\_\_\_, 201\_

\_\_\_\_\_ appeared before  
me. \_\_\_\_\_ affirm that they have the authority to enter into this  
AGREEMENT and that the signatures thereto are their own.

Notary Public \_\_\_\_\_

ID# \_\_\_\_\_

My Commission expires:  
\_\_\_\_\_



**Attachment #7- (Voluntary Upgrades)**

Date

Owner Name  
Address  
City, State Zip

**Certified Mail**

Dear [Owner]:

On [date], the [ ] Health Department received your application for a sewage system voluntary upgrade permit which did not include supporting documentation from a licensed onsite soil evaluator (“OSE) or professional engineer (“PE”). Based on our site and soil evaluations (copy attached), the conditions on your lot may not substantially comply with the minimum requirements of the *Sewage Handling and Disposal Regulations* (12VAC5-610-10 et seq., as amended July 1, 2000) (“SHDR”) and the *Alternative Onsite Sewage System Regulations* (12VAC5-613-10 et seq., effective December 7, 2011 ) (collectively, the “Regulations”) for the following reasons:

(Choose one or more or add as appropriate.)

1. Insufficient depth to a limiting factor such as the seasonal water table, a restrictive horizon, rock, etc.
2. Insufficient horizontal separation from well, shellfish waters, etc....
3. Insufficient area of suitable soil.

The voluntary upgrade system for your property must have advanced treatment, pressure dosing, or both as part your system’s design. **[Note: modify this paragraph to fit the specific situation]** These requirements assure public health and groundwater supplies are protected and that the risk for human disease transmission is minimized.

Employees of the Virginia Department of Health (VDH) typically do not design sewage systems with advanced treatment or pressure dosing because of the complexity of these designs and the wide variety of brand-name products and equipment available. These types of designs require extensive consultation between the owner and an OSE/PE to assure that the owner’s needs are met. VDH does not have the resources to provide this extensive consultation and cannot choose specific products because of our regulatory relationship with product manufacturers.

Pursuant to Code of Virginia § 32.1-164.1:1.B, whenever an owner has elected to voluntarily upgrade an onsite sewage system pursuant to § 32.1-164.1:3 and it is on or serves real property consisting of not less than one and not more than four dwelling units, an owner may request a waiver from requirements for advanced treatment, pressure dosing, or both, as long as such a level of advanced treatment or pressure dosing was not required by the original permit and

approval documents. Furthermore, the State Health Commissioner shall issue such a waiver if the request meets the statutory prerequisites, including there being no finding by the Commissioner that the current system was installed illegally without a permit. Based upon the review of documents regarding your current onsite system, you are eligible for the waiver should you choose to apply for one.

If you choose to request a waiver, VDH staff will design your system at your request, as long as the requirements are relatively simple. If you do not obtain a waiver or decline to request that VDH design your system, you must hire a qualified consultant to design your voluntarily upgraded system. Currently, VDH recognizes PEs (Professional Engineers licensed by the Virginia Department of Professional and Occupational Regulation) for any type of system design, and OSEs (Onsite Soil Evaluators licensed by the Virginia Department of Professional and Occupational Regulation) for certain system designs that do not require the practice of engineering. If you request a waiver and **do not** want VDH to design the upgrade system, please complete the enclosed Waiver Request and return it to this office with your OSE/PE plans for the upgraded system - **do not check the box requesting VDH to design your system**. If you request a waiver and prefer VDH to design your system, complete the waiver, check the design request box, and return it to our office (address noted on the letterhead). As soon as we receive this information, we will process your application and issue you a voluntary upgrade permit.

If you are signing the waiver agreement, have your signature notarized. This is a legal document so review it carefully. You may wish to seek legal advice from an attorney to explain the Waiver. The law requires you record the waiver in the land records of the clerk of the circuit court in the jurisdiction in which the onsite sewage system is located. A voluntary upgrade waiver is transferable pursuant to a real estate purchase contract.

You are required by law to disclose the Waiver in writing to any and all potential purchasers or mortgage holders pursuant to Code of Virginia § 32.1-164.1:1.D.

If you want an OSE/PE to design your system after requesting a waiver, please discuss with your consultant so he may submit plans incorporating your wishes. VDH will not change your expert's design and an OSE/PE must approve the system's final construction.

If you request a waiver and ask for a VDH design, please remember VDH lacks the resources to consider, inform, and consult with you about all design options available in the marketplace for a voluntary upgrade. Hundreds of design options and potentially hundreds of products exist from which to choose within each possible design. Depending on your specific needs, please consider that VDH could design a system inconsistent with your immediate or long-term interests due to VDH's lack of resources and inability to provide you with complete consultation services. VDH regulates the onsite sewage industry and approves (or denies) requests from product manufacturers. VDH cannot recommend one product over another, just as VDH cannot design or recommend a specific proprietary pre-engineered system. VDH is unable to recommend certain products or proprietary designs because of VDH's unique position as a regulator and having scarce resources to provide you with detailed consultation. Consequently, it is possible VDH could not provide a design that is as well-tailored to your needs as compared

to a private consultant. A private consultant would not necessarily have VDH's limitations, and could propose specific products and provide more in-depth consultation.

Also, VDH cannot advise you regarding how a system under a waiver may affect your ability to transfer the property; nor can VDH advise you about liability issues should your system fail and adversely impact drinking water supplies. A system installed under a waiver may not comply with the Regulations regarding the level of treatment and/or pressure dosing requirements.

You have the right to challenge the results of VDH's site and soil evaluations and the decisions made regarding your voluntary upgrade application (see the first and second paragraphs of this letter) by requesting an informal fact-finding conference (IFFC). Your written request for an IFFC must be received in this office within 30 days from receipt of this letter. Please call me at (\_\_\_\_) \_\_\_\_ - \_\_\_\_ if you have more questions.

Sincerely,

EHSS

**Attachment #8 – (Voluntary Upgrades)**

REQUEST FOR WAIVER and WAIVER FOR A VOLUNTARY UPGRADE

This document, which includes a REQUEST FOR WAIVER AND WAIVER (collectively, “AGREEMENT”), is made and entered into this \_\_\_\_ Day of \_\_\_\_\_, 201\_, by \_\_\_\_\_ <Insert Owner(s)> \_\_\_\_\_, and, without limitation, their heirs, successors, devisees, agents, assigns, representatives and interests (hereinafter “OWNER”) and the COMMONWEALTH OF VIRGINIA, acting through the Department of Health (hereinafter “DEPARTMENT”), including, without limitation, any and all of its agencies, boards, and commissions, their insurer(s), officers, directors, employees, representatives, and agents (hereinafter “COMMONWEALTH”).

WHEREAS, OWNER owns \_\_\_\_<Insert Address/Tax Map number>\_\_\_\_\_ (hereinafter “PROPERTY”); and

WHEREAS, OWNER requested a construction permit to voluntarily upgrade the PROPERTY’S existing onsite sewage system; and

WHEREAS, the DEPARTMENT determined that the *Sewage Handling and Disposal Regulations* (12VAC5-610-10 et seq., as amended July 1, 2000) (“SHDR”) and the *Alternative Onsite Sewage System Regulations* (12VAC5-613-10 et seq., effective December 7, 2011 (collectively, the “Regulations”), require additional treatment or pressure dosing that was not provided by the voluntary upgrade requested by OWNER; and

WHEREAS, the voluntary upgrade must provide additional treatment to comply with the REGULATIONS and adequately protect public health and water resources; and

WHEREAS, Code of Virginia § 32.1-164.1:1 provides that whenever an owner has elected to voluntarily upgrade an onsite sewage system pursuant to Code of Virginia § 32.1-164.1:3, the system is on or serves real property consisting of not less than one nor more than four dwelling units, and the REGULATIONS impose (i) a requirement for treatment beyond the level of treatment provided by the existing onsite sewage system when operating properly, or (ii) a new requirement for pressure dosing, then the owner may request a waiver (hereinafter “WAIVER”) from the requirements of the REGULATIONS pertaining to additional treatment and/or pressure dosing for the proposed upgraded system; and

WHEREAS, if the above stated requirements for an owner to request a waiver have been met, the State Health Commissioner (hereinafter “COMMISSIONER”) shall grant such WAIVER, unless the COMMISSIONER finds that the existing sewage system was installed illegally without a permit; and

WHEREAS, OWNER affirms, and the COMMISSIONER has not found to the contrary, that the existing sewage system was installed legally with a valid permit; and

WHEREAS, OWNER, by executing this AGREEMENT, hereby requests that the COMMISSIONER grant the WAIVER from additional treatment and/or pressure dosing requirements provided at Code of Virginia § 32.1-164.1:1.

NOW, THEREFORE, in exchange for the mutual promises contained herein, the OWNER and the COMMONWEALTH agree as follows: the WAIVER provided at Code of Virginia § 32.1-164.1:1 is hereby granted 24 hours after OWNER provides certification to the DEPARTMENT that this AGREEMENT has been recorded in the land records of the clerk of the circuit court in the jurisdiction in which the property on which the relevant onsite sewage system is located.

REQUEST FOR DEPARTMENT TO DESIGN A VOLUNTARY UPGRADE SYSTEM

- Check Here if this Section Applies.

OWNER hereby requests that an employee of the Virginia Department of Health design OWNER's sewage system. OWNER understands that the DEPARTMENT cannot serve as OWNER's consultant. If OWNER request a waiver and ask the DEPARTMENT to design the new system, please remember that the DEPARTMENT lacks the resources to consider, inform, and consult with OWNER about all design options available in the marketplace for a voluntary upgrade. Hundreds of design options and potentially hundreds of products exist from which to choose within each possible design. Depending on OWNER's specific needs, the DEPARTMENT could design a system inconsistent with OWNER's immediate or long-term interests due to the DEPARTMENT's lack of resources and inability to provide OWNER with complete consultation services. The DEPARTMENT regulates the onsite sewage industry and approves (or denies) requests from product manufacturers. The DEPARTMENT cannot recommend one product over another, just as the DEPARTMENT cannot design or recommend a specific proprietary pre-engineered system. The DEPARTMENT is unable to recommend certain products or proprietary designs because of the DEPARTMENT's unique position as a regulator and having scarce resources to provide OWNER with detailed consultation. Consequently, it is possible the DEPARTMENT could not provide a design that is as well-tailored to OWNER's needs as compared to a private consultant. A private consultant would not necessarily have the DEPARTMENT's limitations, and could propose specific products and provide more in-depth consultation.

\_\_\_\_\_  
Environmental Health Manager

\_\_\_\_\_  
Date

COMMONWEALTH OF VIRGINIA

CITY / COUNTY OF \_\_\_\_\_

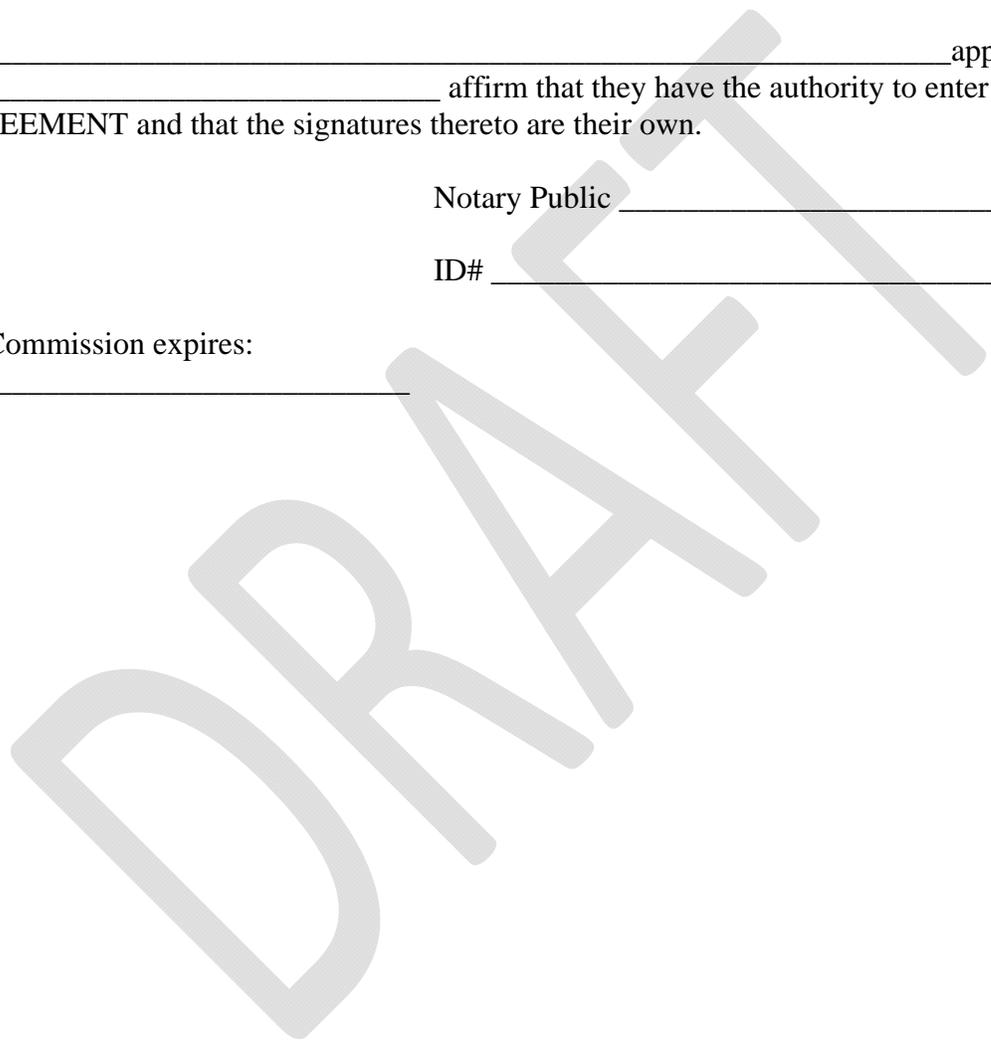
On this the \_\_\_\_\_ day of \_\_\_\_\_, 201\_

\_\_\_\_\_ appeared before  
me. \_\_\_\_\_ affirm that they have the authority to enter into this  
AGREEMENT and that the signatures thereto are their own.

Notary Public \_\_\_\_\_

ID# \_\_\_\_\_

My Commission expires:  
\_\_\_\_\_



Understood and Accepted

\_\_\_\_\_  
OWNER

\_\_\_\_\_  
Date

COMMONWEALTH OF VIRGINIA

CITY / COUNTY OF \_\_\_\_\_

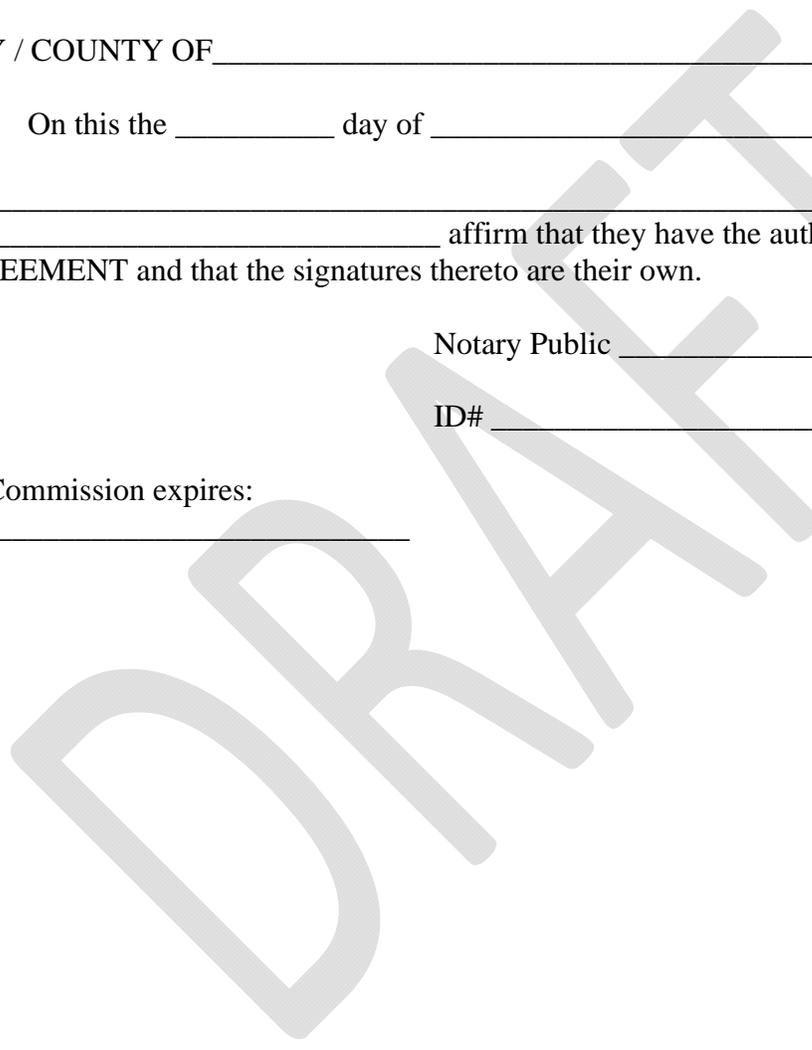
On this the \_\_\_\_\_ day of \_\_\_\_\_, 201\_

\_\_\_\_\_ appeared before  
me. \_\_\_\_\_ affirm that they have the authority to enter into this  
AGREEMENT and that the signatures thereto are their own.

Notary Public \_\_\_\_\_

ID# \_\_\_\_\_

My Commission expires:  
\_\_\_\_\_



**Attachment #9A – (Voluntary Upgrades with waivers)**

**VOLUNTARY UPGRADE**  
**RELEASE, HOLD HARMLESS,**  
**And INDEMNIFICATION AGREEMENT**

This AGREEMENT is made and entered into this \_\_\_\_ Day of \_\_\_\_\_, 20\_\_, by and between \_\_\_\_\_ and \_\_\_\_\_, including, without limitation, their heirs, successors, devisees, agents, assigns, representatives and interests (hereinafter “OWNER”) and the COMMONWEALTH OF VIRGINIA, acting through the Department of Health (“DEPARTMENT”), including, without limitation, any and all of its agencies, boards, and commissions, their insurer(s), officers, directors, employees, representatives, and agents (hereinafter “COMMONWEALTH”).

WHEREAS, \_\_\_\_\_ <Insert Property Description>  
\_\_\_\_\_, Virginia (hereinafter “PROPERTY”); and

WHEREAS, OWNER requested a construction permit to voluntarily upgrade the existing onsite sewage system serving PROPERTY; and

WHEREAS, the DEPARTMENT determined that the *Sewage Handling and Disposal Regulations* (12VAC5-610) and the *Alternative Onsite Sewage Systems Regulations* (12VAC5-613) (collectively, the “REGULATIONS”), require additional treatment and/or pressure dosing not provided by the voluntary upgrade requested by OWNER; and

WHEREAS, the voluntary upgrade must provide additional treatment and/or pressure dosing to comply with the REGULATIONS and adequately protect public health and water resources; and

WHEREAS, Code of Virginia § 32.1-164.1:1 provides that whenever an owner has elected, pursuant to Code of Virginia § 32.1-164.1:3, to voluntarily upgrade an onsite sewage

system that is on or serves real property consisting of not less than one nor more than four dwelling units, and the REGULATIONS impose (i) a requirement for treatment beyond the level of treatment provided by the existing onsite sewage system when operating properly, or (ii) a new requirement for pressure dosing, then the owner may request a waiver (hereinafter "WAIVER") from the requirements of the REGULATIONS pertaining to additional treatment and/or pressure dosing; and

WHEREAS, the State Health Commissioner ("COMMISSIONER") shall grant such WAIVER, unless the COMMISSIONER finds that the existing system was installed illegally without a permit; and

WHEREAS, OWNER affirms, and the COMMISSIONER has not found to the contrary, that the existing sewage system was installed legally with a valid permit; and

WHEREAS, pursuant to Code of Virginia § 32.1-164.1:1, OWNER requested and received the WAIVER from additional treatment requirements and/or pressure dosing; and

WHEREAS, Code of Virginia § 32.1-164.1:3 allows the DEPARTMENT to require OWNER to indemnify and hold harmless the DEPARTMENT before issuing the construction permit.

NOW, THEREFORE, OWNER agrees to and hereby does release the DEPARTMENT from any and all claims, complaints, demands, actions, causes of action, liabilities, and obligations, whether administrative, legal or equitable, whether known or unknown, which OWNER now has or may have in the future relating to or arising from the voluntary upgrade, including, without limitation, any and all claims due to the failure of any person to comply with federal, state, or local laws or regulations, claims under the Virginia Tort Claims Act, the Virginia Constitution, the United States Constitution and amendments thereto, or under

common law. Furthermore, OWNER expressly releases the DEPARTMENT from any and all claims, actions, causes of action, or obligations under the Virginia Onsite Sewage Indemnification Fund, § 32.1-164.1:01 of the *Code of Virginia*, that may arise from or be related to the repair, replacement, and/or operation of OWNER's onsite sewage disposal system pursuant to the voluntary upgrade, if installed.

OWNER also agrees to hold harmless and indemnify the DEPARTMENT for any sum of money or judgment against the DEPARTMENT, including reasonable attorneys' fees incurred in the defense of any action arising out of or related to the voluntary upgrade specified in the permit and not required by law.

Severability. If any portion of this AGREEMENT is held to be void or deemed unenforceable for any reason, the remaining portion shall survive and remain in effect, unless the effect of such severance shall defeat the parties' intent as set forth herein, with the parties asking the Court to construe the remaining portions consistent with the expressed intent of the parties.

Entire Agreement. OWNER acknowledges that OWNER has had an opportunity to consult with an attorney concerning OWNER's rights and obligations. OWNER acknowledges that OWNER has had sufficient time and opportunity to consider this AGREEMENT with the DEPARTMENT, that OWNER has read this AGREEMENT, that OWNER fully understands and agrees to its terms and conditions, and that there exists no other promises, representations, inducements or agreements related to this AGREEMENT, except as specifically set forth herein. Furthermore, OWNER acknowledges that this constitutes the entire agreement between OWNER and the DEPARTMENT.

\_\_\_\_\_  
Environmental Health Manager

\_\_\_\_\_  
Date

COMMONWEALTH OF VIRGINIA

CITY / COUNTY OF \_\_\_\_\_

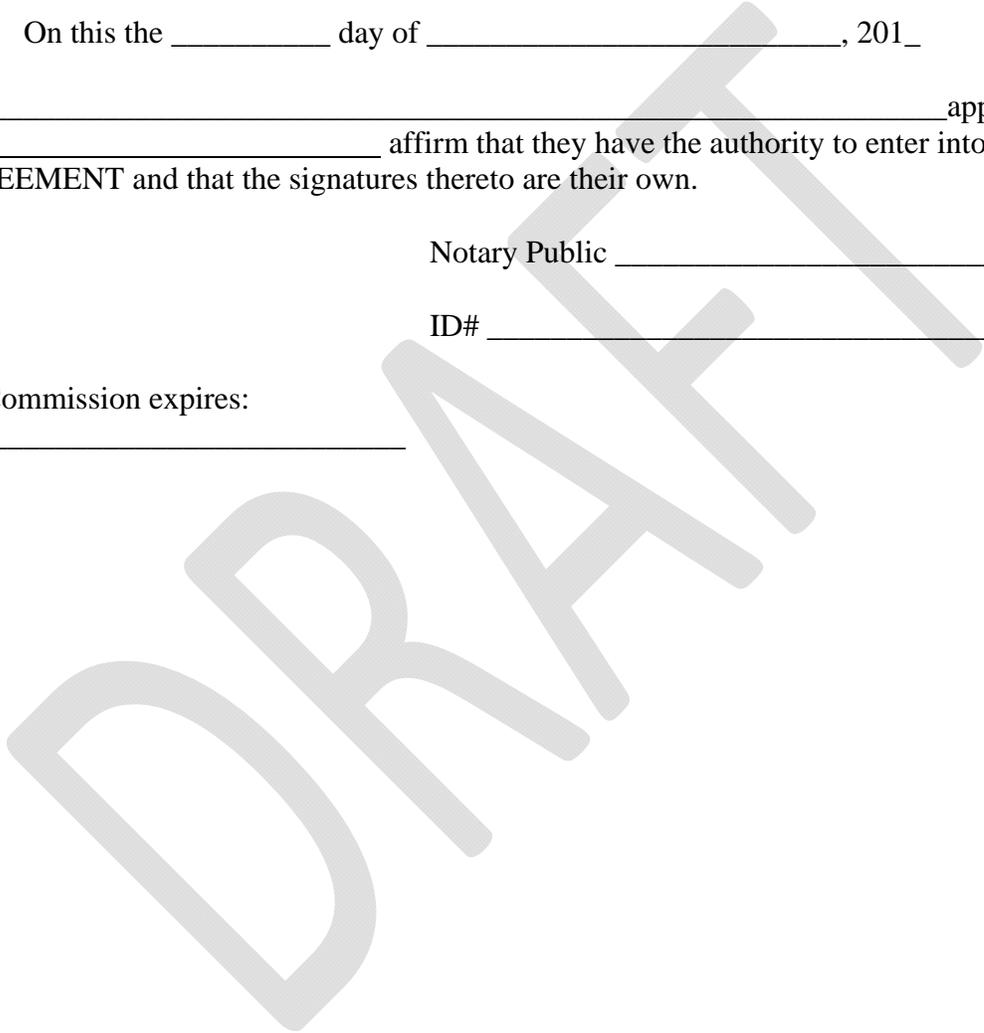
On this the \_\_\_\_\_ day of \_\_\_\_\_, 201\_

\_\_\_\_\_ appeared before  
me. \_\_\_\_\_ affirm that they have the authority to enter into this  
AGREEMENT and that the signatures thereto are their own.

Notary Public \_\_\_\_\_

ID# \_\_\_\_\_

My Commission expires:  
\_\_\_\_\_



Understood and Accepted

\_\_\_\_\_  
OWNER

\_\_\_\_\_  
Date

COMMONWEALTH OF VIRGINIA

CITY / COUNTY OF \_\_\_\_\_

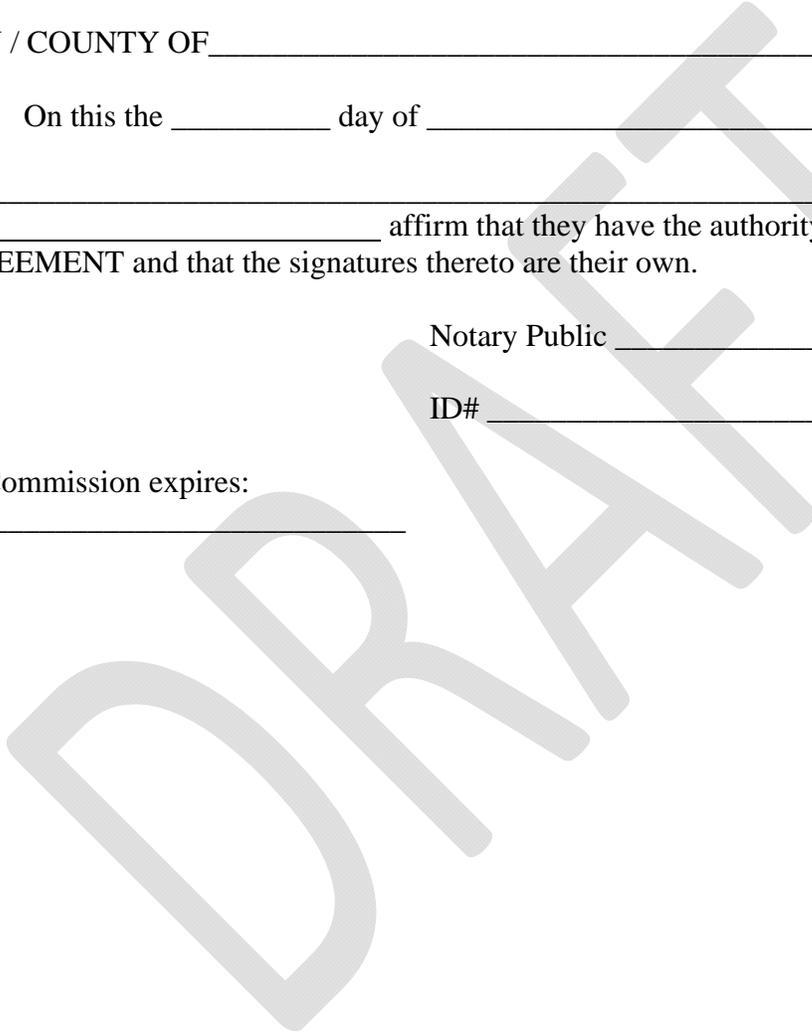
On this the \_\_\_\_\_ day of \_\_\_\_\_, 201\_

\_\_\_\_\_ appeared before  
me. \_\_\_\_\_ affirm that they have the authority to enter into this  
AGREEMENT and that the signatures thereto are their own.

Notary Public \_\_\_\_\_

ID# \_\_\_\_\_

My Commission expires:  
\_\_\_\_\_



**Attachment #9B – (Voluntary Upgrades without waivers)**

**VOLUNTARY UPGRADE**  
**RELEASE, HOLD HARMLESS,**  
**And INDEMNIFICATION AGREEMENT**

This AGREEMENT is made and entered into this \_\_\_\_ Day of \_\_\_\_\_, 20\_\_, by and between \_\_\_\_\_ and \_\_\_\_\_, including, without limitation, their heirs, successors, devisees, agents, assigns, representatives and interests (hereinafter “OWNER”) and the COMMONWEALTH OF VIRGINIA, acting through the Department of Health (“DEPARTMENT”), including, without limitation, any and all of its agencies, boards, and commissions, their insurer(s), officers, directors, employees, representatives, and agents (hereinafter “COMMONWEALTH”).

WHEREAS, \_\_\_\_\_ <Insert Property Description>  
\_\_\_\_\_, Virginia (hereinafter “PROPERTY”); and

WHEREAS, OWNER requested a construction permit to voluntarily upgrade the existing onsite sewage system serving PROPERTY; and

WHEREAS, OWNER affirms, and the COMMISSIONER has not found to the contrary, that the existing sewage system was installed legally with a valid permit; and

WHEREAS, Code of Virginia § 32.1-164.1:3 allows the DEPARTMENT to require OWNER to indemnify and hold harmless the DEPARTMENT before issuing the construction permit.

NOW, THEREFORE, OWNER agrees to and hereby does release the DEPARTMENT from any and all claims, complaints, demands, actions, causes of action, liabilities, and obligations, whether administrative, legal or equitable, whether known or unknown, which OWNER now has or may have in the future relating to or arising from the voluntary

upgrade, including, without limitation, any and all claims due to the failure of any person to comply with federal, state, or local laws or regulations, claims under the Virginia Tort Claims Act, the Virginia Constitution, the United States Constitution and amendments thereto, or under common law. Furthermore, OWNER expressly releases the DEPARTMENT from any and all claims, actions, causes of action, or obligations under the Virginia Onsite Sewage Indemnification Fund, § 32.1-164.1:01 of the *Code of Virginia*, that may arise from or be related to the repair, replacement, and/or operation of OWNER's onsite sewage disposal system pursuant to the voluntary upgrade, if installed.

OWNER also agrees to hold harmless and indemnify the DEPARTMENT for any sum of money or judgment against the DEPARTMENT, including reasonable attorneys' fees incurred in the defense of any action arising out of or related to the voluntary upgrade specified in the permit and not required by law.

Severability. If any portion of this AGREEMENT is held to be void or deemed unenforceable for any reason, the remaining portion shall survive and remain in effect, unless the effect of such severance shall defeat the parties' intent as set forth herein, with the parties asking the Court to construe the remaining portions consistent with the expressed intent of the parties.

Entire Agreement. OWNER acknowledges that OWNER has had an opportunity to consult with an attorney concerning OWNER's rights and obligations. OWNER acknowledges that OWNER has had sufficient time and opportunity to consider this AGREEMENT with the DEPARTMENT, that OWNER has read this AGREEMENT, that OWNER fully understands and agrees to its terms and conditions, and that there exists no other promises, representations, inducements or agreements related to this AGREEMENT, except as specifically set forth herein. Furthermore, OWNER acknowledges that this constitutes the entire agreement between OWNER and the DEPARTMENT.

\_\_\_\_\_  
Environmental Health Manager

\_\_\_\_\_  
Date

COMMONWEALTH OF VIRGINIA

CITY / COUNTY OF \_\_\_\_\_

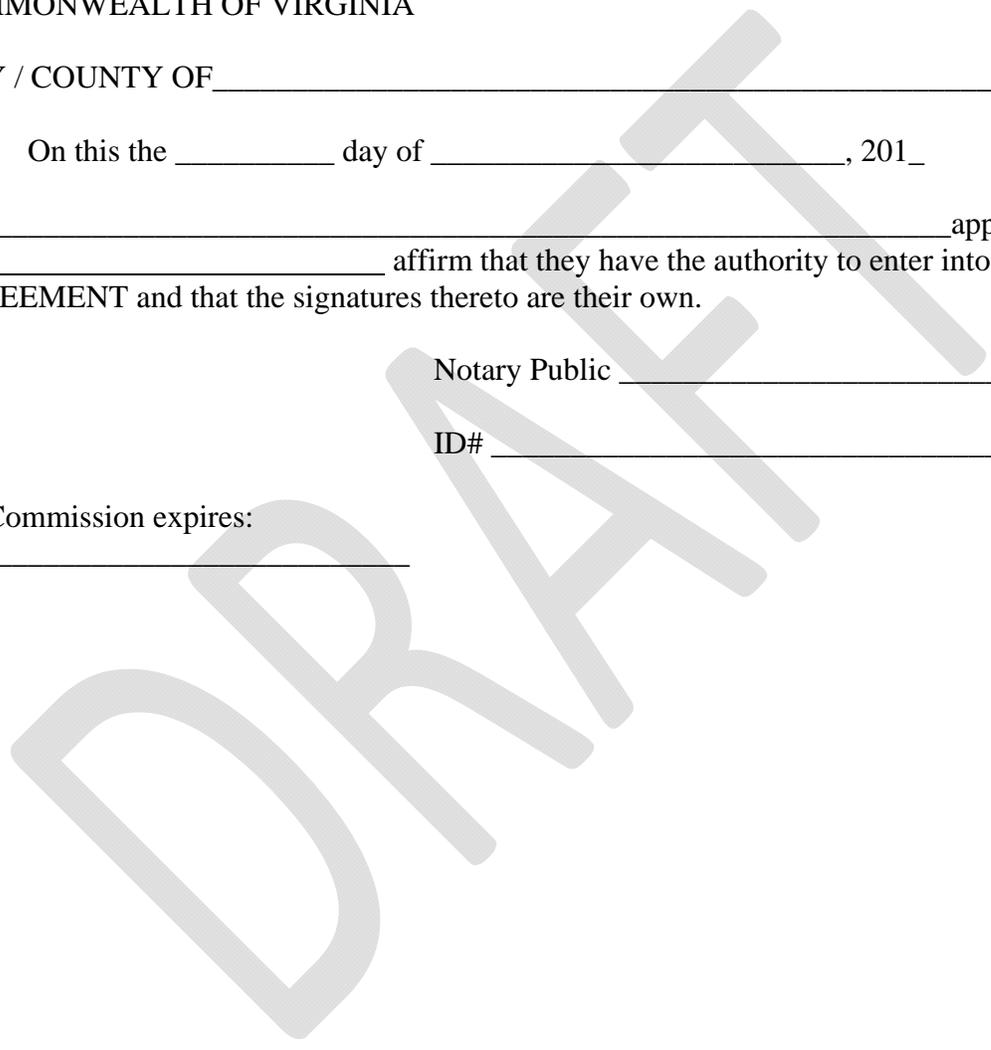
On this the \_\_\_\_\_ day of \_\_\_\_\_, 201\_

\_\_\_\_\_ appeared before  
me. \_\_\_\_\_ affirm that they have the authority to enter into this  
AGREEMENT and that the signatures thereto are their own.

Notary Public \_\_\_\_\_

ID# \_\_\_\_\_

My Commission expires:  
\_\_\_\_\_



Understood and Accepted

\_\_\_\_\_  
OWNER

\_\_\_\_\_  
Date

COMMONWEALTH OF VIRGINIA

CITY / COUNTY OF \_\_\_\_\_

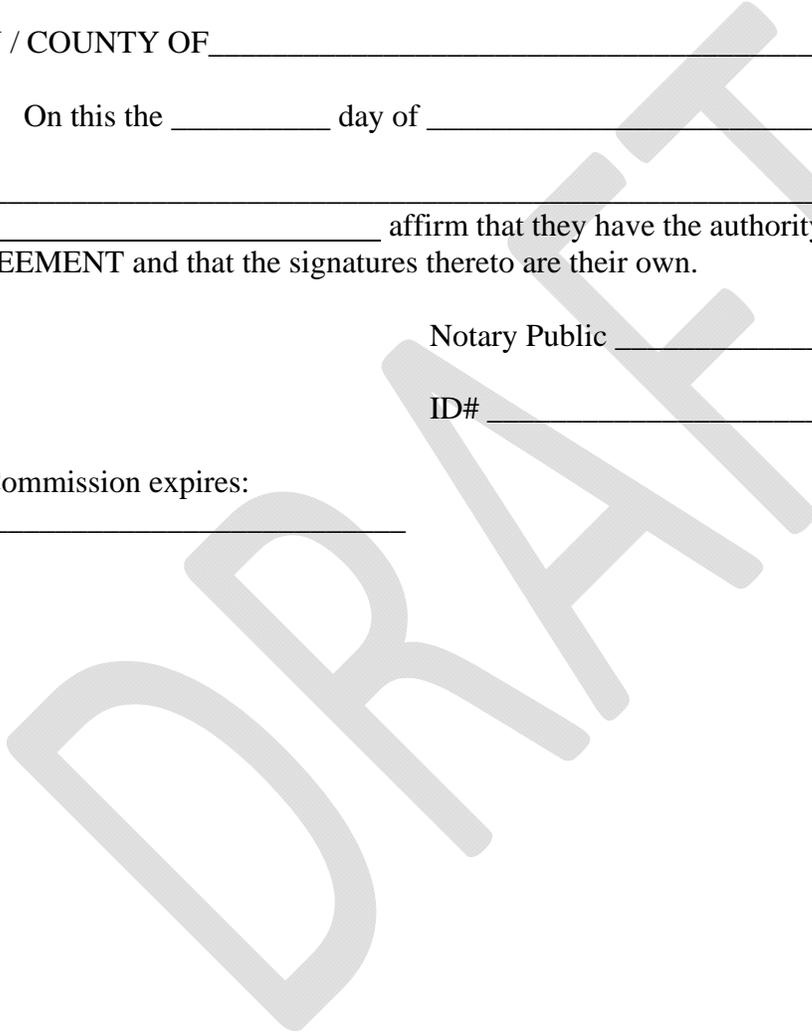
On this the \_\_\_\_\_ day of \_\_\_\_\_, 201\_

\_\_\_\_\_ appeared before  
me. \_\_\_\_\_ affirm that they have the authority to enter into this  
AGREEMENT and that the signatures thereto are their own.

Notary Public \_\_\_\_\_

ID# \_\_\_\_\_

My Commission expires:  
\_\_\_\_\_



**Attachment #10 - (Voluntary Upgrades)**

[Date]

[Name]

[Address]

[City, State, Zip]

Dear [Name]

Our records indicate that you have a septic system located at [specific address] for which a repair waiver was applied for and received during the period of July 1, 2004 to December 6, 2011. Due to recently passed legislation, you may be eligible for a voluntary upgrade waiver to this septic system.

During the 2015 legislative session, the Virginia General Assembly passed House Bill 1804 (HB 1804), which amended Code of Virginia § 32.1-164.1:1.B. The amended statute provides that a property owner who obtained a waiver to repair a failing onsite sewage system between the dates specified above and completed such a repair, and wishes to voluntarily upgrade the same septic system may request, and shall receive, a voluntary upgrade waiver. HB 1804 can be found in its entirety at the following link: <http://leg1.state.va.us/cgi-bin/legp504.exe?151+ful+HB1804ER+pdf>

Should you have any questions about HB 1804, your eligibility or the process for receiving a voluntary upgrade waiver, please contact your local health department.

Sincerely,

**Table 1: Draft Recommendations**

<b>Draft Recommendation</b>	<b>Agency Resources</b>	<b>Economic Impacts: Agency and Stakeholder</b>	<b>Additional Information</b>
<b>Transparency of Cost</b>			
7/1/17: Modify OSE/PE certification statement to verify discussion of options.	Low impact.	Low impact.	Pg. 14 Appendix A Interim Report 3
7/1/17: Modify OSE/PE certification statement to verify discussion of cost.	Low impact.	Low impact.	Pg. 14-15 Appendix B Interim Report 3
No later than 7/1/18: Develop a process for a public body to arbitrate disputes regarding designs, warranties, and installations of OSS and private wells.	May require additional resources to facilitate public body meetings.	Could decrease impact on stakeholders by providing alternative to civil court.	Pg. 15 Interim Report 3
<b>Consumer Disclosure</b>			
7/1/17: Modify OSE/PE certification statement to verify discussion of options.	Low impact.	Low impact.	Pg. 15-16 Appendix A Interim Report 1
<b>Dispute Resolution</b>			
No later than 7/1/18: Develop a process for a public body to arbitrate disputes regarding designs, warranties, and installations of OSS and private wells.	May require additional resources to facilitate public body meetings.	Could decrease impact on stakeholders by providing alternative to civil court.	Pg. 16 Interim Report 3
<b>Range of Cost</b>			
See summary of questionnaire responses; interim report 1.	n/a	n/a	Pg. 17 Interim Report 1
<b>Final Transition Date</b>			
The final transition date will be based on the implementation of all other components of the HB 558 plan.	n/a	n/a	Pg. 18 Interim Report 3
<b>Transitional Timeline</b>			
See timeline.	n/a	n/a	Pg. 18-19 Interim Report 3

Draft Recommendation	Agency Resources	Economic Impact: Agency and Stakeholder	Additional Information
<b>Incremental Timeline</b>			
VDH will continue requiring subdivision reviews to include private sector evaluations.	No impact.	No impact.	Pg. 20 Appendix C Interim Report 1
7/1/17: Eliminate direct services for certification letters statewide.	Decreases resource needs to provide evaluations. Increases resource needs for Level I/II reviews.	Reduces agency revenue. Increases cost for property owners. Increases business for private sector.	Pg. 20-21 Appendix D Appendix E Interim Report 1
No later than 7/1/17: Allow transfer of active permits to new property owners.	Decreases resource needs for processing applications.	Reduces agency revenue. Reduces cost for property owners.	Pg. 20-21 Interim Report 1
7/1/17: Eliminate direct services for voluntary upgrades statewide.	Decreases resource needs to provide evaluations and designs. Increases resources needs for Level I/II reviews.	Increases cost for property owners. Increases business for private sector.	Pg. 21-22 Appendix F Interim Report 1
7/1/17: Expand the definition of maintenance for OSS.	Decreases resource needs for processing applications.	Reduces cost for property owners to install simple repairs and voluntary upgrades.	Pg. 22 Appendix G Interim Report 1
7/1/17: Require applicants to petition VDH for bare application repair evaluation and design services.	Low impact.	Low impact.	Pg. 22-23 Appendix H Interim Report 1
No later than 7/1/18: Develop guidelines for determining hardship in obtaining private sector services for repairs.	Low impact.	Low impact; however, guidelines may reduce cost for property owners when private sector services cannot be obtained in a timely manner.	Pg. 28 Appendix R Interim Report 1
7/1/18: Require means testing for repair evaluation and design services. Income eligibility will be decreased annually for two year. 7/1/20: Owners only receive repair evaluation and design services if i) the repair fund is not fully funded and they are eligible for the repair fund, or ii) they demonstrate a hardship in obtaining private sector services.	Decreases demand on resources to provide site evaluations and designs. Increases demand on resources to provide Level I/II reviews. Increases resource to conduct eligibility reviews.	Increases cost for ineligible property owners. Increases business for private sector.	Pg. 23-24 Appendix I Interim Report 1

Draft Recommendation	Agency Resources	Economic Impact: Agency and Stakeholder	Additional Information
<b>Incremental Timeline</b>			
7/1/18: Require owners requesting repair bare application evaluation and design services that do not meet the income eligibility criteria to demonstrate a hardship in obtaining private sector services.	Decreases demand on resources to provide site evaluations and designs. Increases demand on resources to provide Level I/II reviews. Increases resource needs for evaluating hardship.	Increases cost for ineligible property owners. Increases business for private sector.	Pg. 23-24 Appendix I Interim Report 1
7/1/17: Require applicants to petition VDH for bare application new construction evaluation and design services.	Low impact.	Low impact.	Pg. 24-26 Appendix J Interim Report 1
7/1/17: Eliminate direct services for new construction not intended as a principle place of residence statewide.	Decreases demand on resources to provide site evaluations. Increases demand on resources to provide Level I/II reviews.	Reduces agency revenue. Increases cost for applicable property owners. Increases business for private sector.	Pg. 24-26 Appendix K Appendix L Interim Report 1
No later than 7/1/18: Develop guidelines for determining hardship in obtaining private sector new construction services.	Low impact.	Low impact; however, guidelines may reduce cost for property owners when private sector services cannot be obtained in a timely manner.	Pg. 28 Appendix R Interim Report 1
7/1/18: Require means testing for new construction evaluation and design services. Income eligibility will be decreased annually for four year. 7/1/22: Owners only receive new construction evaluation and design services if they demonstrate a hardship in obtaining private sector services.	Decreases demand on resources to provide site evaluations and designs. Increases demand on resources to provide Level I/II reviews. Increases resources to conduct eligibility reviews.	Reduces agency revenue. Increases cost for ineligible property owners. Increases business for private sector.	Pg. 24-26 Appendix M Appendix N Interim Report 1
7/1/18 to 6/30/22: Require owners requesting new construction bare application evaluation and design services that do not meet the income eligibility criteria to demonstrate a hardship in obtaining private services.	Decreases demand on resources to provide site evaluations and designs. Increases demand on resources to provide Level I/II reviews. Increases resource needs for evaluating hardship.	Reduces agency revenue. Increases cost for ineligible property owners. Increases business for private sector.	Pg. 24-26 Appendix M Appendix N Interim Report 1

Draft Recommendation	Agency Resources	Economic Impact: Agency and Stakeholder	Additional Information
<b>Incremental Timeline</b>			
Accept evaluations and designs from well drillers for private well construction and abandonment.	Decreases demand on resources to provide site evaluations. Increases demand on resources to provide Level I/II reviews.	May reduce cost to property owners for private sector well only evaluations. Increases business for private sector.	Pg. 25-26 Appendix O Interim Report 1
7/1/17: Require applicants to petition VDH for bare application SAP evaluation services.	Low impact.	Low impact.	Pg. 27-28 Appendix P Interim Report 1
No later than 7/1/18: Develop guidelines for determining hardship in obtaining private sector SAP evaluation services.	Low impact.	Low impact; however, guidelines may reduce cost for property owners when private sector services cannot be obtained in a timely manner.	Pg. 28 Appendix R Interim Report 1
7/1/18: Require means testing for SAP evaluation services. Income eligibility will be decreased annually for four year. 7/1/22: Owners only receive SAP evaluation services if they demonstrate a hardship in obtaining private sector services.	Decreases demand on resources to provide site evaluations and designs. Increases demand on resources to provide Level I/II reviews. Increases resources to conduct eligibility reviews.	Increases cost for ineligible property owners. Increases business for private sector.	Pg. 27-28 Appendix Q Interim Report 1
7/1/18 to 6/30/22: Require owners requesting bare application SAP evaluation services that do not meet the income eligibility criteria to demonstrate a hardship in obtaining private sector services.	Decreases demand on resources to provide site evaluations and designs. Increases demand on resources to provide Level I/II reviews. Increases resource needs for evaluating hardship.	Increases cost for ineligible property owners. Increases business for private sector service providers.	Pg. 27-28 Appendix Q Interim Report 1
<b>Local Transitions</b>			
No later than 7/1/18: Develop guidelines for determining hardship in obtaining private sector services.	Low impact.	Low impact; however, guidelines may reduce cost for property owners when private sector services cannot be obtained in a timely manner.	Pg. 28 Appendix R Interim Report 1

Draft Recommendation	Agency Resources	Economic Impact: Agency and Stakeholder	Additional Information
<b>Fee Change</b>			
7/1/18: Create fees for OSS repair applications consistent with new construction applications; fee is waived for property owners below that are eligible for the repair fund.	Increases resources to conduct eligibility reviews.	Revenue offsets a portion of losses. Increases cost for ineligible property owners.	Pg. 29-30 Appendix S Appendix T Interim Report 2
7/1/18: Create fees for OSS voluntary upgrade applications consistent with new construction applications; fee is waived pursuant to eligibility in the Fee Regulations.	Increases resources to conduct eligibility reviews.	Revenue offsets a portion of losses. Increases cost for ineligible property owners.	Pg. 29-30 Appendix U Appendix V Interim Report 2
<b>Services in Underserved Areas</b>			
No later than 7/1/18: Develop guidelines for determining hardship in obtaining private sector services.	Low impact.	Low impact; however, guidelines may reduce cost for property owners when private sector services cannot be obtained in a timely manner.	Pg. 30 Appendix R Interim Report 1
<b>Review Procedures</b>			
Continue to perform a Level I review of all site evaluations and designs.	No impact.	No impact.	Pg. 31, 34-35 Interim Report 3
Continue to perform a Level II review of at least 10% of submittal with supporting work from the private sector.	No impact.	No impact.	Pg. 31, 34-35 Interim Report 3
Continue to provide notice to the applicant and private sector designer prior to conducting a Level II review.	No impact.	No impact.	Pg. 31, 34-35 Interim Report 3
No later than 7/1/18: VDH inspects all OSS and private wells.	Increases resource needs to conduct inspections.	Low impact.	Pg. 31, 34-35 Interim Report 3
<b>Program Improvements</b>			
Continue providing the opportunity for applicants and private sector service providers to request a courtesy review.	No impact.	No impact.	Pg. 32 Interim Report 3

Draft Recommendation	Agency Resources	Economic Impact: Agency and Stakeholder	Additional Information
<b>Program Improvements</b>			
No later than 7/1/17: Allow the transfer of OSS and private well construction permits to new property owners.	Decreases resource needs for processing applications.	Reduces agency revenue. Reduces cost for property owners.	Pg. 32-34 Interim Report 3
No later than 7/1/18: VDH inspects all OSS and private well installations.	Increases resource needs to conduct inspections.	Low impact.	Pg. 32-34 Interim Report 3
Require an initial operational inspection for both COSS and AOSS 180 days after the operation permit is issued.	Increases resource needs to review inspection reports.	Increases cost for property owners. Increases business for private sector.	Pg. 32-34 Interim Report 3
Require operators to report all inspections and maintenance activities for COSS to VDH using a web-based reporting system.	Increases resource needs to review inspection and maintenance activities.	Increases cost for private sector service providers. May reduce cost for localities current expending resources to collect data.	Pg. 32-34, 35-36, 38-39, 40 Appendix X Interim Report 3
No later than 7/1/18: Require a malfunction assessment be submitted to VDH as part of the application process for all repair and voluntary upgrade permits.	Increases resource needs to review assessments.	Increases cost for private sector service providers for voluntary upgrades.	Pg. 32-34, 37, 38 Interim Report 3
No later than 7/1/18: Develop malfunction assessment guidelines and forms.	Low impact.	Low impact.	Pg. 32-34, 37, 38 Interim Report 3
Expand web-based data efforts to including accepting applications and payments for services online, and make OSS and private well record available online.	Reduces resource needs for data entry and responding to FOIA request.	Reduces FOIA cost for the private sector and the general public.	Pg. 35-36 Interim Report 3
Expand efforts to create a complete electronic record for permitted OSS and private wells.	Short-term, increases resource needs to enter historical data. Long-term, decreases resource needs to respond to FOIA request.	Low impact.	Pg. 35-36 Interim Report 3
Update the Onsite Quality Assurance manual.	Low impact.	Low impact.	Pg. 36 Interim Report 3

Draft Recommendation	Agency Resources	Economic Impact: Agency and Stakeholder	Additional Information
<b>Program Improvements</b>			
7/1/17: Expand the definition of maintenance to streamline the process for simple repairs and voluntary upgrades.	Decreases resource needs for processing applications.	Reduces cost for property owners to install simple repairs and voluntary upgrades.	Pg. 37, 38 Appendix G Interim Report 3
Implement specific procedures for tracking enforcement actions.	Low impact.	Low impact.	Pg. 37, 38 Interim Report 3
Expand efforts to educate the public regarding OSS and private wells.	Increases resource needs to provide education.	Long-term, improved education may save owners money on system repairs.	Pg. 39 Interim Report 3
Expand the pump-out/inspection requirements of the CBPADMR to all OSS statewide.	Increases resource needs to review inspection reports and enforce pump out requirement.	Short-term, increases O&M cost for property owners. Long-term, may decrease cost of system repairs for property owners. Increases business for private sector. Assist the Commonwealth and localities with meeting Chesapeake Bay WIP goals.	Pg. 32-34, 40 Appendix Y Interim Report 3
Expand effort to incorporate OSS and private wells into community health assessments.	Increases resource needs to conduct community health assessments.	Long-term, improves decision making at a state, local, and community level.	Pg. 39 Interim Report 3
<b>Repair Funding</b>			
Cover cost of private sector evaluation and design services, system installation, and five years of sampling and O&M for qualifying property owners.	If administered by VDH, increases resource need to process request for assistance.	Reduces cost of system installations for eligible property owners. Other impacts to be determined.	Pg. 41 Interim Report 2