

**Virginia Department of Health (VDH)
Sewage Handling and Disposal Advisory Committee (SHADAC)
June 3, 2015 – Meeting Summary**

Meeting locations:

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

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

List of attendees at central location:

Advisory Committee Members

Mike Lynn	Dwayne Roadcap	David Fridley	Curtis Moore
Alan Brewer	Joel Pinnix	Cody Vigil	

VDH Staff and Members of the Public

Marcia Degen	David Tiller	Lance Gregory	Mike Burch
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List of attendees at remote location:

Advisory Committee Members

Jeff Walker	Bill Timmons
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Mr. Walker sat in as the representative for the Virginia Association of Professional Soil Scientist.

Administrative

1. Welcome.

Chairman Lynn welcomed everyone to the meeting.

2. Approve agenda.

There were no edits to the agenda. Mr. Brewer made a motion to approve; Mr. Moore seconded that motion. The motion carried.

3. SHADAC appointment.

Mr. Gregory informed committee members that VDH will be sending out letters to organizations where their appointee's term has expired. The letter will ask organization to provide at least two nominations with resume to be forwarded to the Commissioner. This aligns the SHADAC appointment process with the process for other VDH Boards such as the Appeals Board.

4. Review summary from April 15, 2015 meeting.

There were no comments on April 15, 2015, SHADAC meeting summary. Mr. Vigil made a motion to approve the summary; Mr. Brewer seconded the motion. The motion carried.

5. Future meeting dates.

Mr. Gregory commented on a memorandum he sent to SHADAC members on May 15, 2015, which summarized the recommendations from the last SHADAC meeting. One of the recommendations from the previous meeting was to have more frequent meetings. The memorandum contained tentative SHADAC meeting dates for the next year. Mr. Gregory asked whether those date were suitable to the committee. The committee agreed on the following dates to meet over the next year: September 16, 2015; December 2, 2015; March 23, 2016; and June 1, 2016. Mr. Gregory stated he would post those dates on www.townhall.virginia.gov immediately.

Public Comment Period

There were no public comments.

Old Business

1. GMP 2015-01 FAQs: subcommittee update.

Chairman Lynn provided an overview of the May 29, 2015, SHADAC subcommittee meeting to discuss VDH's draft frequently asked questions (FAQs) document for Guidance Memorandum and Policy (GMP) 2015-01. The subcommittee reviewed the draft FAQ giving draft responses a 1, 2, or 3; 1 meaning there was general agreement; 2 meaning additional discussion was required, and 3 meaning there was significant disagreement. He then asked if there were any particular FAQs the committee would like to discuss.

Mr. Walker commented that the subcommittee discussed issues regarding disclosure. He stated that the Virginia Association of Professional Soil Scientist (VAPSS) has shared with the Department of Professional and Occupational Regulations (DPOR) their concerns that a contract or a statement including conflicts of interest or limitations of services must be provided to clients. Mr. Walker commented that calling the counter document, currently provided by VDH, a disclosure document is a misnomer. He then asked the SHADAC to consider the issue of distinct services; services requiring a license and those that do not.

Mr. Moore asked whether non-subcommittee members would like for the subcommittee decisions to be vetted through the full committee.

Chairman Lynn commented that under the rules, it appears they will have to come back to the full committee.

Mr. Vigil commented that the subcommittee was able to reach consensus on about 30 percent of the responses.

Mr. Moore suggested that Mr. Gregory send the revised FAQs, based on the subcommittees work, out to the full SHADAC and request comments by a set date.

Mr. Pinnix asked where one would go for an answer if VDH didn't provide the FAQ document.

Mr. Roadcap commented there are concerns about consistency, and have different responses based on who you ask. Without the FAQ document, questions are typically answered by local health department (LHD) staff, and they contact the Office of Environmental Health Services if they need assistance.

Mr. Pinnix voiced concern on where the process stops. VDH writes a regulation, then writes policies fine tuning the regulations, then writes guidance on how you administer the policy. He also commented that it was unclear whether a FAQ will change variability at the LHD level.

Mr. Walker commented the FAQs are not the issue, the policy is the issue.

Mr. Fridley recommended the committee encourage the release of as many of the responses as possible, to help clarify issues specific to GMP 2015-01 to avoid variability of interpretation.

Mr. Vigil stated it was his understanding that was the agreement during the subcommittee

Mr. Moore made a motion that the SHADAC recommend to the department that they distribute the FAQ which receive a 1 to the full SHADAC and give the committee 30-days to review, take the comments under advisement, and publish the FAQs that received a 1 in subcommittee at that point.

Mr. Vigil seconded the motion.

Chairman Lynn commented that there is nothing preventing VDH from doing what they want to do with the FAQ document.

Mr. Walker commented that September is a long way off, and that VDH need to get this off their desk.

Chairman Lynn asked whether the committee would agree to amend the motion to follow the same process for responses that receive a 1 at future subcommittee meetings.

All were in favor of the motion as amended.

2. Motion: State Health Commissioner to revisit 12VAC5-613-70.
 - a. Review draft letter from the committee to the State Health Commissioner.

Mr. Gregory commented that another components of his May 15, 2015, memorandum dealt with the SHADAC's recommendation that the State Health Commissioner (Commissioner) revisit the approval process for treatment level 2 (TL2) and treatment level 3 (TL3). Mr. Gregory provided the SHADAC with a template letter that could be used for creating a formal response to the Commissioner; however, the template is only a framework that requires input from SHADAC to complete.

Chairman Lynn provided the background on the issue from the previous meeting. Several members mentioned that testing cost and the timeframe were prohibitive for manufacturers.

Mr. Vigil commented that the cost of testing in Virginia is \$50,000 to \$100,000.

Mr. Walker stated that VAPSS is concerned about the increasing costs to homeowners, asking whether it is really worth the expenditure for the difference between TL-2 and TL-3.

Mr. Moore asked whether member felt the cost/benefit is off balance.

Mr. Walker stated that homeowners are opting to go with a variance or waiver instead of install a treatment unit. Mr. Pinnix agreed, voicing concern that the regulations are not based in real good science and engineering.

Chairman Lynn commented that there is no guidance on what is in compliance or out of compliance on the back side, after installation; operation and maintenance requirements are not being enforced. He added that using TL-3 limits what type of system you have available for design.

Mr. Burch commented that his company has been in contact with a third party and to test 20 systems quarterly for a year will be \$50,000. He asked whether it is necessary to test nationally approved medical devices in Virginia. Mr. Burch stated that when you combined TL-3 and National Sanitation Foundation (NSF) 245, you only have three treatment unit options in Virginia; commenting the public needs access to more manufacturers.

Mr. Roadcap commented that manufactures could request a variance; however, none have been received to date. Additionally, the regulation is up for periodic review. The agency could also post a notice to receive comments on a specific section of the regulations.

Mr. Fridley asked whether the issue is the testing protocol, or having both TL-2 and TL-3. He commented that those are two very different questions. He added the questions raised get into the public health issue of loading rates, and removal of pathogens.

Chairman Lynn asked where a homeowner stands if a treatment system is de-listed, but the property owner has already installed the system.

Mr. Pinnix commented that from his perspective as an engineer and an operator, he doesn't see a significant difference between TL-2 and TL-3. He voiced concern that the issue deals with picking winners and losers in regards to manufacturers of treatment units, stating that the cost for products go way up following approval. When VDH approved PuraFlo, Advantex, and EcoFlo, the cost of those products went way up.

Mr. Brewer stated that he appreciated the discussion on TL-2 versus TL-3, but the SHADAC's motion in April dealt with verification under section 12VAC5-613-70. He then presented a motion that members provide the Chairman with concise language for the letter to the Commissioner within 30 days for consideration at the next meeting.

Mr. Walker stated he had an issue with presenting a motion on other motion.

Mr. Brewer clarified the specific language for the letter does not exist and he was reluctant to attempt to draft the language during the meeting. His motion was a suggestion that the committee members provide specific language for the letter to the Commissioner within 30 days and that information would be vetted by the full committee, possibly offline.

Mr. Brewer again made a motion that the committee members provide the chairman with concise language for the draft letter to the Commissioner regarding revisiting 12VAC5-613-70 within 30 days, and that language be provided to committee members prior to the next meeting, to allow the committee to take action to approve the letter at the September meeting.

Mr. Moore commented that, if as part of that motion, the committee gave the chairman authority to finalize; the committee wouldn't need to revisit the issue in September.

Mr. Walker moved to amend the motion to give the Chairman that authority.

Mr. Moore seconded that motion.

All were in favor of Mr. Walker's amendment.

All were in favor of the full motion.

3. Status of GPS policy.

Mr. Gregory stated that at the last SHADAC meeting, members provided a recommendation for a minor revision to proposed GMP 2015 -2. The recommendation was included in the policy, and the policy has been issued.

Mr. Fridley asked whether there was a proposed launch date for the policy.

Mr. Gregory stated the policy had been sent to Environmental Health Managers and was posted on www.townhall.virginia.gov.

Mr. Walker voiced concern that policies were being provided to the SHADAC at the last minute. He also voiced concern that the policy does not address professional endorsement per surveying requirements.

4. Chesapeake Bay Watershed Implementation Plan (WIP) goals and milestones.

Dr. Degen provided a presentation on the development of WIP goals and milestones (see attached presentation).

Mr. Brewer commented on the deliverable of 36,000 pump outs each year, with 1986 in Chesapeake Bay Watershed outside of the Department of Environmental Quality (DEQ) managed Chesapeake Bay Protection Area (CBPA). He asked whether that meant the other 34,000 pump outs were outside of the CBPA, adding that the issue is very important to localities regarding credits for best management practices (BMPs). Mr. Brewer stated that localities are not getting credit because they can't track pump outs.

Mr. Walker asked whether there should be a motion from the SHADAC recommending VDH create a process for recording all pump outs.

Dr. Degen commented that the pump out program use to be under the Department of Conservation and Recreation (DCR), and it moved to DEQ during recent restructuring.

Mr. Fridley asked whether this meant that DEQ has authority for ensuring the pump outs occur.

Mr. Brewer stated that there is a difference between the CBPA and the Chesapeake Bay Watershed. There are pump outs in the watershed that are not being reported.

Mr. Walker commented VDH would be the best agency to ensure that pump outs are being reported. Mr. Walker added that VAPSS has been concerned about the lack of data coming out of VDH for two years.

New Business

1. Potential white papers from the SHADAC and its representative organizations.
 - a. Virginia Association of Professional Soil Scientist proposal.

Chairman Lynn stated that after the last meeting there have been some discussions about a white paper, or targeted white papers, as being a way for the committee to convey needs to the Commissioner and VDH staff. He commented the SHADAC needs to look at whether the white papers could be focused enough to start the process for regulatory changes. Chairman Lynn had spoken with Mr. Walker about having VAPSS present a white paper on some of the issues they have raised.

Mr. Walker then commented on issues with the current status of the onsite program including: deficiencies regarding reporting of who is working under license and under what capacity; the overlap between DPOR and VDH, and VDH's interpretations of license requirements; expectations for work to be done in accordance with engineering standards; the lack of recent soil program graduates being hired by VDH; code official conflicts with design officials; failure rates associated with specific pieces of equipment; VAPSS members that are VDH staff feel they cannot protest agency policies as employees of VDH, but have to hold a limited standard even though they are responsible to the property owners under their license; ambiguity and misappropriation of a seal for onsite soil evaluator; and VDH staff using previous soil work from subdivision reviews.

Mr. Walker stated that a white paper on these issues might have a chance to make a change. He added that the white paper needs support from all stakeholders. We still have unlicensed contractors submitting work. However, Mr. Walker was not willing to commit VAPSS resources.

Chairman Lynn commented that the SHADAC has heard these issues for years. VDH central office has been making an effort to standardize work product, and it sounds like Mr. Walker is asking whether the entire committee should address these issues or just VAPSS.

Mr. Moore asked whether Chairman Lynn could summarize the issues raised by Mr. Walker.

Chairman Lynn commented that he understands the main issue is the use of a seal and whether or not the DPOR board says it's required. Second is that there is still an inherent conflict of interest where the permitting authority is also the designer. Those duties should be separated and the counter document should be a full disclosure document. Another general thought is that things might be easier on everyone if VDH handled few or no bare applications; clarifying the role between designer and regulator. LHD staff are taking to heart that their name is on the design and that it actually means something, that they could have some personal responsibility for what goes out.

Mr. Brewer commented that the Virginia Association of Counties has an established position that they would like VDH to offer direct services to citizens. He added that the issue of licensure was not a primary issue from the work plan developed at the last meeting. However, it would be appropriate to have an organization develop a white paper for an issue that was not raised as a priority at our last meeting, and bring that paper to the committee for discussion.

Mr. Pinnix commented that a seal does provide an indication of professionalism, a he was not aware of any other design profession that doesn't have a seal. Regarding conflict of interest, having a standard work product and conflict of interest go hand and hand. DPOR does not set design standard. Mr. Pinnix stated that in this case he believes VDH sets the standard for work being done under the exemption to the practice of engineering. The American Council of Engineering Companies (ACEC) recognizes that most of the work being done on the design side should be done by the private sector. Regarding a white paper, ACEC would welcome doing

something like that, but where does it go? Does it go from ACEC to the Commissioner, or from ACEC to the SHADAC? ACEC would feel more comfortable having something with its stamp on it.

Mr. Moore stated that when the Virginia Onsite Wastewater Recycling Association (VOWRA) created a white paper on this issue many years ago, it discussed the separation of duties. VOWRA would be happy to entertain VAPSS's white paper, and take that under advisement, but Mr. Moore commented that the SHADAC may not have the resources to put the white paper together.

Mr. Fridley commented that the issues being raised seemed to be interpretation of the Code of Virginia, DPOR's regulations, and a vision for the onsite industry. He added that getting to a consensus on a preferred business model would be difficult. Mr. Fridley also voiced concern that a white paper from the SHADAC may not be the appropriate way to discuss interpretations of the Code or DPOR regulations.

Chairman Lynn made note of Mr. Brewer's point that the SHADAC should be addressing the issues voted on during the previous meeting. Chairman Lynn suggested selecting a few items from the priority list and use the draft decision memorandum as a way to bring those issues forward for the Commissioners. He added that it was not clear whether the agency has the resources to tackle the issues previously addressed during the Safety and Health in Facilitating a Transition (SHIFT) process.

Mr. Roadcap commented that VDH has implemented the consensus SHIFT recommendation to use a strategy to encourage the use of the private sector, not a mandated approach. However the agency is open to suggestions on the encouraging strategy.

Chairman Lynn stated the committee may find it simpler to create a form letter with suggested strategies for encouraging the use of the private sector.

2. Proposed amendments to the AOSS Regulations regarding direct dispersal.

Dr. Degen then provide a presentation on proposed amendments to the Regulations for Alternative Onsite Sewage System Regulations (AOSS Regulations) dealing with the section on direct dispersal of effluent to ground water.

Mr. Roadcap commented the idea for the proposed amendment is to address recent variances for direct dispersal. In those cases the Commissioner has general granted variances to repair failing system or install voluntary upgrades provided the system produces TL-3, disinfection, and a 50 percent reduction of total nitrogen. The proposed fast track amendments are designed to help resolve issues with the definition, and changing the performance expectations for repairs and voluntary upgrades. New construction is not part of the proposal; VDH believe that topic would be controversial. VDH is presenting this information to the SHADAC in hopes of getting support for a fast track process. If VDH doesn't get support, public comment could push it into a standard regulatory process.

Chairman Lynn stated that he has not found a professional engineer that thought they could meet the direct dispersal treatment standard without a membrane.

Mr. Roadcap commented that manufactures have stated a membrane and additional filters would get the level of treatment necessary.

Mr. Pinnix commented that he believes VDH has considerable latitude under the repair clause, and the only issue with a voluntary upgrade is the issue with increased monitoring and testing. Additionally, he believes the agency has latitude to restrict the term "excavation" only to the excavation being proposed as part of the design. Mr. Pinnix voiced concern that VDH would be creating a need for a regulation that does not exist with the proposed action.

Chairman Lynn asked where the proposal was in process.

Mr. Roadcap commented that the proposal is at division staff level and the division is seeking the committees input. The intent is to present the policy discussed at the last meeting along with the proposed fast track regulations to upper management for approval.

3. Review of regulations within the VDH's onsite sewage program.

Mr. Gregory state the top priority, as voted by the SHADAC during the previous meeting, was regulatory review which includes some of the earlier discussions about treatment and moving policy into regulations. Mr. Gregory asked if the committee has specific suggestions for regulatory changes that could be discussed at the next meeting.

Mr. Pinnix asked what VDH wants.

Mr. Roadcap stated that VDH is responding to the last meeting. The agency is bringing forward regulatory and policy issues it is working on, but VDH is willing to entertain additional ideas from the SHADAC.

Chairman Lynn stated that some of the issues will be address in the letter to the Commissioner discussed earlier.

Mr. Walker commented that the agenda mentions a discussion on the use of previous soil work.

Mr. Gregory explained that it was his intent to discuss the issue with the subcommittee, but the subcommittee ran out of time. He added that it would be on the agenda for the next subcommittee meeting.

Mr. Walker commented that VAPSS believes soil work is intellectual property of the person doing the work and must only be used with their permission.

Mr. Pinnix disagreed that permission is required to use existing soil work form a certification letter.

4. Draft repair and voluntary upgrade waiver policy.

Mr. Tiller presented a draft policy which will combine everything regarding waivers into one policy; combining GMP 128, GMP 155, and new legislation (House Bill 1804). The bulk of the GMP is attachments, letters for the LHD when they receive an applicable application.

Chairman Lynn asked what type of voluntary upgrade VDH staff could process.

Mr. Tiller replied a simple pump conventional system.

Mr. Fridley commented that the draft policy states once you get a repair wavier, you can get additional repair permits under that waiver.

Mr. Moore commented that the policy needs to define what a repair is.

Chairman Lynn and other members voiced concern that LHD's don't always agree that a proposed project is a repair, and may call it a voluntary upgrade. One example give is the replacement of deteriorated distribution box.

The committee the discussed what types of repairs/upgrades would be enforceable actions by VDH. Is it only an enforceable action when you have a failing system with sewage on the ground, or can VDH require correction of a cracked distribution box when the system is not failing on the ground or backing up in the house? What happens when the existing absorption area doesn't meet current standards?

Mr. Walker voice concern regarding waivers as the systems can result in direct dispersal and be in violation of the regulations. He asked how a designer certifies a design that is not in compliance with the regulations.

Chairman Lynn commented that the waivers are statutory allowances.

Mr. Walker asked whether the designer would need to modify their certification statement to reference the waiver section of the Code.

Mr. Pinnix motioned that the meeting adjourn.

Mr. Fridley seconded the motion and the motion carried.

Adjourn

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

Date: June 3, 2015
Time: 10 am to 2 pm
Location: 5th Floor, Main Conference Room
James Madison Building
109 Governor Street
Richmond, Virginia 23219

Administrative (25 minutes)

1. Welcome. (5 minutes)
2. Approve agenda. (5 minutes)
3. SHADAC appointment. (5 minutes)
4. Review summary from April 15, 2015 meeting. (5 minutes)
5. Future meeting dates. (5 minutes)

Public Comment Period

Old Business (20 minutes)

1. GMP 2015-01 FAQs: subcommittee update. (20 minutes)
 - a. Questions regarding use of previous soil work.

Break (10 minutes)

Old Business Continued (35 minutes)

2. Motion: State Health Commissioner to revisit 12VAC5-613-70. (15 minutes)
 - b. Review draft letter from the committee to the State Health Commissioner.
3. Status of GPS policy. (5 minutes)
4. Chesapeake Bay Watershed Implementation Plan goals and milestones. (15 minutes)

New Business (60 minutes)

1. Potential white papers from the SHADAC and its representative organizations. (30 minutes)
 - b. Virginia Association of Professional Soil Scientist proposal.
2. Proposed amendments to the AOSS Regulations regarding direct dispersal. (30 minutes)

Break (10 minutes)

New Business Continued (65 minutes)

3. Review of regulations within the VDH's onsite sewage program. (45 minutes)
4. Draft repair and voluntary upgrade waiver policy. (20 minutes)

Adjourn



COMMONWEALTH of VIRGINIA

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

Department of Health
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RICHMOND, VA 23218

TTY 7-1-1 OR
1-800-828-1120

May 15, 2015

MEMORANDUM

TO: Sewage Handling and Disposal Advisory Committee (SHADAC) Members
Office of Environmental Health Services Staff
Environmental Health Managers

FROM: Lance Gregory 
Environmental Health Coordinator
Division of Onsite Sewage and Water Services, Environmental Engineering,
and Marina Programs

SUBJECT: April 15, 2015 SHADAC Meeting - Follow up to committee motions,
recommendations, and questions.

This memorandum tries to capture motions, recommendations, and questions presented during the April 15, 2015, SHADAC meeting that require follow-up. I have outlined below an anticipated date of completion for each. . Please contact me at Lance.Gregory@vdh.virginia.gov, with any suggested changes if I have not accurately captured the follow needs.

Motions:

The motions approved by the committee during the April 15, 2015 meeting are:

1. The committee revised its meeting process. Motion from the meeting: *A public comment period, included within the agenda at the Chairman's discretion, should be limited to 5 minutes per person. The public are still allowed to comment throughout the meeting when recognized by the Chairman.*

Action: I will update the operating procedure for the committee and provide the draft revision to the committee for review at the next scheduled meeting. Future meetings will include a public comment period upon request by the Chairman.

Anticipated completion date: Next meeting.

2. The committee created a subcommittee. Motion from the meeting: *The SHADAC should create a subcommittee and request Virginia Department of Health (VDH) meet with them to review the Frequently Asked Questions [for GMP 2015-01] and determine what is wrong, what is right, and what needs further discussion.*

Action: I have reserved the 5th Floor Main Conference Room at VDH's Central Office for the following dates to hold a kickoff meeting for the subcommittee: May 26, 2015; May 27, 2015; and May 29, 2015. All tentative dates are scheduled from 10:00 a.m. to 12:00 p.m. Subcommittee members are asked to contact me, at Lance.Gregory@vdh.virginia.gov, by 12:00 p.m. on May 19, 2015 with their preferred date for the kickoff meeting.

Anticipated completion date: I will post the kickoff meeting date on www.townhall.virginia.gov by May 19, 2015. The subcommittee can report on its work at the next SHADAC meeting.

3. The committee recommended a revisit of 12VAC5-613-70. Motion from the meeting: *Recommend that the State Health Commissioner revisit the section of the regulations that deals with treatment level 2 (TL-2) and treatment level 3 (TL-3) testing [see [12VAC5-613-70](#)].*

Action: I will work with Chairman Lynn to offer a letter for the Committee to send to Dr. Levine, State Health Commissioner for her response. I hope to have this letter ready for your consideration at the next meeting.

Anticipated completion date: Next meeting.

Recommendations:

I documented three recommendations during the April 15, 2015, SHADAC meeting. Those recommendations were:

1. *The SHADAC should meet more frequently. Suggest meeting in late March, early June, early September, and early December, with Wednesday being the preferred meeting day.*

Action: I have reserved the 5th Floor Main Conference Room at VDH's Central Office for the following tentative meeting dates: June 3, 2015; September 16, 2015; December 2, 2015; and March 23, 2016. If any of these proposed meeting dates present a conflict, please let me know.

Anticipated completion date: I will post the next meeting at www.townhall.virginia.gov on May 20, 2015, unless there are significant conflicts with the proposed June 3rd meeting date. I will also post future meeting dates by June 4, 2015.

2. *VDH needs to review all regulations within the onsite program.*

Action: I spoke with Dwayne Roadcap, Division Director about this motion. We would like to explore whether this particular agenda item can be addressed through a subcommittee or placed on the committee's routine agenda so that the regulations can be reviewed together.

Anticipated completion date: I will ask Chairman Lynn to add this topic to the committee's agenda for June 3, 2015. The regulations can be reviewed at each future meeting as desired.

3. *The draft global positioning data policy should be revised to clarify that the policy does not create a mandate for private sector designers to collect geographic information.*

Action: Staff revised the policy to state the following: "This policy does not mandate that private sector professionals submit GPS data."

Completion Date: April 20, 2015. We anticipate approval of this policy soon.

Questions:

I recorded four specific questions during the April 15, 2015, SHADAC meeting:

1. *[Group of similar questions] If a site has previous soil work on file, how can VDH accept a bare application? Can any OSE/PE - private or public - use previous soil work on file to complete a design without doing new soil work? Is it legal and is it professional to use another person's work?*

Action: We will address these questions in the subcommittee and provide written responses for consideration.

Anticipated completion date: Next meeting.

2. *Should discussion among the GMP 2015-01 FAQ subcommittee be brought back to the full committee?*

Action: My understanding of this question was that most of the committee thought this topic did not need to be discussed at a future meeting. The subcommittee can address this topic and update the full committee.

Anticipated completion date: Update at next meeting.

3. *What data can VDH collect to assess population health as it relates to onsite and private well industry?*

Action: This is an ongoing question. The committee or a subcommittee can address as desired by the committee.

Anticipated completion date: Ongoing.

4. What are the expectations for the industry to meet VDH's commitments to the Chesapeake Bay Watershed Implementation Plan (WIP) goals? What are the milestones?

Action: I am willing to share more information about this question at the next meeting and offer a quick presentation, if desired.

Anticipated completion date: Next meeting.

June 3, 2015

DECISION MEMORANDUM

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

THROUGH: Mike Lynn
Chairman
Sewage Handling and Disposal Advisory Committee

FROM: Sewage Handling and Disposal Advisory Committee (SHADAC)

SUBJECT: Recommendation to revisit section 12VAC5-613-70 of the Regulations for Alternative Onsite Sewage Systems (12VAC5-613, the AOSS Regulations).

PURPOSE

The SHADAC request the State Health Commissioner consider revisiting section 12VAC5-613-70 of the AOSS Regulations in order to:

- 1.

BACKGROUND

On April 15, 2015, the SHADAC passed a motion recommending the State Health Commissioner revisit the section of the regulations that deals with treatment level 2 and treatment level 3 testing; 12VAC5-613-70 of the AOSS Regulations.¹

¹ The AOSS Regulations define treatment level 2 effluent or “TL-2 effluent” as secondary effluent as defined in 12VAC5-610-120 that has been treated to produce biological oxygen demand 5-day (BOD₅) and total suspended solid (TSS) concentrations equal to or less than 30 mg/l each. The AOSS Regulations define treatment level 3 effluent or “TL-3 effluent” as effluent that has been treated to produce BOD₅ and TSS concentrations equal to or less than 10 mg/l each.

JUSTIFICATION

The SHADAC believes of section 12VAC5-613-70 of the AOSS Regulations is necessary for the following reasons:

- 1.

RECOMMENDATION

The SHADAC recommends revisit section 12VAC5-613-70 of the AOSS Regulations. We recommend the process for review be as follows:

- 1.

APPROVAL

- Recommend Recommend with Modification Deny

Dwayne Roadcap

Date

- Approve

- Approve with Modification

- Deny

Allen Knapp

Date

- Approve

- Approve with Modification

- Deny

Marissa J. Levine, MD, MPH, FAAFP

Date



COMMONWEALTH of VIRGINIA

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

Department of Health
P O BOX 2448
RICHMOND, VA 23218

TTY 7-1-1 OR
1-800-828-1120

May 15, 2015

MEMORANDUM

TO: District Health Directors
District Environmental Health Managers **GMP #2015-02**

THROUGH: Robert W. Hicks, Deputy Commissioner *RW Hicks*
Community Health Services

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

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

SUBJECT: Guidance Memorandum and Policy 2015-02: Collection of Global Positioning
System (GPS) Data for Onsite Sewage Disposal Systems, Alternative Discharge
Systems, and Private Wells

Scope: All onsite sewage disposal systems, alternative discharge systems and private wells either currently in use or approved for use by the Virginia Department of Health (VDH).

Policy: The local health department will obtain and record, in VENIS, GPS coordinates for all onsite sewage disposal systems, alternative discharge systems and private wells that are in use or are approved for use. "Approved for use" in this context means that an Operation Permit has been issued for a sewage disposal system or the private well has been approved for use. The policy also applies to any onsite sewage disposal system, alternative discharge system, and private well that is currently being used.

Procedures:

1. Data collection

The local health department is responsible for ensuring that data meeting the minimum requirements listed below is collected for each sewage disposal system and/or private well approved for use by that department. The data should be collected after installation, to ensure that the coordinates accurately reflect the installed, rather than the permitted, location. Local health departments are encouraged to work with private sector professionals to obtain the data with completion statements and records of inspection. However, this policy does not mandate that private sector professionals submit GPS data.

Local health departments will begin collecting the required coordinates for any sewage disposal system or private well (including all class IV wells) approved on or after the effective date of this memorandum. For sewage systems and private wells already in existence, for which no data is available in VENIS, local health departments will collect the coordinates at the time of the next visit to the property where the system and/or well is located. For example, if the local health department makes a visit to a property for a “safe, adequate and proper” determination, the coordinates of the sewage system and/or well should be collected during that visit. The use of computer mapping websites (e.g., GetLatLong, iTouchMap, Google) is permissible for temporarily identifying the location of sewage systems and private wells already in existence (including Legacy Systems) when staff know a site visit is not planned for the foreseeable future. **Coordinates identified in this manner should be field-verified with a GPS unit at the next site visit.** Field-verified data should be used to over-write previously collected data; do not keep both sets of coordinates. Keep in mind that the aerial imagery used by mapping websites may not be current and the resolution may not provide adequate detail to clearly identify the points of interest.

As a *minimum*, coordinates for the following points will be collected and recorded in VENIS:

- a. For an onsite sewage disposal system, the center of the absorption area.
- b. For an alternative discharge system, the outfall of the discharge.
- c. For a private well, the well head.

2. Data quality and accuracy

At a minimum, the data shall be collected with a GPS unit that has a Wide Area Augmentation System (WAAS) enabled receiver. The WAAS signal is a type of real-time correction with fixed reference stations/satellites that helps improve the accuracy of

your location. It should be available in most locations in Virginia, and GPS units should receive this signal automatically. However, if the particular GPS unit in use does not read this signal by default, make sure this feature is turned on in the option settings. Most GPS units contain at least a 12-channel receiver. A GPS unit with more channels is not necessarily more accurate, but it may obtain a quicker fix on your location and hold satellite signals better. If data collection is to be done in hilly terrain or under tree canopy, a GPS unit with a protruding or external antenna may improve satellite reception. The horizontal reference datum (or simply 'datum') should be set to NAD83 when collecting data. Verify the datum setting of the GPS unit prior to collecting data. Some GPS units may default to another setting when powered-down or when batteries are replaced. Data should be collected in the decimal degree format (e.g. dd.ddddd or 76.12345) and must include at least five decimal places for latitude and longitude. It is acceptable to collect more than five decimal places if the GPS unit can accurately make the determination, or if the district chooses to perform post-processing differential correction of the data.

3. Data recordation

The GPS coordinates identified in item 1 above shall be entered into VENIS on the appropriate sewage component (for absorption area or discharge point) or on the design tab for a private well. Enter the data in an un-projected, decimal-degree latitude and longitude format. Only numbers will be permitted in the data fields, and the position relative to the Equator and Prime Meridian will be handled internally by VENIS (e.g. N, W, "-", etc.). Check the "verified" box when the data has been field verified (as opposed to having been collected using a web-based program). The data entered here will be used by the Office of Environmental Health Services (OEHS) for mapping data, and will be shared with other users both inside and outside of the agency.

If local health departments wish to obtain additional GPS coordinates (e.g. for a treatment unit, absorption area corners, etc.) they may do so. These additional coordinates can be recorded in VENIS for the applicable component shown on the "installed" tab. An additional set of coordinates to locate the property can also be entered on the physical location.

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
Agriculture including CAFO/AFO				
6/30/2014 6/30/2015	A.1. Conduct continuing education classes relative to nutrient management	6 classes each year	DCR	1/15/15 - Six continuing education classes on nutrient management were conducted in 2014.
11/1/2014 11/1/2015	A.2. Determine resource needs for agricultural BMP implementation through Soil and Water Conservation Districts (Phase I WIP, pg. 65-66, Phase II WIP, pg. 18)	Annually	DCR	1/15/15 - The VA Agricultural Needs Assessment for program year 2016 (July 2015-June 2016) was completed.
12/31/2014	A.3. Develop specific, targeted educational program for unpermitted dairies (Phase I WIP, pg. 66)		DCR	Direct mailings are being sent to licensed dairies and five additional educational meetings are being planned. 1/15/15 – Direct mail campaign completed and educational meetings continue to be offered quarterly.
6/30/2015	A.4. Advance Healthy Waters program geo-referenced data sets	Update Bay watershed data sets	DCR	Endeavor to update 10-year old data in Bay Watershed portions of the state and develop an on-going maintenance plan. 1/15/15 - Updates to 10-year old data in Bay Watershed portions of the state is well-underway with the first phase of assessment reaching completion. The development of an on-going maintenance plan has begun. 187 Ecologically Healthy Water Natural Heritage Element Occurrences have been added to DCR Natural Heritage Biotics Database for use in conservation planning and land conservation efforts.

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
12/31/2015	A.5. Enhanced funding for livestock exclusion (Phase I WIP, pg. 63)	Fund qualified stream exclusion practices at 100% through FY15	DCR	1/15/15 - Additional funding has been budgeted for stream exclusion in the Chesapeake Bay watershed from both re-programmed CBIG (\$985,000) and new EPA allocations from federal FY 2014 (\$750,000).
12/31/2015	A.6. Continue development of the Resource Management Program and promote adoption in coordination with industry partners (Phase I WIP pg. 59, Phase II WIP pg. 19)	RMPs on at least 40 agricultural operations	DCR	DCR has assembled a marketing workgroup and developed educational materials. The regulations defining compliance have been adopted and outreach efforts have begun headed by a staff person whose time is dedicated to the program 1/15/15 - DCR has staffed the RMP Program with three full-time positions. RMP plan development and implementation cost-share specifications have been developed and are part of the current FY 15 VACS program. \$60,000 in VACS funding has been made available in the Bay drainage. An additional \$472,000 has been contracted for RMP development through private developers. This contract should result in approximately 270 RMPs developed by the end of the milestone period. Since July 2014, when the program went into effect, eight individuals have been certified as RMP developers and three RMPs have been submitted and

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
				approved. Also, \$780,000 has been contracted for the development of computer applications to assist in the tracking and development of RMPs. The software program is expected to be completed in the 1 st quarter of 2015.
12/31/2015	A.7. Increase the number of nutrient management plans on unpermitted dairies (Phase I WIP, pg. 76)	75% of facilities participating	DCR	DCR expects to execute contracts with plan writing contractors to further this milestone. 1/15/15 - DCR issued a competitive Request for Applications (RFA) in June 2014 for private plan writing on unpermitted dairy operations. Three private certified NM planners were awarded a total of \$118,900 combined CBIG and NPS§319 funding to develop plans on a targeted acreage of 18,612 acres.
12/31/2015	A.8. Track voluntary best management practice collection statewide (Phase I WIP, pg. 54)	BMP dataset for input to EPA-CBPO Watershed Model Progress Run	DCR	1/15/15 - All SWCD have the ability to enter voluntary BMPs through the Agricultural BMP Tracking Program. A new grant initiative to provide SWCDs incentives to re-inspect structural BMPs that are approaching or recently reached the end of their contract to recertify that they are still functioning. This grant will also initiate a tillage survey in the Bay watershed in 2015 to capture conservation tillage acres for nutrient and sediment reductions.

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
12/31/2015	A.9. Renew relationship with fertilizer companies to encourage and track precision agricultural application (Phase I WIP, pg. 65)	45,000 acres of precision agriculture each year	DCR	1/15/15 - DCR is continuing with this effort
12/31/2015	A.10. Increase nutrient management planning to include 85% of all applicable state-owned land (Phase I WIP, pg. 61)	780,000 acres agricultural nutrient management each year	DCR	1/15/15 - Annual planned acreage on pace to achieve in 2015. 87% of the 7,600 acres of state owned agricultural lands where nutrients are applied have plans.
12/31/2015	A.11. Report competitive grant project achievements, including BMP data to be credited in the Bay model	Reportable 2007-2014 BMP data digitized, analyzed and included for VA accomplishments.	DCR	1/15/15 - This project will continue through 2015 with a targeted completion date for reportable data of December 2015.
12/31/2015	A.12. Develop agricultural nonpoint source assessment data to be used for Ag needs assessment, 305(b) report, NPS Management Plan, Chesapeake Bay and Virginia Waters Clean Up Plan and other reports	Data developed, analyzed and reported to DEQ	DCR	1/15/15 - 2014 Nonpoint Source Assessment produced estimated nitrogen, phosphorus, and sediment loads for 1,236 6 th order hydrologic units. NPS Chapter for Draft 2014 Integrated Assessment Report (303(d)/305(b) Report) completed. Agricultural NPS ranking of HUCs produced from these results.
12/31/2015	A.13. Spatial reporting of nutrient management plan data	Tracking module to report spatially	DCR	1/15/15 - On pace to achieve this level of specificity with NutMan 4 software roll out in 2015.
10/31/2014	A.14. Assess 48 VPA permitted facilities that have applied for VPDES CAFO permits to determine if they require VPDES permits (Phase I WIP pg. 74, Phase II WIP pg. 18)	Assess 48 facilities	DEQ	1/15/15 - All facilities which have applied for a VPDES CAFO permit have been assessed to determine if a permit is necessary. Based on the review, DEQ will be processing VPDES CAFO permits

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
				for five facilities located in the Bay watershed.
12/31/2015	A.15. Convert applicable CAFO VPA permits to VPDES permits (Phase I WIP pg. 74, Phase II WIP pg. 18)	3 VPDES permits issued	DEQ	1/15/15 - The VPDES CAFO permit template is complete and has been accepted by EPA. The template will be used to draft the three VPDES CAFO permits.
12/31/2015	A.16. Complete evaluations of the remaining small AFOs in Virginia's portion of the Chesapeake Bay watershed in accordance with the Small AFO Strategy developed in cooperation with VDACS (Phase I WIP, pg. 76)	Completion of evaluation and, if necessary appropriate remedies initiated	DEQ/ VDACS	1/15/15 - Approximately 426 small AFOs remain to be evaluated out of the 800 identified in the WIP.
Urban including MS4				
7/1/2014	U.1. Continue development of the Construction General Permit Coverage System as a management tool for the Virginia Stormwater Management Program (VSMP) regulations. The system will allow local entry of Construction General Permit registration statement and notice of termination information, including urban and suburban BMPs, into the database for regulated land-disturbing activities. This will allow DEQ to consolidate locality data for submission to EPA through the NEIEN (Phase I WIP, pg. 96)	Construction General Permit Coverage System	DEQ	Beta testing to begin no later than June 1, 2014 by selected localities representing a cross section of Virginia local governments 1/15/15 - Phase 1 of the Stormwater Construction General Permit System was placed into production in June 2014. This system allows DEQ and local government entry of Construction General Permit registration statements and notices of terminations, including post-development BMPs for regulated land-disturbing activities.
7/1/2014	U.2. Issue TMDL Action Plan Guidance for MS4s	Guidance Memorandum	DEQ	1/15/15 - Guidance document (GM14-2012) finalized in August 2014.

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
12/31/2014	U.3. Continue development of the Construction General Permit Coverage System as a management tool for the Virginia Stormwater Management Program (VSMP) regulations. Update the system to allow local entry of urban and suburban BMPs for unregulated land-disturbing activities. This will allow DEQ to further consolidate locality data for submission to EPA through the NEIEN (Phase I WIP, pg. 96)	Enhanced Construction General Permit Coverage System	DEQ	1/15/15 - DEQ is currently in the process of finalizing the Phase 2 Stormwater Construction General Permit System requirements, and it is anticipated that this Phase will be released to production during calendar year 2015. Once completed, the system will allow DEQ and local government entry of Construction General Permit modifications and transfers, and basic inspection information for regulated land-disturbing activities.
12/31/2014 10/1/2015	U.4. Complete development of a system to track, verify and report homeowner installed BMPs. The system will capture and report data in a format suitable for state Bay Model progress submissions	Homeowner BMP Tracking System – “SMART” Stormwater Management and Restoration Tracker Report Homeowner BMPs for 2015 progress	Alliance for the Chesapeake Bay - Virginia Office/DEQ	1/15/15 - System development has experienced some delays due to contractual and technical issues. Development and testing of the system will continue in 2015 with deployment anticipated by year’s end.
12/31/2014 12/31/2015	U.5. Issue 3 final MS4 individual permits and draft the remaining individual permits with the cooperation of the permittee, EPA, and other stakeholders. Reissuing all remaining MS4 permits by the end of 2015	3 final Phase I MS4 permits issued, all remaining individual MS4 permits in draft All final permits issued	DEQ	1/15/15 - Final MS4 Phase I individual permits for Chesterfield County and Prince William County effective in December 2014. Draft MS4 Phase I individual permits for Henrico County and Fairfax County sent to EPA in December 2014. DEQ is currently

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
	(Phase I WIP, pg. 93)			drafting the remaining six Phase I individual permits for EPA review. All MS4 Phase I individual permits will be reissued by the end of the Milestone period.
7/1/2014	U.6. Review MS4 program plans and issue permit coverage to the small MS4s newly designated based on the 2010 census	8 new localities or municipally owned facilities covered	DEQ	1/15/15 - Coverage provided under the small MS4 general VPDES permit to eight newly designated small MS4s by May 15, 2014.
9/30/2014		Remaining 8 newly designated MS4s covered		1/15/15 - Coverage provided under the small MS4 general VPDES permit to the remaining eight newly designated small MS4s by September 1, 2014.
12/31/2014	U.7. Achieve reductions from new development and redevelopment using urban BMPs through ramped up compliance with the Virginia Stormwater Management permit (VSMP) and the stormwater provisions of the Chesapeake Bay Preservation Act (CBPA)	Compliance strategy, audit and inspection guidance	DEQ	Strategy will be consistent with the national strategy (i.e., 2007 Clean Water Act National Pollution Discharge Elimination System Compliance Monitoring Strategy for the Core Program and Wet Weather Sources) 1/15/15 - A draft Construction Stormwater Compliance Monitoring Strategy has been developed. The document is due to be completed in January 2015. No new Chesapeake Bay Preservation Act compliance reviews were initiated, as the agency's focus has been on development and adoption of local stormwater ordinances. As of January 2015, 92 localities have approved

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
				local stormwater programs which require the installation and maintenance of BMPs to reduce pollutants from new development and redevelopment.
12/31/2015	U.8. Continue to implement contractor-applicator training and certification regulation, including a training and certification program for the proper handling, use, and application of fertilizer to nonagricultural lands. Establishes recordkeeping requirements for certified applicators (Phase I WIP, pg. 90)	Implement regulations	VDACS	2 VAC 5-405, <i>Regulations for the Application of Fertilizer to Nonagricultural Lands</i> , became effective February 1, 2012. Four (4) courses of training have been approved. One such course was developed jointly by Virginia Cooperative Extension (Virginia Tech), VDACS, and DCR, and it is available online at no cost to participants. 1,219 individuals have received credentials as Certified Fertilizer Applicators. 1/15/15 - 1,634 individuals have received credentials as Certified Fertilizer Applicators (CFA).
12/31/2015	U.9. Nutrient Management on Urban Turf – update standards and criteria per 2013 legislation (Phase I WIP, pg. 90)	Train 110 urban nutrient management planners, 35 VT extension specialists and 600 VDACS-certified fertilizer applicators	DCR	1/15/15 - Standards and Criteria updates went into effect March 13, 2014. Four training sessions were held around the state for 80 certified planners, including multiple extension specialists who deal with urban nutrient management. DCR, with VDACS and VT, is working to update the CFA online training modules to reflect changes. Previously trained CFA's will be updated through continuing education opportunities.

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
12/31/2015	U.10. Nutrient management on urban turf – residential sector	Implement pilot project in 6 Phase II MS4-targeted communities	DCR	1/15/15 - 6 Phase I/II MS4 communities with pilot programs have certified urban nutrient management planners on staff. Planned acreage during the 2014 progress year was reported. Continued technical and funding support is needed to expand outreach of these programs.
12/31/2015	U.11. Nutrient management on urban turf – golf courses; begin development of cost-share program for golf course nutrient management (Phase I WIP, pg. 90)	Urban nutrient management plans completed on 11,000 acres of golf courses during the milestone period	DCR	Grants have been awarded for nutrient management plans on up to 100 golf courses. Another grant will be awarded to increase golf course plans in mid August of 2014. 1/15/15 - The first round of Golf Course Nutrient Management Plan Writing grants was completed in December 2014. Over 7,800 acres of golf course plans have been completed. A second RFA was issued in October 2014 and a total of \$148,870 is being awarded to 13 private certified urban NM plan writers across the Commonwealth starting January 2015 for over 14,000 additional acres.
12/31/2015	U.12. Nutrient management on urban turf – state-owned facilities (Phase I WIP, pg. 90)	85% of state owned facilities with active plans	DCR/ VDACS	A nutrient management plan has been adopted for Department of Transportation properties. VDOT will assess the acreage that receives nutrients in new constructions and maintenance and will report such acreage. 1/15/15 - DCR worked with the DGS Division of Real Estate Services to obtain

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
				a database of all state-owned land. DCR is in the process determining which properties apply fertilizer. State-owned lands that currently have and previously had plans will continue to be renewed, tracked and reported.
12/31/2015	U.13. Improve tracking and reporting of urban nutrient management including state-owned facilities and local government lands (Phase I WIP, pg. 90)	60,000 acres of urban nutrient management each year	DCR/ VDACS	1/15/15 - Updated UNM plan reporting system is being developed. System will allow real-time data collection. Combining DCR acreage data with VDACS's CFA acreage data will meet deliverable.
7/1/2014 12/31/2015	U.14. Continue to implement amendments to the Virginia Fertilizer Law to protect water quality (Phase I WIP, pg. 90)	Implement new provisions	VDACS	Provisions regarding zero phosphorous in lawn maintenance fertilizer, as well as certain deicing agents containing various forms of nitrogen or phosphorous became effective December 31, 2013. VDACS is seeking to ensure compliance through label review at the time of product registration, and through marketplace inspections. As of mid-March 2014, inspectors in VDACS' Office of Plant Industry Services have visited 87 different retail locations and inspected 72 different products. Only three deicing products were found to contain urea, and those products were grandfathered under the statute.

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
				<p>1/15/15 - During November and December 2014, inspectors visited multiple retailers ahead of the cold winter months to ensure compliance with the deicing agent provisions. As of mid-December 2014, at least three large retailers that had taken delivery of non-compliant product had pulled the product off the floor at all of their Virginia locations. To date, over 600 tons of non-compliant product has been recalled, diverted or placed under stop sale.</p> <p>Provision regarding the slowly-available nitrogen content of lawn maintenance fertilizer and the application thereof became effective July 1, 2014.</p>
12/31/2015	U.15. Establish pollutant removal efficiencies for typical roadway vegetated shoulders and drainage conveyances thereby promoting the use of such practices over those employing impervious materials		VDOT	<p>VDOT will continue its interest in establishing pollutant removal efficiencies for these practices.</p> <p>1/15/15 - This activity is ongoing.</p>
12/31/2015	U.16. Provide DEQ stormwater management training to relevant VDOT stormwater personnel and contractors performing BMP review and inspection tasks		VDOT	<p>1/15/15 - VDOT provided DEQ Basic and Inspector SWM training to 950 VDOT internal personnel and consultant personnel working under contract to VDOT (equivalent to 2,612 training days).</p>

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
12/31/2015	U.17. Revise VDOT guidance documents to incorporate and promote the use of low impact development techniques and other innovative stormwater BMPs in roadway projects	Multiple guidance documents	VDOT	1/15/15 - This activity continues as guidance documents are updated.
12/31/2015	U.18. Continue “Stormwater Management Comparative Study of Porous Asphalt for I-66 and Route 234 Bypass Park & Ride Facility” to determine /develop maintenance requirements for permeable asphalt pavement	Study	VDOT	1/15/15 - This activity continues with monitoring and the collection of data.
Onsite Sewage Systems				
12/31/2014	OSS.1. Implement operation and maintenance (O&M) portions of final <i>Alternative Onsite Sewage Systems (AOSS) Regulations</i> (12VAC5-613) (Phase I WIP, pg. 106)		VDH	Implementation of the O&M requirements is underway. VDH is finalizing an implementation manual to improve consistency in application of the regulations. 1/15/15 - New staff additions have allowed work to begin on an enforcement policy.
12/31/2014	OSS.2. Train agency staff on new inspection, compliance, and enforcement procedures for alternative onsite sewage systems		VDH	1/15/15 - Upper level staff training on inspections will be completed Spring 2015. Training will be offered to remaining staff when the implementation and enforcement manual is completed.
12/31/2014	OSS.3. Develop a Global Positioning System (GPS) guidance policy for VDH staff in order to facilitate a consistent approach to geolocating onsite sewage systems in the Bay watershed	Capture location of all new AOSS installed in the Bay watershed during the milestone period	VDH	VDH will focus on geolocating alternative onsite sewage systems installed in the Bay watershed. 1/15/15 - New AOSS installed in the Bay watershed that meet an approved BMP are

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
				geolocated. This work will be expanded to include all new AOSS. Approval of a GPS guidance policy was delayed to address stakeholder concerns, but is on track for approval in 2015.
12/31/2015	OSS.4. Work with DEQ and local governments to capture and report the number of septic tank pump-outs that occur as a result of the Chesapeake Bay Preservation Act requirements (local ordinances), voluntary efforts and repairs throughout the Bay watershed	36,000 septic tank pump-outs each year	VDH/ DEQ	The target values are a combination of the annual pump-out data submitted to DEQ by the localities within the Chesapeake Bay Preservation Act area, and an annual estimate based on VDH data of the pump-outs performed voluntarily or as part of permitted repair activities outside Bay Act localities. 1/15/15 - This information is provided annually to DEQ for Bay progress reporting. For 2014 progress, VDH reported 1,986 pump-outs in the Bay watershed outside of the DEQ-managed CBPA areas. 26,557 pump-outs occurred in the Bay Act area.
12/31/2015	OSS.5. Work with DEQ and local governments to capture and report the number of connections to public sewer	600 sewer connections during the milestone period	VDH/ DEQ	The Virginia Environmental Information System (VENIS) database is capable of tracking onsite facilities that are connected to public sewer when the information is received from the locality. However, there is no requirement for the information to be reported to VDH. Discussions are planned to solicit the information from the wastewater authorities.

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
				1/15/15 - Where available, this information is provided annually to DEQ for Bay progress reporting. For 2014 progress, VDH reported 168 sewer connections in the Bay watershed.
12/31/2015	OSS.6. Report the number of alternative onsite sewage systems (AOSS) meeting the current BMP for 50% reduction, and the new BMPs for 20%, 38%, and 69% reduction, pending their final approval by the Chesapeake Bay Program	2,870 lbs TN load reduction over baseline conditions at the edge of drainfield during the milestone period	VDH	The nitrogen requirements in the Virginia AOSS regulation became effective in December 2013. 1/15/15 - New BMP categories of 20%, 38%, and 69% nitrogen reduction were approved for use by the Bay Program partnership. This information is provided annually to DEQ for Bay progress reporting. For 2014 progress, VDH reported 707 AOSS meeting one of the approved BMPs. This equates to approximately 2,074 pounds of nitrogen reduced over baseline conditions in the fiscal year.
12/31/2015	OSS.7. VDH continues to operate the VENIS database and look for ways to improve functionality		VDH	VDH continues to conduct extensive quality assessment and quality control of the data within the VENIS database in order to improve our ability to deliver reliable information and to better track progress. 1/15/15 - QA/QC work is ongoing. Programming changes have been made to the VENIS database, and more are planned, to incorporate tracking for the new BMPs that were approved in July

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
				2014, and to more accurately count all the onsite sewage BMP categories.
12/31/2015	OSS.8. Work with EPA and other TMDL stakeholders to better predict nitrogen losses through various soil types and treatment unit combinations in order to improve the accuracy of the Chesapeake Bay Watershed Model predictions for the onsite sector, especially for systems located above the geologic fall line		VDH	VDH commits to participation in workshops and stakeholder group meetings to advance the initiative. 1/15/15 - VDH staff participates in the CBPO Soil Attenuation Expert Panel, the CBPO Wastewater Technology Workgroup (WWTWG), the CBPO Water Quality Goal Implementation Team (WQGIT), the Virginia Chesapeake Bay Stakeholder Advisory Group (CBSAG), the Virginia Sewage Handling and Disposal Advisory Committee (SHADAC), and the VDH Environmental Health Managers meetings. VDH staff also participated in the CBPO On-Site Wastewater Treatment Systems Nitrogen Reduction Technology Expert Review Panel until the objective was completed and a final report was published.
Forest				
12/31/2015	F.1. Continue with BMP training sessions for forest harvesting contractors, Professional Foresters and forest landowners	4 training sessions each year	VDOF	Through VDOF programs, cooperation with the SHARP Logger Program and Cooperative Extension. 1/15/15 - For FY 2014, VDOF worked within the SHARP Logger Program to offer 14 training Programs with 307 participants present. Five of these programs were in the core program area

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
				with 126 attendees and the remaining 9 programs were for continuing education.
12/31/2015	F.2. Develop new on-line BMP training program for harvest contractors through VT Sustainable Harvesting And Resource Professional (SHARP) Logger Program focusing on underutilized harvesting BMPs and considerations for biomass harvesting practices	1 on-line training program each year	VDOF	1/15/15 - Developed a new logger training on-line course showing the beneficial use of harvesting slash (tree tops and limbs) in the stabilization of skid trails and bare soil areas.
12/31/2015	F.3. Continue BMP implementation monitoring to determine BMP rates being applied to forest harvest sites within the Bay Watershed through funding provided by a CBRAP Grant		VDOF	Monitoring meets the criteria set out in the Southern Group of State Foresters BMP Implementation Monitoring Protocol. 1/15/15 - This has been accomplished for calendar year 2013 with results showing on a random sampling of 240 sites across Virginia and a specific subsample taken within the Bay Watershed a tract average of 91% of appropriate BMPs being utilized on tracts harvested within the Bay Watershed. Monitoring is wrapping up for calendar year 2014 in December with reporting available in February 2015.
12/31/2015	F.4. Provide cost-share to forest harvesting contractors to implement BMPs (Phase I WIP, pg. 110)	90% of harvested area treated	VDOF	1/15/15 - Funding in the amount of \$250,000 was received from the Commonwealth's Water Quality Improvement Fund. At total of \$150,000 has been allocated to the Logger BMP Cost-Share Program that is cost-sharing

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
				BMPs on those areas of impaired streams that are directly impacted by the timber harvest.
12/31/2015	F.5. Continue enhanced enforcement of the Virginia Silvicultural Water Quality Law in the Chesapeake Bay Watershed utilizing CBRAP grant funding	Enforcement on 100% of harvest sites based upon agency established procedures and harvest inspection of each harvest site	VDOF	1/15/15 - VDOF has been actively engaged in enforcement of the Commonwealth's Silvicultural Water Quality Law. 95 WQ Law Actions took place on timber harvest operations within the Bay Watershed.
12/31/2015	F.6. Provide cost-share funding to those landowners to establish riparian forest buffers that would not otherwise qualify for cost-share funding through federal programs (Phase I WIP, pg. 62)		VDOF	1/15/15 - A \$250,000 grant was received from the Commonwealth's Water Quality Improvement fund for FY2015. \$100,000 of this grant has been allocated to this program and all funding has been committed for projects to be completed in the Spring of 2015.
12/31/2015	F.7. Slow the loss of forestland conversion and associated water quality benefits resulting from necessary municipal infrastructure development (Phase II WIP, pg. 33)	2000 acres of avoided forestland conversion achieved by integrating DOF forestland loss mitigation assessments of proposed development projects into state environmental impact review (EIR) processes	VDOF	VDOF initiated a voluntary mitigation program in November 2012 funded by a USFS grant that includes broader, more comprehensive participation in DEQ and VDOT EIR processes. 1/15/15 - VDOF estimates approximately 4000 acres of forestland loss was avoided in 2013 and 2014 by integrating DOF forestland loss mitigation assessments of proposed development projects into the state environmental impact review (EIR) processes of both DEQ and VDOT.

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
12/31/2015	F.8. Open Field Targeting Initiative – target open lands in Central Virginia that are not currently being used in an agricultural capacity or are otherwise abandoned. Identify landowners and contact for tree planting (Phase I WIP, pg. 62)		VDOF	Working in a 4 county area of Central Virginia to identify and contact landowners that have been targeted for tree planting projects. 1/15/15 - This project has been completed in the counties of Greene, Madison, Culpepper and Orange and has been expanded to include the counties of Albemarle, Louisa, Goochland and Rappahannock in the Central Piedmont. In addition, some funding for abandoned open-land planting projects has been received from the Alliance for the Chesapeake Bay to assist in covering 100% of tree planting costs and maintenance for landowner establishment of trees on open land. There have been 17 projects approved for 133.2 acres of tree planting for a total cost of \$136,945. All funding for this program has been allocated and planting projects will be completed in the Spring of 2015.
12/31/2015	F.9. Identification of incentives and drivers to assist communities directing growth away from key forestland assets such as groundwater recharge areas, intact and productive forests, and wildlife corridors to ensure forestland economic and ecosystem values are considered and weighed against competing land use options in land	List of incentives and drivers with action plan for implementing vetted through discussion with communities	VDOF	1/15/15 - A proposal has been submitted requesting 2015 funding and a partnership team headed by DOF with participation from DEQ, PDCs and others has been created to move forward if the funding request is granted.

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
	development decisions (Phase II WIP, pg. 34)			
12/31/2015	F.10. Initiation of dialogue with EPA, Bay jurisdictions, and others to determine the feasibility of achieving credited TMDL nutrient or sediment reductions from conserving existing forestland in the context of the Chesapeake Bay model (Phase II WIP, pg. 34)	Convene a group comprised of EPA, Bay jurisdictions, state agencies, and other stakeholders to initiate a dialogue that focuses on valuing conservation of existing forestland in the Chesapeake Bay model	DEQ/VDOF	This would have to be a collaborative effort contributed to and funded by multiple sources and coordinated with the other Bay partners. VDOF role would be as technical assistance and project management provider. 1/15/15 - A first module project aimed at achieving this objective was proposed in 2014 by a consortium of Virginia agencies and NGOs and approved by EPA and the CBP for implementation in 2015.
12/31/2015	F.11. Continue to focus riparian forest buffer establishment efforts in Potomac River Watershed and expand these efforts to the northern piedmont through the establishment of “Buffer Teams” composed of NRCS, FSA, DCR, VDOF, SWCD and other partners through a focused riparian forest buffer - GIS targeting / marketing initiative (Phase I WIP, pg. 62)	Work through a new 4 County area in Central Virginia in the same way targeting was accomplished in a 4 county Shenandoah Valley area	VDOF	Funding is currently being provided through a U. S. Forest Service Bay Grant. 1/15/15 - This initiative is on-going and the targeting portion has been expanded to the Central Piedmont counties of Rappahannock, Greene, Madison, Culpepper, Orange, Albemarle, Fluvanna, Louisa and Goochland. A direct mailing program will be initiated upon completion of the identification of targeted landowners.
12/31/2015	F.12. Permanently conserve forestland through permanent conservation easements or acquisition (Phase II WIP, pg. 34)	Conserve 6000 acres across the Virginia portion of the Watershed	VDOF	VDOF currently administers a robust conservation easement and land acquisition program focused on keeping the forestland intact and undivided, enabling landowners to manage their forestland for timber products and

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
				environmental values. 1/15/15 – Efforts are ongoing.
Industrial Stormwater				
7/1/2014	IS.1. Provide coverage for an estimated 900 facilities under reissued industrial stormwater GP including effluent nutrient monitoring and offsetting of new or expanding industrial SW nutrient loads	Permit registrations	DEQ	1/15/15 - Issued coverage to 757 facilities in the Bay watershed under the 2014 Industrial Stormwater General Permit, which became effective 7/1/14. Still working on permit coverage issued to approximately 30 additional facilities.
7/1/2014	IS.2. Begin 2 year program of effluent nutrient monitoring at permitted industrial stormwater facilities in the Bay watershed	Industrial stormwater effluent monitoring program	DEQ	Activity extends beyond this milestone period. 1/15/15 - All facilities in the Bay watershed have a permit condition that requires them to monitor their stormwater discharges for TN, TP and TSS.
Wastewater				
12/31/2014	W.1. Initiate reissuance of watershed GP including reduced WLAs in the James River basin as indicated in TMDL Appendix X	Publish NOIRA	DEQ	1/15/15 - NOIRA to be published in first quarter of 2015.
Extractive				
12/31/2014 12/31/2015	E.1. Enhance coordination between DEQ and DMME to collect and report BMPs installed on active mine sites as well as reclamation of active and orphaned mines		DMME/DEQ	1/15/15 - DMME and DEQ have established procedures for reporting BMPs on extractive lands. Currently, only mine reclamation is creditable in the Bay Model. Erosion and Sediment Control is available for use in planning scenarios but is not currently approved for credit in progress reporting. DEQ will seek such Bay Program approval in 2015.

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
12/31/2015	E.2. Ensure compliance with permit conditions for proper site planning and best management practice implementation	24,000 acres of Erosion and Sediment Control on Extractive Lands each year	DMME	1/15/15 - There are 47,335 acres of permitted mine sites in the Bay watershed. 25,274 of those acres are disturbed and have BMP's installed on them. 2,456 of the permitted acres have had reclamation completed.
12/31/2015	E.3. Document and report reclamation of active and orphaned mine sites	1,000 acres of mine reclamation during the milestone period	DMME	1/15/15 - For 2014 progress 401 acres of mine reclamation was credited in the Bay watershed.
Local Engagement				
12/31/2014	LE.1. Develop a communications strategy for engaging local stakeholders in WIP implementation, milestone planning and progress reporting (Phase II WIP, pg. 42)		DEQ	1/15/15 - Established the Chesapeake Bay Stakeholders Advisory Committee to provide advice and feedback on milestones, implementation, the Bay Watershed Agreement and other topics of interest to the Bay Program partnership. The group is also used as a communications conduit to share information with stakeholders more broadly.
12/31/2015	LE.2. Complete comprehensive evaluation of historical implementation data to assess data quality and update accordingly for use in v6.0.model calibration		DEQ	1/15/15 - \$1.5M in CBRAP funding will be made available to localities in 2015 to cover cost associated with collecting, formatting, and submitting quality BMP data for urban/developed lands and any available local land use/land cover data.
Federal Facilities				
10/1/2014 10/1/2015	FF.1. Engage federal agencies with facilities in Virginia to encourage participation in Bay	Participation by all federal facilities	DEQ	1/15/15 - The Bay Program has developed and approved a process for States to

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
	TMDL planning, implementation and reporting as outlined in EPA guidance	larger than 500 acres		<p>establish load targets for Federal Facilities. The process includes procedures for Federal Facilities to provide data to inform the development of two-year milestones and report BMP implementation.</p> <p>There are more than 200 federal facilities in Virginia, 74 are larger than 500 acres in size.</p>
Trading and Offsets				
6/30/2015	TO.1. Expansion of Existing Nutrient Credit and Stormwater Offset program (Phase I WIP, Page 12)	Promulgate nonpoint source credit certification regulation	DEQ	1/15/15 - Public hearings scheduled for February 2015. Written public comments to be received through March 16, 2015.
12/31/2014	TO.2. Begin development of online nutrient credit registry		DEQ	1/15/15 - Initial discussions on the scope of the online registry held. Anticipate more development of the registry effort in first half of 2015. Current registry maintained manually and made available on DEQ website.
2/1/2016	TO.3. Conduct study on the cost-effectiveness of nutrient credit use as an option for VDOT stormwater permitting requirements	Report	VDOT	<p>Activity extends beyond this milestone period.</p> <p>1/15/15 - Initial study completed by the Virginia Center for Transportation Innovation and Research and published in August 2014. Potential for additional study being evaluated.</p>

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
4/1/2014 4/1/2015	TO.4. Report results of wastewater nutrient monitoring and credit availability for the prior year's annual loads. Reports will be made available on DEQ's nutrient trading webpage	Report	DEQ	1/15/15 - 2013 Nutrient Loads Report published on DEQ website in April 2014.
7/1/2014 7/1/2014	TO.5. Publish notice of all nutrient credit exchanges and purchases for the previous calendar year and make all documents relating to the exchanges available to any person requesting them. Reports will be made available on DEQ's nutrient trading webpage	Report	DEQ	1/15/15 - 2013 Nutrient Trades Report published on DEQ website in July 2014.
James River Phased Implementation/Chlorophyll Study				
12/31/2015	JR.1. Define relationships between harmful algal blooms (HAB), indicators and designated use (DU) attainment (Phase I WIP, pg. 7 – 11)	Principal Investigator reports	DEQ	1/15/15 - Work ongoing. In fall 2014, closed-out VCU's water quality monitoring contract; 3 years of enhanced sampling data collected throughout the James estuary. Also completed laboratory bioassay experiments. Principal Investigators continue data analysis and research.
12/31/2015	JR.2. Continue to hold annual meetings of the Stakeholder Advisory Group (SAG)		DEQ	1/15/15 - Third SAG meeting held in September 2014; agenda included study background, DEQ staff risk assessment of microcystin in blue crabs, and current status of Scientific Advisory Panel work on criteria protectiveness, lines of evidence, bioassay results, and literature reviews.

Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
11/30/2014 5/31/2015	JR.3. Continue development of empirical relationships between HAB measures and designated use attainment	Science Advisory Panel (SAP) recommendations	DEQ	1/15/15 - Most recent SAP meeting held in November 2014; agenda included preliminary draft empirical relationships report, status report on James River HAB model development, Algal Growth model, and effects of river discharge on seasonal algae bloom patterns in the Upper James. Principal Investigators due to submit preliminary final draft reports in January 2015 for DEQ review/comment.
7/31/2015	JR.4. Utilize model to assess chlorophyll-a criteria alternatives, including the existing standards	Scenario and Alternatives Analysis Report	DEQ	1/15/15 - Model utilization for scenario runs will begin after model calibration and verification has been deemed satisfactory. Model development schedule extended to end of 2015 to allow for inclusion of additional monitoring results from 2011-13 in calibration dataset.
12/31/2015	JR.5. Continue development of models for indicators, nutrient inputs and HABs (Phase I WIP, pg. 9)	Final Model Study Report	DEQ	1/15/15 - Planning for a January 2015 meeting to review model calibration to-date; will include select SAP members, contractors as well as representatives from EPA-CBPO modeling team and STAC.
Additional Activities not Included in Original 2014-2015 Milestones				
	Develop online application to allow distributors of fertilizer to submit the required tonnage reports	Online application is moved to production	VDACS	1/15/15 - Virginia Code § 3.2-3610 requires commercial distributors of fertilizer to file annual reports to the Commissioner of VDACS showing the city or county where the product was distributed, the amounts (expressed in

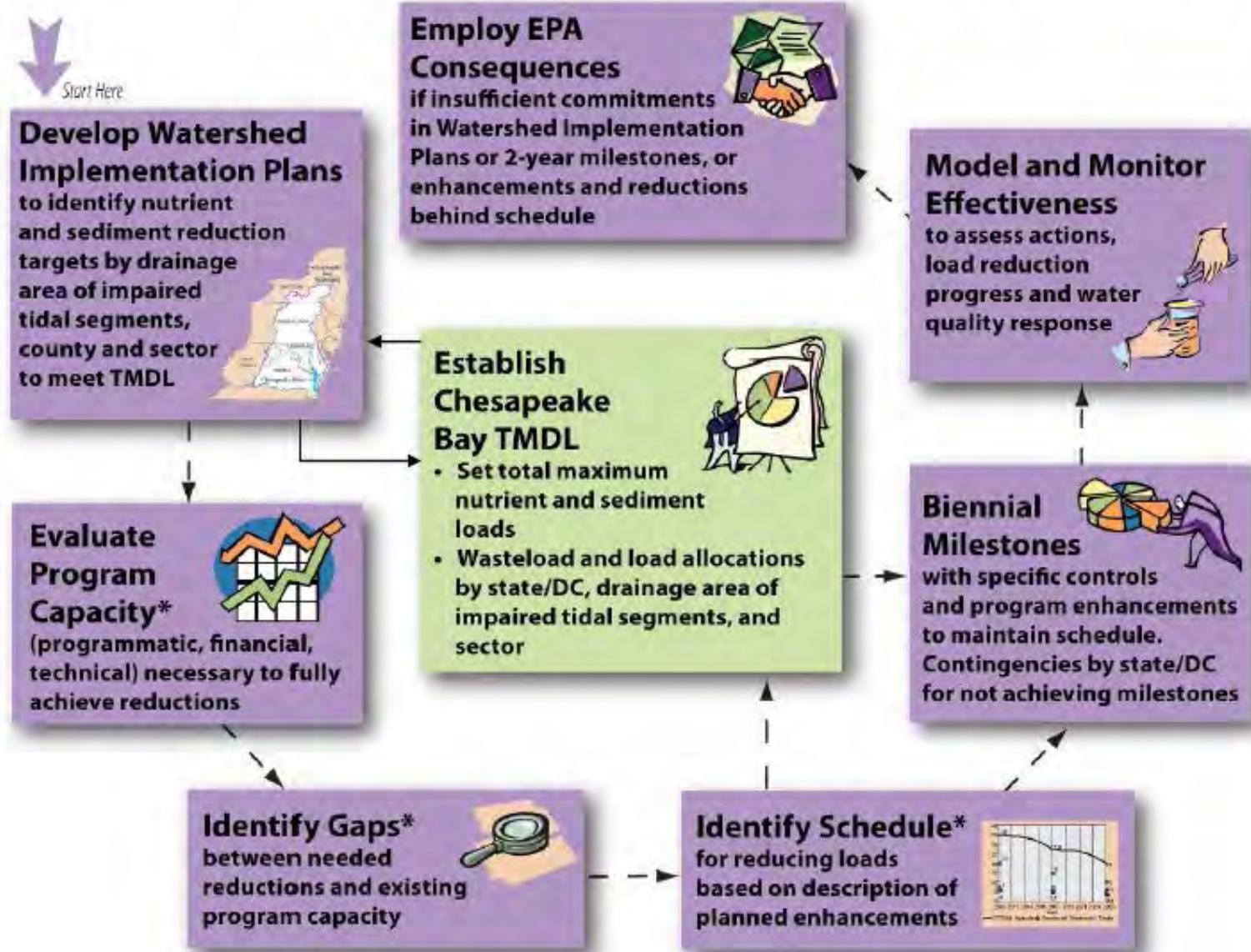
Virginia

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
				tons, or decimal portions) of each grade of fertilizer, and the form of the product, e.g., in bags, bulk, or liquid). This information is currently reported in hardcopy forms and must be subsequently entered by hand, a time-consuming process that takes months to complete.
	Issue Request for Applications for the distribution of \$28 million in Stormwater Local Assistance Funds		DEQ	1/15/15 – DEQ solicited applications for FY 2015 SLAF grant assistance and evaluated the 65 projects received from 25 localities totaling \$21,613,776. After an evaluation of funding availability, project eligibility, priority ranking, and analyses of the cost effectiveness of the eligible projects, the recommended projects for this second phase of SLAF funding includes 64 projects in 25 localities totaling \$21,488,776. The remaining \$6,511,224 will be carried over for a future solicitation in 2015.
* As part of the adaptive management process for achieving water quality goals, jurisdictions may submit programmatic milestones that modify, are in place of, or are in addition to milestones listed in their WIPs so long as the jurisdiction can demonstrate that they will be as effective toward meeting water quality goals.				

Chesapeake Bay TMDL & Milestones

Mandatory Pollution Diet at Work



*Included in Watershed Implementation plans

Watershed Implementation Plan Expectations

- Identify reductions by river basin, tidal segment watershed, county, source sector**
- Identify gaps and strategy for building local capacity**
- Commit to develop 2-year milestones at the county scale**
- Develop contingencies**

Watershed Implementation Plan

How Virginia will comply with the TMDL

Divided by Source Sectors such as Onsite, Agriculture,
Urban Stormwater, and Discharges

Submitted to EPA November 2010

About an 18% reduction in N anticipated

2 year milestones with interim 2017, final 2025

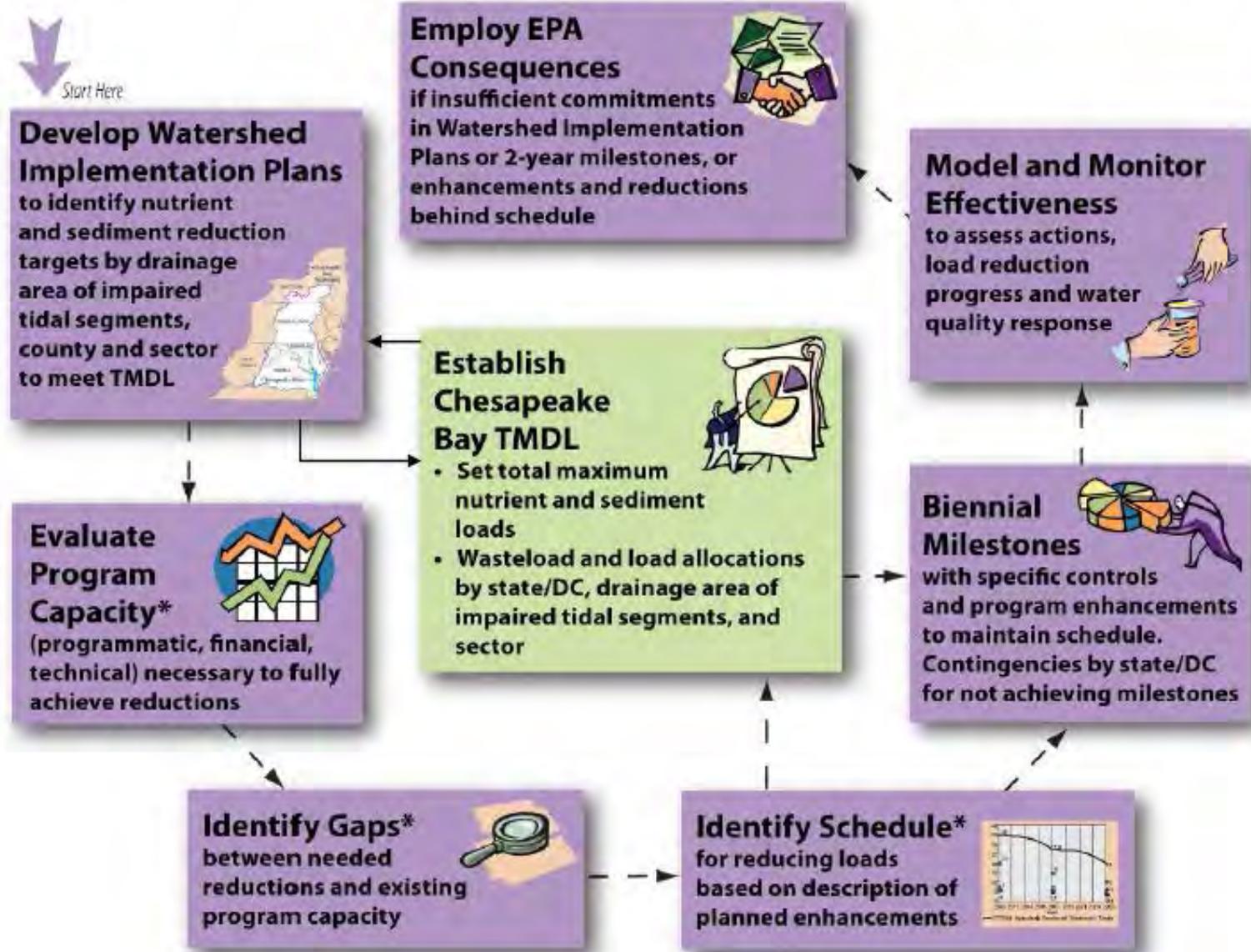
WIP Strategies for Onsite Sector

- Require use of BMPs to achieve at least 50% N reduction for all new small AOSS; New large AOSS will demonstrate compliance with <3 mg/l TN at the project boundary.
- Aggregate increased loads at jurisdictional level and make available for offsets (nutrient credit trading).
- Seek legislative changes to require all new and replacement systems to utilize 1) “shallow-placed” designs or (2) de-nitrification technology.
- Seek legislative changes to promote the use of community onsite systems.

WIP Strategies for Onsite Sector

- Seek legislative changes for 5 year pump-out in all Chesapeake Bay watershed localities.
- Seek legislative changes for tax credits for upgrade of existing conventional systems.
- Encourage the use of “Betterment Loans” for repairs; Explore financial incentives or relief to encourage the upgrade of existing systems especially for low and moderate income households.

Mandatory Pollution Diet at Work



*Included in Watershed Implementation plans

Milestones

Can find details on:

<http://www.epa.gov/reg3wapd/tmdl/ChesapeakeBay/EnsuringResults.html>

ON JANUARY 15, 2015, EPA RECEIVED THE TWO-YEAR MILESTONES PROGRESS UPDATES FOR THE 2014-2015 PROGRAMMATIC MILESTONES from Chesapeake Bay jurisdictions as part of the "pollution diet" or Bay TMDL. These progress updates are expected per the Two-Year Milestone Guide that was shared in July 2011. Chesapeake Bay jurisdictions will provide progress updates for programmatic milestones at the midpoint and the end of the milestone period.

Milestones

Measurable interim goals that are revised every 2 years
with interim updates annually

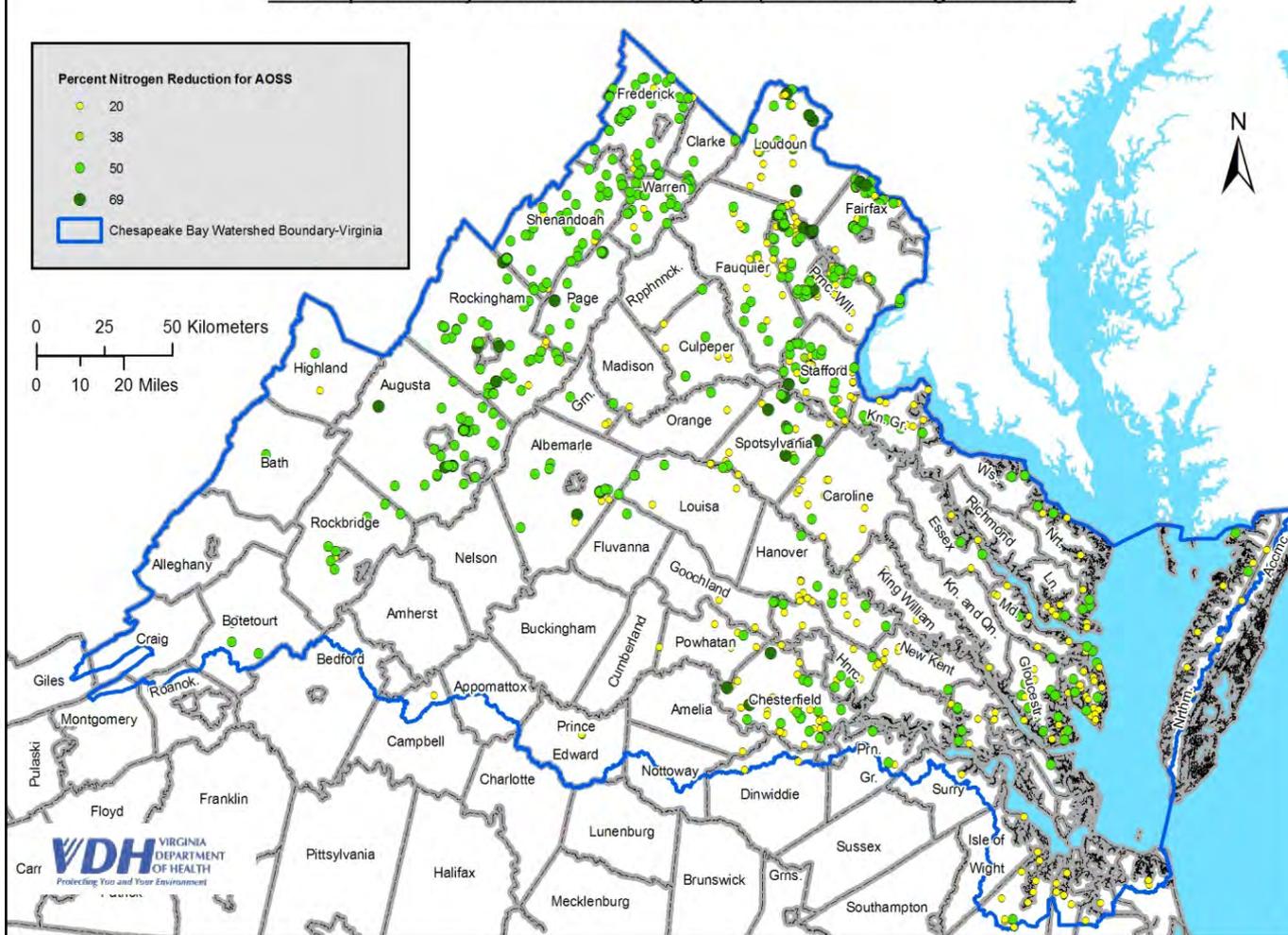
VDH milestones include:

- Training of staff in new regulations, inspections, compliance and enforcement
- Develop GPS policy to facilitate geolocating systems
- Work to capture pumpouts
- Work to captures number of hookups to central sewer
- Report BMPs
- Improve VENIS to aid in tracking and reporting
- Participate in various stakeholder groups

January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
				geolocated. This work will be expanded to include all new AOSS. Approval of a GPS guidance policy was delayed to address stakeholder concerns, but is on track for approval in 2015.
12/31/2015	OSS.4. Work with DEQ and local governments to capture and report the number of septic tank pump-outs that occur as a result of the Chesapeake Bay Preservation Act requirements (local ordinances), voluntary efforts and repairs throughout the Bay watershed	36,000 septic tank pump-outs each year	VDH/ DEQ	The target values are a combination of the annual pump-out data submitted to DEQ by the localities within the Chesapeake Bay Preservation Act area, and an annual estimate based on VDH data of the pump-outs performed voluntarily or as part of permitted repair activities outside Bay Act localities. 1/15/15 - This information is provided annually to DEQ for Bay progress reporting. For 2014 progress, VDH reported 1,986 pump-outs in the Bay watershed outside of the DEQ-managed CBPA areas. 26,557 pump-outs occurred in the Bay Act area.

Nitrogen-reducing Alternative Onsite Sewage Systems (AOSS) Installed in the Chesapeake Bay Watershed of Virginia (FY2012 through FY2014)





townhall.virginia.gov

Fast-Track Regulation Agency Background Document

Agency name	Virginia Department of Health
Virginia Administrative Code (VAC) citation(s)	12 VAC5-613
Regulation title(s)	Regulations for Alternative Onsite Sewage Systems
Action title	Amend 12 VAC5-613
Date this document prepared	November 21, 2014

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*.

Brief summary

Please provide a brief summary (preferably no more than 2 or 3 paragraphs) of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed. Alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation.

The Department is seeking to amend sections of the Regulations for Alternative Onsite Sewage Systems (12VAC5-613, AOSS Regulations), including the definition of direct dispersal to clarify that only excavation that creates a direct conduit or preferential path to groundwater is direct dispersal. The agency is also amending the regulations to allow for a nitrogen (N) limit that is

more financially attainable for permit holders and consistent with the 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. The Department is also proposing to add a section to the regulation to allow for less restrictive performance and monitoring requirements for repairs to failing alternative onsite sewage systems as well as voluntary upgrades to older systems. The current regulations have proved to be an economic stumbling block for owners who want to repair failing systems or upgrade their older septic systems. These less restrictive requirements would only be available to current onsite sewage systems that are directly dispersing effluent to groundwater with a capacity of less than 1,000 gallons/day. Since the AOSS Regulations became effective, the Commissioner has granted many variances to the AOSS Regulations for owners claiming financial hardship for repairs of failing systems and voluntary upgrades to older systems.

Acronyms and Definitions

Please define all acronyms used in the Agency Background Document. Also, please define any technical terms that are used in the document that are not also defined in the "Definition" section of the regulations.

"AOSS" means Alternative Onsite Sewage System
"BMP" means Best Management Practice
"Board" means Board of Health
"BOD₅" Biochemical Oxygen Demand 5-day
"EPA" means Environmental Protection Agency
"N" means Nitrogen
"TP" means Total Phosphorous
"TMDL" means Total Maximum Daily Load
"TSS" Total Suspended Solids

Statement of final agency action

Please provide a statement of the final action taken by the agency including: 1) the date the action was taken; 2) the name of the agency taking the action; and 3) the title of the regulation.

Legal basis

Please identify the state and/or federal legal authority to promulgate this proposed regulation, including:

1) the most relevant citations to the Code of Virginia or General Assembly chapter number(s), if applicable; and 2) promulgating entity, i.e., agency, board, or person. Your citation should include a specific provision authorizing the promulgating entity to regulate this specific subject or program, as well as a reference to the agency/board/person's overall regulatory authority.

Va. Code Section 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 Sections 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 Section 32.1-20 vests the Commissioner with all of the authority of the Board when not in session, and Va. Code Section 32.1-16 provides that the Virginia Department of Health shall be under the supervision and management of the Commissioner of Health.

Purpose

Please explain the need for the new or amended regulation. Describe the rationale or justification of the proposed regulatory action. Describe the specific reasons the regulation is essential to protect the health, safety or welfare of citizens. Discuss the goals of the proposal and the problems the proposal is intended to solve.

The AOSS Regulations took effect on December 7, 2011. The AOSS Regulations define terms such as “direct dispersal,” set performance requirements for AOSSs, including nitrogen (N) limits, and establish a program for operation and maintenance of AOSS. When the AOSS Regulations were promulgated, the EPA provided limited information on expected N reductions in the TMDL. The N limit established in 12VAC5-613-90 D is no longer consistent with EPA’s model program, which recognizes a higher N limit. Similarly, through the implementation of the regulations the agency has found that the definition of direct dispersal is too stringent and encompasses many activities, such as boring holes for soil evaluation, that do not lead to direct dispersal of sewage effluent to groundwater.

In the development of the AOSS Regulations, VDH staff worked with the EPA and neighboring states to develop BMPs for small alternative sewage systems through an expert review panel. The panel submitted a draft report to EPA’s Wastewater Workgroup on September 10, 2013. The draft report contained multiple BMPs and more BMPs will be added, reviewed, and approved over time. Unless Virginia designers use an approved BMP, EPA will not provide a credit (or N reduction) for the TMDL. As such, 12VAC5-613-90 D (1) should be amended because it is not consistent with the TMDL and the requirements of 90 D (1) should be moved into a BMP to allow for reporting to the EPA to allow for a credit for the TMDL.

The AOSS Regulations also regulate direct dispersal of treated effluent to groundwater. 12VAC5-613-90 D (4) establishes a discharge limit of 3 mg/l TN and 0.3 mg/l total phosphorus

(TP) in the Chesapeake Bay Watershed, which is the limit of technology. However, the limit of technology has proved to not be economically feasible for the repairs and voluntary upgrades of small AOSSs of less than 1,000 gallons/day. The Commissioner has granted many variances to owners claiming financial hardship for repairs of failing systems and allowed for lesser requirements for direct dispersal. By some estimates, it can cost over \$30,000 to obtain this level of treatment for TN and TP. The amendment of 12 VAC5-613-90 D(4) will remove the requirement of TN of 3mg/l and .3 mg/l of TP for systems within the Chesapeake Bay Watershed and will allow these systems to meet the same N requirements for other AOSS in the Chesapeake Bay Watershed.

Section 12VAC5-613-90 C sets stringent performance and operational for all systems that result in direct dispersal. These stringent requirements include: 1) quarterly sampling and remote monitoring of the treatment works; 2) treatment of wastewater prior to application to the soil that produces BOD₅ and TSS concentrations each equal to or less than 5 mg/l, fecal coliform concentrations less than or equal to 2.2 col/100 ml as a geometric mean with no sample exceeding 14 col/100 ml, N concentration of less than 5 mg/l, high level disinfection, and filtration capable of demonstrating compliance with an average turbidity of less than or equal to 2 Nephelometric turbidity units prior to disinfection; 3) renewable operating permits; and 4) requiring the designer to provide a hydrogeologic analysis of the receiving groundwater. These stringent requirements, while appropriate for new construction, present a significant financial barrier to repairing or voluntarily upgrading existing systems directly dispersing effluent to ground water. The Commissioner has granted many variances to owners claiming financial hardship for repairs and voluntary upgrades. The amendments to will provide a more financially attainable level of treatment, while still providing a high level of treated effluent that exceeds the systems being repaired or upgraded.

Rationale for using fast-track process

Please explain the rationale for using the fast-track process in promulgating this regulation. Why do you expect this rulemaking to be noncontroversial?

The amendments are required to be consistent with the EPA’s model program for the TMDL for N limit. Further, the amendments will allow for more homeowners to affordably repair failing sewage systems or upgrade old sewage systems that are dispersing effluent to ground water and the action will not be controversial as it reduces a financial burden to homeowners while improving public health and the environment.

Substance

Please briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the “Detail of changes” section below.

Amending the definition of direct dispersal of effluent to ground water in 12 VAC5-613-10 to clarify that excavation excludes soil disturbance that does not create a direct conduit or preferential path to groundwater. Amend 12 VAC5-613-90C by adding subsection (8) to allow for repaired or voluntarily upgraded direct dispersal systems to provide a 50% reduction of TN as compared to a conventional gravity drainfield system in accordance with 12VAC5-613-90B and provide TL3 treatment and standard disinfection in accordance with 12VAC5-613-80 (13) Table 2 for systems with less than twelve inches separation to groundwater. Repealing 12 VAC5-613-90 D(4) removes the requirement of TN concentration of less than or equal to 3 mg/l and TP concentration of less than or equal to .3 mg/l for direct dispersal systems in the Chesapeake Bay Watershed. Instead these systems will meet the 50% reduction of TN as compared to a conventional gravity drainfield system as is required of other AOSS in the watershed.

Issues

Please identify the issues associated with the proposed regulatory action, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, please indicate.

The primary advantage to the public for these changes is a reduced financial burden to repair failing onsite sewage systems that disperse effluent to groundwater. The amendments also allow for a less restrictive total nitrogen reduction for small AOSS within the Chesapeake Bay Watershed, from 3mg/l to TN concentration to a 50% reduction of TN as compared to a conventional system. The advantage to the agency is to provide for more repairs of failing dispersal systems without individually granting waivers to the performance requirements due to the economic hardships involved in meeting the requirements. Currently the Commissioner has granted fifteen variances to allow for the repair or voluntary upgrade of existing direct dispersal systems within the Chesapeake Bay Watershed. These standards while reduced from what was initially promulgated are still protective of public health, exceed the level of treatment provided by existing direct dispersal systems, are within the requirements of the EPA’s model program for the TMDL, and ease the financial burden on the homeowner while streamlining the agency’s processing of applications.

Requirements more restrictive than federal

Please identify and describe any requirement of the proposal which is more restrictive than applicable federal requirements. Include a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements or no requirements that exceed applicable federal requirements, include a statement to that effect.

These changes to the regulations are not more restrictive than the EPA’s model program which is not currently required by regulation; instead they seek to conform the state requirements to the EPA’s model program.

Localities particularly affected

Please identify any locality particularly affected by the proposed regulation. Locality particularly affected means any locality which bears any identified disproportionate material impact which would not be experienced by other localities.

The localities most affected by these substantive changes will be those within the Chesapeake Bay Watershed. The changes reflect the EPA’s model program and are more financially obtainable for homeowners.

Regulatory flexibility analysis

Pursuant to § 2.2-4007.1B of the Code of Virginia, please describe the agency’s analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 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.

The agency could choose to not amend the regulations and expect homeowners to meet the current requirements of nitrogen reduction which exceeds the limit proposed by the EPA model program. However, the number of variance requests and comments submitted to the agency by AOSS designers demonstrate that these regulatory requirements are not obtainable either because of the financial hardship involved or because they are the limits of currently available technology

which is not always feasible in repair and upgrade situations due to limited site and soil conditions.

Economic impact

Please identify the anticipated economic impact of the proposed new regulations or amendments to the existing regulation. When describing a particular economic impact, please specify which new requirement or change in requirement creates the anticipated economic impact.

<p>Projected cost to the state to implement and enforce the proposed regulation, including: a) fund source / fund detail; and b) a delineation of one-time versus on-going expenditures</p>	<p>Will add no additional cost to the state, will result in a decrease in cost as staff will not have to individually process variance requests to the current regulatory scheme.</p>
<p>Projected cost of the new regulations or changes to existing regulations on localities.</p>	<p>Will add no additional cost to localities.</p>
<p>Description of the individuals, businesses, or other entities likely to be affected by the new regulations or changes to existing regulations.</p>	<p>Owners of AOSS systems, especially in the Chesapeake Bay will be able to more affordably construct, repair, and voluntarily upgrade their AOSS systems.</p>
<p>Agency’s best estimate of the number of such entities that will be affected. Please include an estimate of the number of small businesses affected. Small business means a business entity, including its affiliates, that: a) is independently owned and operated and; b) employs fewer than 500 full-time employees or has gross annual sales of less than \$6 million.</p>	<p>Approximately 30,000 onsite sewage systems could be affected. The Department estimates that approximately 250 of the 30,000 systems are owned by small businesses.</p>
<p>All projected costs of the new regulations or changes to existing regulations for affected individuals, businesses, or other entities. Please be specific and include all costs including: a) the projected reporting, recordkeeping, and other administrative costs required for compliance by small businesses; and b) specify any costs related to the development of real estate for commercial or residential purposes that are a consequence of the proposed regulatory</p>	<p>No additional reporting requirements or costs for real estate development.</p>

changes or new regulations.	
Beneficial impact the regulation is designed to produce.	Reduce the financial burden on homeowners and small business to construct, repair, or voluntarily upgrade a existing onsite sewage systems.

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.

The agency could choose to not amend the regulations and expect homeowners to meet the current requirements of nitrogen reduction which exceeds the limit proposed by the EPA model program. However, the number of variance requests and comments submitted to the agency by AOSS designers demonstrate that these regulatory requirements are not obtainable for failing or older systems seeking upgrades either because of the financial hardship involved or because they are the limits of currently available technology.

Public participation notice

If an objection to the use of the fast-track process is received within the 30-day public comment period from 10 or more persons, any member of the applicable standing committee of either house of the General Assembly or of the Joint Commission on Administrative Rules, the agency shall: 1) file notice of the objections with the Registrar of Regulations for publication in the Virginia Register; and 2) proceed with the normal promulgation process with the initial publication of the fast-track regulation serving as the Notice of Intended Regulatory Action.

Periodic review and small business impact review report of findings

If this fast-track is the result of a periodic review/small business impact review, use this form to report the agency's findings. Please (1) summarize all comments received during the public comment period following the publication of the Notice of Periodic Review and (2) indicate whether the regulation meets the criteria set out in Executive Order 17 (2014), e.g., is necessary for the protection of public health, safety, and welfare, and is clearly written and easily understandable. In addition, as required by 2.2-4007.1 E and F, please include a discussion of

the agency’s consideration of: (1) the continued need for the regulation; (2) the nature of complaints or comments received concerning the regulation from the public; (3) the complexity of the regulation; (4) the extent to which the regulation overlaps, duplicates, or conflicts with federal or state law or regulation; and (5) the length of time since the regulation has been evaluated or the degree to which technology, economic conditions, or other factors have changed in the area affected by the regulation.

This fast-track is not the result of a periodic review or small business impact review.

Family impact

Please assess the impact of this regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one’s spouse, and one’s children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

The only potential family impact is that the substantive changes will allow for more families to affordably repair their failing alternative onsite sewage system.

Detail of changes

*Please list all changes that are being proposed and the consequences of the proposed changes; explain the new requirements and what they mean rather than merely quoting the proposed text of the regulation. If the proposed regulation is a new chapter, describe the intent of the language and the expected impact. Please describe the difference between existing regulation(s) and/or agency practice(s) and what is being proposed in this regulatory action. If the proposed regulation is intended to replace an emergency regulation, please list separately: (1) all differences between the **pre**-emergency regulation and this proposed regulation; and 2) only changes made since the publication of the emergency regulation.*

For changes to existing regulation(s), use this chart:

Current section	Proposed new section	Current requirement	Proposed change, intent, rationale, and likely impact of proposed
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number	number, if applicable		requirements
12 VAC 5-613-10		Direct dispersal of effluent to ground water" means less than six inches of vertical separation between the point of effluent application or the bottom of a trench or other excavation and ground water.	<p>Direct dispersal of effluent to ground water means less than six inches of vertical separation between groundwater and the point of effluent application or the bottom of an effluent-dispersal trench or other excavation. Other excavation excludes minor tillage of the soil surface without soil removal; replacement of fill material with better quality fill material as determined by the Department to improve the ability of the site to treat wastewater; house foundations; tank excavations; force main and header line excavations; and soil disturbances, including pre-existing drainfields installed prior to _____(effective date of regulatory change), that are not designed for surface or groundwater drainage, and do not create a direct conduit to ground water.”</p> <p>The intent of the proposed change is to clarify what a direct dispersal sewage system is. Designs were submitted to the department for systems that would not meet the definition of a direct dispersal system but for the fact they were located over older system sites where excavation extended to the water table. The new design was then considered direct dispersal and subject to all the requirements of 12 VAC5-613-90 C, even though the design sought to improve upon the existing site conditions. Further the broad language of the current regulatory definition of direct dispersal could encompass such activities as soil borings which are not part of the design of a system.</p>

Current section number	Proposed new section number, if applicable	Current requirement	Proposed change, intent, rationale, and likely impact of proposed requirements
12 VAC 5-613-90 D(4)		For direct dispersal of effluent to groundwater in the Chesapeake Bay Watershed, TN concentration shall be less than or equal to 3 mg/l and total phosphorus concentration shall be less than or equal to 0.3 mg/l.	<p>For direct dispersal of effluent to groundwater in the Chesapeake Bay Watershed, shall be less than or equal to 3 mg/l and total phosphorus concentration shall be less than or equal to 0.3 mg/l.</p> <p>The intent of the proposed change is to allow AOSS in the Chesapeake Bay Watershed that are direct dispersal to meet the same requirements as other AOSS in the Chesapeake Bay Watershed of a 50% reduction TN as compared to a conventional gravity drainfield system in accordance with 12 VAC 5-613-90 D(1) and the requirements of 12 VAC 5-613-90 D for direct dispersal systems.</p> <p>The current regulatory requirement is more restrictive than that of the EPA’s model program of 10 mg/l N for systems less than 1000 ft to the water’s edge. The EPA model program does not set TP limits as Phosphorus migration occurs at a slower pace than that of nitrogen; and phosphorus will continue to adsorb to down gradient unsaturated soils as it migrates. The current regulatory scheme includes requirements and recommended management approaches to prevent system failure which would result in additional phosphorous reaching the Bay.</p>

Current	Proposed	Current requirement	Proposed change, intent, rationale,
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section number	new section number, if applicable		and likely impact of proposed requirements
12 VAC 5-613-90 D(1)		<p>D. The following additional nutrient requirements apply to all AOSSs in the Chesapeake Bay Watershed:</p> <p>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:</p> <p>a. Compliance with one or more best management practices recognized by the division such as the use of a NSF certified treatment; or</p> <p>b. Relevant and necessary calculations provided to show one or both of the following:</p> <p>(1) Effluent TN concentration of 20 mg/l measured prior to application to the soil dispersal field ; or</p> <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 (>18 inches below the soil</p>	<p>D. The following additional nutrient requirements apply to all AOSSs in the Chesapeake Bay Watershed:</p> <p>1. All small AOSSs shall provide a 50% reduction of TN as compared to a conventional gravity drainfield system; compliance with this subdivision may [shall] be demonstrated through the following:</p> <p>a. [c] ompliance with one or more best management practices recognized by the division [.]</p> <p>b. Relevant and necessary calculations provided to show one or both of the following:</p> <p>(1) [an] Effluent TN concentration of 20-30 mg/l measured prior to application to the soil dispersal field [.] ; or</p> <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 (>18 inches below the soil surface).</p> <p>The proposed change would allow the Department to move the D(1)(b) regulatory requirements into a BMP document 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</p>

		surface).	Program and consistent with the actual performance statistics recorded for systems currently permitted by the agency.
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If a new regulation is being promulgated, use this chart:

Section number	Proposed requirements	Other regulations and law that apply	Intent and likely impact of proposed requirements
12 VAC5-613-90 C(8)	<p><u>8. When an application is filed for a repair or a voluntary upgrade to an existing direct dispersal sewage system, where no other viable regulatory compliant option exists, the sewage system shall provide a 50% reduction of TN as compared to a conventional gravity drainfield system in accordance with 12VAC5-613-90 B and provide TL3 treatment and standard disinfection in accordance with 12VAC5-613-80 (13) Table 2 for systems with less than twelve inches separation to groundwater. The following requirements will not be applicable to repair or voluntary upgrade applications for systems installed prior to December 7, 2011, that result in direct dispersal:</u></p> <p><u>a. 12 VAC5-613 90 C (1) through C(4)</u></p>	12 VAC-5-610 and the rest of the requirements of 12 VAC5-613	For alternative onsite sewage systems directly dispersing sewage effluent to groundwater that are either filing applications to repair or voluntarily upgrade an existing system that results in direct dispersal, the new regulation would allow these systems to not be subject to the performance, operating and renewable permit requirements of 12 VAC5-613-90 C. The intent of this provision is to reduce the financial burden of meeting the requirements of new construction of direct dispersal AOSS for failing systems or those seeking to voluntarily upgrade their systems.

	<p><u>b. 12 VAC5-613 90 C(6) and C(7)</u></p> <p><u>c. and 12 VAC5-100 G. The system will be monitored in accordance with 12 VAC5-613-100 D if it is generally approved or E if it is not generally approved.</u></p>		
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Proposed Fast Track Regulatory
Modifications to the AOSS
Regulations

Why?

- To revise the definition of direct dispersal to clarify that only an excavation that creates a direct, preferential path to groundwater is direct dispersal.
- Provide an allowance for reduced direct dispersal requirements for repairs and voluntary upgrades
- Modify the nutrient limits for direct dispersal in the Chesapeake Bay watershed to align with EPA guidance.
- Modify the language for BMPs to align with EPA guidance.

Current Definition

"Direct dispersal of effluent to ground water" means less than six inches of vertical separation between the point of effluent application or the bottom of a trench or other excavation and ground water.

Proposed Definition

- Direct dispersal of effluent to ground water means less than six inches of vertical separation between groundwater and the point of effluent application or the bottom of an effluent-dispersal trench or other excavation. Other excavation excludes minor tillage of the soil surface without soil removal; replacement of fill material with better quality fill material as determined by the Department to improve the ability of the site to treat wastewater; house foundations; tank excavations; force main and header line excavations; and soil disturbances, including pre-existing drainfields installed prior to _____ (effective date of regulatory change), that are not designed for surface or groundwater drainage, and do not create a direct conduit to ground water.”

Main changes to definition

- Excludes the following 'excavations'
 - Minor tillage without soil removal
 - Replacement of fill with better fill
 - House foundations; tank, force main and header line excavations
 - Pre-existing drainfields installed prior to reg change
 - Non-drainage excavations that do not create a direct conduit to groundwater

Repairs/Voluntary Upgrades

- The direct dispersal requirements, while appropriate for new construction, present a significant financial barrier to repairing or voluntarily upgrading existing systems directly dispersing effluent to ground water. The Commissioner has granted many variances (15+) to owners claiming financial hardship for repairs and voluntary upgrades. The amendments will provide a more financially attainable level of treatment, while still providing a high level of treated effluent that exceeds the systems being repaired or upgraded.

Repairs/Voluntary Upgrades

- When no other regulatory compliant option exists and direct dispersal is proposed, then new standards apply:
 - 50% TN reduction as compared to conventional
 - TL3
 - Standard disinfection
- 90.C.1 -4, and 6,7 and 100 G do not apply for systems install prior to December 7, 2011

Repairs/Voluntary Upgrades

- Monitoring
 - Generally approved system follow 100.D
 - Non-generally approved follow 100.E.

Modifications of Bay limits

- Eliminate 90.D.4 (Nutrient limits for Bay direct dispersal)
 - ~~– For direct dispersal of effluent to groundwater in the Chesapeake Bay Watershed, shall be less than or equal to 3 mg/l and total phosphorus concentration shall be less than or equal to 0.3 mg/l.~~
- Basis: The EPA model program does not support the lower N and P limit.

Modifications of Bay limits

- Modify 90.D.1. (Bay N limits for small AOSS)
 - Eliminates option to submit just calculations (90.1.b)
 - Clarifies that all small AOSSs must use an approved BMP. BMPs will be modified to allow unique designs and designs for non-residential systems (that do not comply with a BMP) with monitoring to verify

Modifications of Bay limits

- Basis: EPA will not provide a credit for designs that do not use an approved BMP and have no verification method. The reg as written is not consistent with the TMDL or the WIP.
- New BMP:
 - Will recognize 30 mg/l TN as the appropriate end of pipe value for 50% TN reduction units. (instead of 20 mg/l in current reg)
 - Will address non-residential systems.
 - Will outline sampling requirements

DATE: DRAFT

TO: District Health Directors
Environmental Health Managers **GMP #2015-02**

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 2015-02: Revises and combines GMP-128 and GMP-155. **GMP- 128 and GMP-155** are hereby rescinded.

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*. GMP-128 outlined procedures for processing applications for repair permits (construction permits) pursuant to § 32.1-164.1:1.B and 12VAC5-610-280.C.2. Legislation approved in 2011(Acts of Assembly, CH.394) amended and reenacted § 32.1-164.1:1 of the Code of Virginia and added § 32.1-164.1:3 which governs permits for voluntary system upgrades. Permits issued pursuant to § 32.1-164.1:3 are subject to the provisions of §32.1-164.1:1. GMP-155 outlined procedures for issuing voluntary upgrade permits. Legislation approved in 2015 (Acts of Assembly, CH. 111) amended and reenacted § 32.1-164.1:1. GMP-2015-02 outlines procedures for issuing repair permits and voluntary upgrade permits in accordance with §32.1-164.1:1 and §32.1-164.1:3 respectively.

General – Repair permits: 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 a new requirement(s) 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 *treatment* requirements of the *Sewage Handling and Disposal Regulations* (12VAC5-610-20 et seq., as amended July 1, 2000, the *Regulations*) and the *Alternative Onsite Sewage System Regulations* (12VAC5-613-10 et seq., effective December 7, 2011) (*Regulations*). That owner, however, would be eligible for a waiver from pressure dosing, as long as the original permit did not require pressure dosing in either the primary or reserve areas. The obverse also 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 is ineligible for a waiver.

A qualified owner may request a waiver and the Commissioner shall grant same unless she finds “that the failing system was installed illegally without a permit.” Except as provided in §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. To obtain a new operating permit, the new owner must comply with the *Regulations* waived, as well as any subsequent requirements imposed since the waiver was granted, if any. The owner shall submit an application for a repair permit. No fee will be required.

Any owner who receives a waiver must record the Waiver in the land records of the jurisdictional circuit court and disclose the waiver in writing to any potential purchaser or mortgage holder.

Section 280.C.2 of the *Regulations* provides that the district health director or environmental health manager may, in cases of economic hardship, waive the requirement for additional treatment for repairs. This policy shall be used to implement § 280.C.2 of the *Regulations* when processing an application to repair a failing sewage system.

To ensure the Commissioner provides the financial relief intended by law, Virginia Department of Health (VDH) personnel will continue to design 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 systems designed with a waiver under § 32.1-164.1:1.B do not comply with the *Regulations* 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 repair system in accordance with § 32.1-164.1:1.B and this policy.

Procedures – Repair: The responsible Environmental Health Specialist Senior (EHSS) 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.

Attachment #1 is a letter notifying the owner of the requirement(s) for additional treatment and/or pressure dosing and that the 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 under the Waiver because the system does not require additional treatment or pressure dosing. The owner may also choose to hire a private sector designer to prepare plans and specifications for the repair system.

Prior to sending a letter by certified mail notifying an owner he is eligible for a waiver, the EHSS must determine whether the failing system was installed illegally without a permit. If the EHSS finds substantial evidence that the system was installed illegally without a permit, he should immediately inform the appropriate VDH supervisory personnel to initiate enforcement proceedings. The letter in Attachments #1 does not apply to systems installed illegally without a permit.

The responsible EHSS should make reasonable efforts to educate owners about the public health and environmental benefits of advanced treatment and/or pressure dosing, and also the benefits of going to the private sector for design and financial consultation. Such reasonable efforts to inform the owner must not, however, unnecessarily delay him from obtaining a permit to construct a repair. VDH staff shall not advise owners about whether to request a waiver; 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 #2**. When properly executed by the owner, Attachment #2 constitutes the request for waiver and the waiver itself. If an owner is asking VDH staff to design a repair system under a waiver, that waiver must be properly executed and in the hands of the responsible EHSS before a construction permit is released. The process for issuing a construction permit with a waiver is the same as issuing a conditional permit under § 250.J of the *Regulations*. When the owner produces written proof (certification) that he has recorded the waiver in the land records, the construction permit is released and becomes effective one day later.

An owner may receive multiple repair permits under a waiver (using good judgment) until the waiver is null and void. Owners who are granted a repair waiver are ineligible for a voluntary upgrade permit since the system is technically still failing (does not meet current requirements).

Exception:

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

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

General – Voluntary Upgrade Permits: Owners of onsite and alternative discharging sewage systems may wish to upgrade those systems even when they are not failing. Requests to upgrade typically arise during real estate transactions when a private inspector indicates an existing sewage system is not performing adequately, 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 of Virginia (Code) allows VDH to issue construction permits for voluntary upgrades of **non-failing** systems using the same rules already in place for failing systems.

Under § 32.1-164.1:3, a new system must comply with current regulations if possible. For onsite sewage systems, if such compliance is not possible, the permit must comply with Parts IV and V of the *Sewage Handling and Disposal Regulations* (12VAC5-610, SHDR) to the greatest extent possible. Where compliance with the SHDR 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. A waiver shall be granted if requested. 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.

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:

- Dwellings may or may not be occupied.
- There shall be no proposed increase in flow or strength of sewage from what is 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 that are required *for any reason*, including the authorization of building permits pursuant to *Code* § 32.1-165, building expansions, replacement of faulty components, and the repair of failing systems are involuntary and *are not covered under the voluntary upgrade section of this policy*.
- 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 are ineligible for voluntary upgrade permits.
- All applications for voluntary upgrade permits with supporting documentation from private designers require a site visit by an EHS to ensure compliance with the statute. 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 and is eligible for a voluntary upgrade permit.
- Voluntary upgrade waivers are 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 **unless the owner received a previous repair waiver on or between July 1, 2004, and December 6, 2011.**
- Voluntary upgrade proposals to relocate remote drainfields to the owner's property or a different site may not meet the intent of the statute. 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 waived design, 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. The answer is design dependent. Merely relocating a system to another site does not necessarily reduce threats to public health or to ground and surface waters and may not be eligible for a voluntary upgrade permit.

Definition:

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

Procedure:

VDH will continue to accept 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 will be waived following 12VAC5-620-80.C. Applications will be reviewed following current VDH policy with the exception that all submittals with supporting documentation require a site visit by an EHS. If necessary, voluntary upgrade applications will be granted an exception in accordance with 12VACS-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.

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.

Attachment #3 is a letter notifying the owner of the requirement(s) for additional treatment and/or pressure dosing and that a waiver is available. This letter will mainly be used for bare applications. 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 under the Waiver because the system does not require 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 wishing to receive a waiver must return the properly executed waiver request and agreement found in **Attachment #4**. When properly executed by the owner, Attachment #4 constitutes the request for waiver and the waiver itself. If an owner is asking VDH staff to design a voluntary upgrade under a waiver, that waiver must be properly executed and in the hands of the responsible EHSS before a construction permit is released. The process for issuing a construction permit with a waiver is the same as issuing a conditional permit under § 250.J of the *Regulations*. When the owner produces written proof (certification) that he has recorded the waiver in the land records, the construction permit is released and it becomes effective one day later.

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 **Attachment #5**) are not required to be recorded, though endorsements shall be notarized. All construction permits issued for voluntary upgrades shall have the following statement attached: "**The upgrades specified in this construction permit are completely voluntary and not required by law.**"

Attachment #6 is an informational letter for any owner who (a) obtained a waiver to repair a failing onsite sewage system pursuant to § 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.

Attachment #1- (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 an OSE/PE. Based on our site and soil evaluations (copy attached), the conditions on your lot do not substantially comply with the minimum requirements of the *Sewage Handling and Disposal Regulations* (12 VAC 5-610-20, as amended July 1, 2000, the *Regulations*) for a Septic Tank Effluent (STE, *Regulations*, § 594) system 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 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.

The Virginia General Assembly passed a law effective July 1, 2004, that provides an opportunity for you to request a Waiver from the requirements for advanced treatment, pressure dosing, or both, as long as your system was not installed illegally without a permit and treatment or pressure dosing was not required by your original permit and approval documents (Va. Code, § 32.1-164.1:1). Based upon my review of documents regarding your onsite system, you are eligible for the Waiver should you choose to apply.

If you choose to request the Waiver, VDH staff will design your system at your request, as long as the requirements are relatively simple. If you forego the Waiver, or decline to request VDH design your system, you must hire a qualified consultant to design your repair or replacement system. Currently, VDH recognizes PEs (Professional Engineers licensed in the Commonwealth of Virginia) for any type of system design, and OSEs (Onsite Soil Evaluators licensed by the Department of Professional and Occupational Regulation) for certain system designs that do not require the practice of engineering. If you request the 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 the 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 repair 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 and future consequences should you transfer the property to a new owner. The law requires you record the Waiver in the land records of the clerk of the circuit court in the jurisdiction in which your property is located. A repair Waiver is only transferable between a husband and wife and certain other property transfers identified under the *Code of Virginia* §32.1-164.1:1.C.

The Waiver and the operating permit for your system are both null and void immediately whenever your property is transferred to any person (or entity) other than your spouse (husband or wife). It is unlawful to operate an onsite sewage system without a valid operating permit (*Regulations*, § 240). This means that any new owner will be unable to lawfully occupy the dwelling/structure and operate the sewage system until obtaining a new operating permit. The new owner will need to apply for, and obtain, a new construction permit that complies with those parts of the *Regulations* previously waived by you, (i.e. advanced treatment and/or pressure dosing) and any new requirements if any adopted after the Waiver was granted. The operating permit for the system can only be reinstated after the upgrades are completed. You are required by law to disclose these conditions in writing to any and all potential purchasers or mortgage holders. *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 the 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 the 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 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 our 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- we cannot recommend one product over another, just as we cannot design or recommend a specific proprietary pre-engineered system. Being unable to recommend certain products or proprietary designs because of our unique position as a regulator and having scarce resources to provide you with detailed consultation, it is possible you would receive an inferior design 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 remember VDH cannot advise you regarding how a system under a Waiver may affect your ability to transfer the property since you are required to upgrade the system at the time of property transfer; nor can we advise you about liability issues should your system fail and adversely impact drinking water supplies. A system installed under a Waiver does not comply with the *Regulations*; adopted by the Board of Health to provide the least intrusive methods to adequately protect groundwater supplies and public health.

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. Because your sewage system has failed, your sewage system operation permit is null and void in accordance with 12 VAC 5-610-340 of the *Regulations*. As I mentioned earlier in this letter, you are required to have an operating permit in order to use an onsite sewage system and 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 hearing. Your written request for a hearing (also called an informal fact-finding conference) must be received in this office within 30 days from 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 #2 – (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 _____, 2014, by _____ <Insert Owner(s)> _____, 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 the COMMONWEALTH OF VIRGINIA).

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

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

WHEREAS, the DEPARTMENT, in accordance with the *Sewage Handling and Disposal Regulations* (12VAC5-610) and the *Alternative Onsite Sewage Systems Regulations* (12VAC5-613), 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 determined that the REGULATIONS, require additional treatment or pressure dosing in order to adequately protect public health and ground and surface water resources; and

WHEREAS, Va. Code § 32.1-164.1:1, provides that whenever any onsite sewage system is failing and the regulations for repairing such failing system 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 a repair system; and

WHEREAS, the State Health Commissioner shall grant such WAIVER, provided that the owner’s existing sewage system was installed legally with a permit and is on or serves real property consisting of not less than one nor more than four dwelling units; and

WHEREAS, the DEPARTMENT, as designee of the State Health Commissioner, determined, and OWNER affirms, that the existing sewage system was installed legally with a valid permit, and

WHEREAS, OWNER, by executing this AGREEMENT, hereby requests that the State Health Commissioner grant the WAIVER provided at Va. Code § 32.1-164.1:1 from additional treatment and or pressure dosing requirements.

NOW, THEREFORE, in exchange for the mutual promises contained herein, the parties agree as follows: The WAIVER provided at Va. Code §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 Circuit Court having jurisdiction over the PROPERTY. Except as provided in Va. Code §32.1-164.1:1 subsection 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. OWNER furthermore understands and affirms that the DEPARTMENT cannot provide such in-depth consulting as OWNER might need or desire, and that it may be in OWNER's best interests to seek advice from competent private professionals to discuss the legal and financial considerations for all of the possible design options available in the marketplace. OWNER acknowledges and accepts that OWNER may receive an inferior design from the DEPARTMENT because the DEPARTMENT has limited resources for detailed consulting and because the DEPARTMENT cannot propose specific proprietary products which may benefit OWNER because of its regulatory relationship with manufacturers. OWNER acknowledges and understands that OWNER may receive a more complete and well-advised design if OWNER seeks advice from private consultants because private consultants are not subject to the same resource restrictions and regulatory relationships as the DEPARTMENT.

Environmental Health Manager

Date

COMMONWEALTH OF VIRGINIA

CITY / COUNTY OF _____

On this the _____ day of _____, 2014

_____ 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:

DRAFT

Understood and Accepted

OWNER

Date

COMMONWEALTH OF VIRGINIA

CITY / COUNTY OF _____

On this the _____ day of _____, 2014

_____ 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 #3- (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 an OSE/PE. Based on our site and soil evaluations (copy attached), the conditions on your lot do not substantially comply with the minimum requirements of the *Sewage Handling and Disposal Regulations* (12 VAC 5-610-20, as amended July 1, 2000, the *Regulations*) for a Septic Tank Effluent (STE, *Regulations*, § 594) system 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.

The Virginia General Assembly passed a law effective July 1, 2011, that provides an opportunity for you to request a Waiver from the requirements for advanced treatment, pressure dosing, or both, as long as your system was not installed illegally without a permit and treatment or pressure dosing was not required by your original permit and approval documents (Va. Code, § 32.1-164.1:1). Based upon my review of documents regarding your onsite system, you are eligible for the Waiver should you choose to apply.

If you choose to request the Waiver, VDH staff will design your system at your request, as long as the requirements are relatively simple. If you forego the Waiver, or decline to request VDH design your system, you must hire a qualified consultant to design your voluntary upgrade system. Currently, VDH recognizes PEs (Professional Engineers licensed in the Commonwealth of Virginia) for any type of system design, and OSEs (Onsite Soil Evaluators licensed by the Department of Professional and Occupational Regulation) for certain system designs that do not require the practice of engineering. If you request the 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 upgrade system- **do not check the box requesting VDH to design your system**. If you request the 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 your property is located. A voluntary upgrade Waiver is transferable.

You are required by law to disclose the Waiver in writing to any and all potential purchasers or mortgage holders.

If you want an OSE/PE to design your system after requesting the 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 the 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 our 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- we cannot recommend one product over another, just as we cannot design or recommend a specific proprietary pre-engineered system. Being unable to recommend certain products or proprietary designs because of our unique position as a regulator and having scarce resources to provide you with detailed consultation, it is possible you would receive an inferior design 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 remember VDH cannot advise you regarding how a system under a Waiver may affect your ability to transfer the property; nor can we advise you about liability issues should your system fail and adversely impact drinking water supplies. A system installed under a Waiver

does not comply with the *Regulations*; adopted by the Board of Health to provide the least intrusive methods to adequately protect groundwater supplies and public health.

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 hearing. Your written request for a hearing (also called an informal fact-finding conference) 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

DRAFT

Attachment #4 – (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 _____, 2014, by _____ <Insert Owner(s)> _____, 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 the COMMONWEALTH Of VIRGINIA).

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

WHEREAS, OWNER requested a construction permit to voluntarily upgrade the existing onsite sewage system; 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 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, Va. Code § 32.1-164.1:1 provides that whenever an owner has elected to voluntarily upgrade an onsite sewage system pursuant to Va. Code § 32.1-164.1:3, 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

WHEREAS, the State Health Commissioner shall grant such WAIVER, provided that the owner’s existing sewage system was installed legally with a permit and is on or serves real property consisting of not less than one nor more than four dwelling units; and

WHEREAS, the DEPARTMENT, as designee of the State Health Commissioner, determined, and OWNER affirms, that the existing sewage system was installed legally with a valid permit, and

WHEREAS, OWNER, by executing this AGREEMENT, hereby requests that the State Health Commissioner grant the WAIVER provided at Va. Code § 32.1-164.1:1 from additional treatment requirements.

NOW, THEREFORE, in exchange for the mutual promises contained herein, the parties agree as follows: The WAIVER provided at Va. Code §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 Circuit Court having jurisdiction over the PROPERTY.

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. OWNER furthermore understands and affirms that the DEPARTMENT cannot provide such in-depth consulting as OWNER might need or desire, and that it may be in OWNER's best interests to seek advice from competent private professionals to discuss the legal and financial considerations for all of the possible design options available in the marketplace. OWNER acknowledges and accepts that OWNER may receive an inferior design from the DEPARTMENT because the DEPARTMENT has limited resources for detailed consulting and because the DEPARTMENT cannot propose specific proprietary products which may benefit OWNER because of its regulatory relationship with manufacturers. OWNER acknowledges and understands that OWNER may receive a more complete and well-advised design if OWNER seeks advice from private consultants because private consultants are not subject to the same resource restrictions and regulatory relationships as the DEPARTMENT.

Environmental Health Manager

Date

COMMONWEALTH OF VIRGINIA

CITY / COUNTY OF _____

On this the _____ day of _____, 2014

_____ 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:

DRAFT

Understood and Accepted

OWNER

Date

COMMONWEALTH OF VIRGINIA

CITY / COUNTY OF _____

On this the _____ day of _____, 2014

_____ 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 #5 – (Voluntary Upgrades)

VOLUNTARY UPGRADE
RELEASE, HOLD HARMLESS,
And INDEMNIFICATION AGREEMENT

This AGREEMENT is made and entered into this ____ Day of _____, 20__, by and between _____ and _____, 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 the COMMONWEALTH Of VIRGINIA).

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

WHEREAS, OWNER requested a construction permit to voluntarily upgrade the existing onsite sewage system; 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, Va. Code § 32.1-164.1:1 provides that whenever an owner has elected to voluntarily upgrade an onsite sewage system pursuant to Va. Code § 32.1-164.1:3, 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 shall grant such WAIVER, provided that the owner's existing sewage system was installed legally with a permit; and

WHEREAS, the DEPARTMENT, as designee of the State Health Commissioner, determines, and OWNER affirms, the existing sewage system was installed legally with a valid permit, and

WHEREAS, OWNER requested and received the WAIVER provided at Va. Code § 32.1-164.1:1 from additional treatment requirements and/or pressure dosing; and

WHEREAS, Va. Code § 32.1-164.1:3 states that the DEPARTMENT may request OWNER to indemnify and hold harmless the Commonwealth before issuing the construction permit.

NOW THEREFORE, OWNER agrees to and hereby does release the COMMONWEALTH OF VIRGINIA 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

COMMONWEALTH OF VIRGINIA 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 COMMONWEALTH OF VIRGINIA for any sum of money or judgment against the COMMONWEALTH OF VIRGINIA, 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 COMMONWEALTH OF VIRGINIA, 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 COMMONWEALTH OF VIRGINIA.

Environmental Health Manager

Date

COMMONWEALTH OF VIRGINIA

CITY / COUNTY OF _____

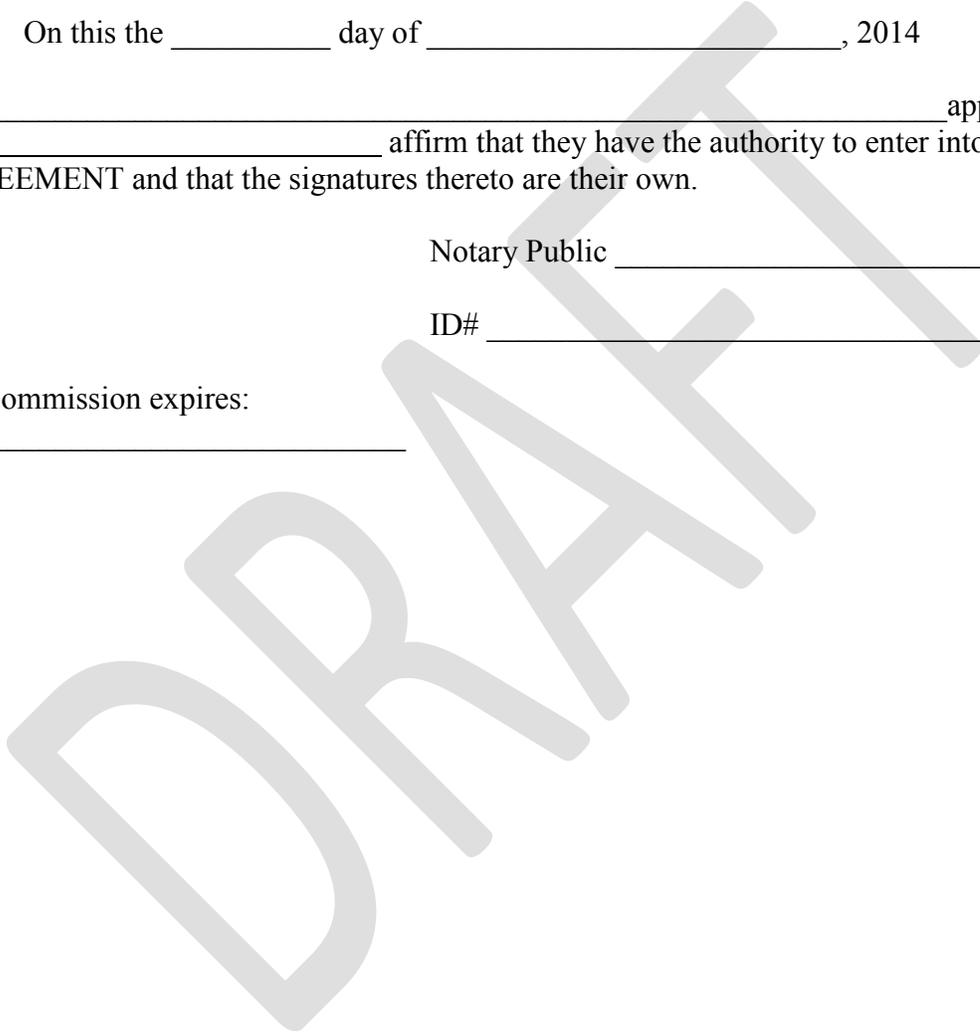
On this the _____ day of _____, 2014

_____ 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 _____, 2014

_____ 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:

DRAFT

Attachment #6 - (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 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 it's 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,