

**Virginia Department of Health (VDH)  
Sewage Handling and Disposal Advisory Committee (SHADAC)  
Meeting Minutes (DRAFT)**

**Date:** June 5, 2020

**Time:** 10 am to 2 pm

**Location:** Online meeting using WebEx

**Present**

SHADAC Members: Mike Lynn (Home Builders Association of Virginia), Lance Gregory (VDH), Alan Brewer (Virginia Association of Counties), William Johnson (American Council of Engineering Companies), Colin Bishop (Manufacturer), Curt Linderman (Department of Environmental Quality, for Valerie Rourke), Laura Farley (Virginia Association of Realtors), Curtis Moore (Virginia Onsite Wastewater Recycling Association), Bill Timmons (General Public), Matt Tolley (Virginia Association of Professional Soil Scientists)

VDH Staff: Anthony Creech, Marcia Degen, Joshua Hepner, Anne Powell, Shawn Carman, Mike Callahan, Jay LeReche, Sonal Iyer, Julie Henderson, Sameh Megally

GENERAL PUBLIC: Trapper Davis, Trish Henshaw (Department of Professional and Occupational Regulation), Scott Currie

Meeting began 10:00 am

Chairman Lynn welcomed attendees and Mr. Gregory provided instruction on using WebEx system. Mr. Gregory introduced Julie Henderson, the new Director for the Office of Environmental Health Services. Ms. Henderson introduced herself.

**Agenda**

Chairman Lynn introduced the agenda. Laura Farley motioned approval of Agenda. Colin Bishop seconded motion. All in favor, the agenda was approved.

**Minutes from August 20, 2019, meeting**

Minutes from August 20, 2019 meeting, Mr. Brewer motioned approval of minutes. Mr. Bishop seconded the motion. All in favor, the minutes were approved.

**Public Comment Period**

Chairman Lynn asked for public comments. No comments from public.

## **Standing Agenda Items**

### Issues related to internal VDH policies and processes.

Mr. Gregory – Reported on an issue raised regarding voluntary upgrades and SAP issues and noted it would be later on the agenda. Recent concern regarding voluntary upgrades versus minor modification are being evaluated by the Division.

Mr. Moore reported on Real Estate Inspections (HB 1266). Only DPOR licensees may inspect onsite systems as part of real estate transactions effective July 1. Chairman Lynn noted he will be teaching a class to realtors about the legislation. Ms. Farley noted the National Sanitation Foundation no longer accredits inspectors and realtors are concerned that there are parts of the Commonwealth where DPOR licensees are not available, which is creating anxiety with realtors. Ms. Henshaw reported that DPOR can produce a list searchable by zip code (caveat that it is always just a snapshot of the licensees when the list is created). Mr. Gregory noted that VDH also has maps based on self-reporting by license holders. VOWRA will be offering NAWT inspector certification classes during October conference.

## **New Business**

### Environmental Health Database and Operation and Maintenance (O&M) Portal

Ms. Iyer provided an update via a PowerPoint Presentation. After the May 5, 2020 O&M portal training, VDH heard loud and clear that the regulated community found the portal to be in need of improvement. O&M Portal Version 2.0 has been developed by VDH/Healthspace. This process involved finalizing a new design and pulling previous input from Version 1.0 simultaneously, and incorporating feedback from regulated community for improvements. Time constraints prevented a large focus group. The training date for Version 2.0 is June 11, 4:00 pm on Webex.

The SHADAC preview PowerPoint is attached to these minutes which covers: new data entry interface, operator information auto populate, owner address will autopopulate if same as system address, check boxes for maintenance, dropdown for several field tests, ability to attach reports, ability to review and edit reports prior to submission, payment, ability to print reports, and ability to print receipts. Several other features which will be covered in training session. VDH is organizing a small focus group (working with VOWRA) with respect to future improvements. Trapper Davis volunteered for the focus group.

Members asked if the portal allows you to look up previous reports; which it does.

Asked whether you can you look up other operator's reports, Ms. Iyer noted that is not available in the O&M portal. VDH is investigating development of a forward facing aspect of EHD similar to restaurant inspections, but O&M Portal is not the vehicle.

Chairman Lynn asked where VDH can give a solid reason why the Commonwealth couldn't contract with an organization to provide sole source data entry. Ms. Iyer noted that the EHD system is not just onsite, it is also restaurant, rabies, and all environmental health programs other

than Shellfish Safety. The O&M portal needed to be updated because of transition from VENIS to EHD and had to be combined. VDH is building partnerships with Carmody and RME for integration, but this cannot be finalized until the O&M portal is finalized. There is also a data security factor – VITA and privacy of system owners which is a factor.

Members commented that the Loudoun system works and it is not clear why the Commonwealth can't accomplish the same thing. Loudoun's database is dedicated to onsite and not part of larger environmental health database. VDH is aware of the concern and the focus group will be looking at it in detail as part of the forward facing evaluation.

#### General Assembly Session Update

Mr. Gregory reported the following:

HJ106 – This was a study bill asking VDH to study the use of Alternative Onsite Sewage Systems in the Commonwealth. It was stricken in subcommittee at the request of the patron.

HB 1366 – Directing VDH and DEQ to develop a program to remediate onsite systems in recurrently flooded areas by adding soil over the septic tank and drainfield. The bill was assigned to Agriculture, Chesapeake and Natural Resources, and continued to the 2021 session. Mr. Gregory commented that the bill raises an issue the SHADAC need to be thinking about – the impact of the rise in sea level. Mr. Moore reported that NOWRA has worked on obtaining a \$100 million in federal funding for onsite systems (Water Infrastructure Act). Mr. Gregory indicated that VDH had received funding in the State Budget for a wastewater infrastructure manager to seek funding for repairs; however, there those funds were not allocated as result of the COVID-19 response.

#### Hardship Guideline Updates - Transition Progress

Mr. Gregory provided the attached PowerPoint presentation to provide an update on revisions to the Hardship Guidelines.

- Plan was to update based on equations.
- VDH has reviewed data from 5/1/2019 to 4/30/2020 – but need some follow-up to fill gaps.
- Private sector designs exceeded last year's projections.
- Current data does not include Fairfax and Loudoun – so should be larger increase overall.
- General safe, adequate, and proper (SAP) data – 87% conducted by VDH but need to follow-up with local health departments regarding the count.
- Private well data is unavailable, database did not capture the title (VHD OSE, private OSE, PE, or Well Driller) or name of the design. Have informed database team of necessary improvement.
- Initial projections for localities making transition – about 20% of remaining counties should transition to private sector this year.
- Additional items for consideration:

- Professional Geologists (PG) for well evaluations. Some local ordinances require a PG to conduct a hydrogeologic study for certain projects. HB 888 however doesn't include PGs as a design option, thus VDH received Hardship request that property owners had already paid a private sector PG for evaluation. Mr. Gregory asked the SHADAC whether this should it be a hardship? After discussion, SHADAC agreed that owners should not have to pay twice for a service, and were amenable to continuing to grant approval as a further consideration.
- Eastern Shore Designer Capacity – There are currently two designers doing the vast majority of work and some are reporting that the designers have reached their capacity. After discussion, SHADAC consensus is to let the market respond, and not specify an Eastern Shore hardship.
- Limited Occupancy Permits. There have been a few hardship request for limited occupancy permits with no change to system – shows up as “other” hardship. Mr. Gregory asked whether this should be a specific hardship. There was no consensus on this other than that the process for granting limited occupancy permits needs to be streamlined.

#### Revising the Sewage Handling and Disposal Regulations

Mr. Gregory reported on initial efforts towards revision of the regulations, noting that due to the size and complexity of the regulations, subgroups should likely address specific sections of the regulations. Mr. Gregory provide a presentation on the following draft guiding principles:

1. All systems fully protective of public health and environment
2. Revisions reduce the complexity of the program
3. Update to current industry practices and mindful for future industry improvements
4. Incorporating Health in All Policies approach
5. Ensure all voices impacted by revisions are heard

SHADAC Members suggested the following with regards to revising the regulations:

- Add something about education and outreach to the public regarding O&M including for conventional?
- Incorporate “useful life” concept into design.
- Define what protecting health means with respect to onsite systems.
- Would like to see regulations address the community improvements angle – not just lot by lot.
- Sustainability should be a guiding principle.
- Need metrics - log reduction of pathogens as a public health outcome.
- Potential to use a risk based approach using critical control points.

With regards to developing working groups and collecting great input from the general public, the SHADC suggested the following:

- Need a category just for repair and replacement.
- Need to determine interaction with AOSS regulations.
- Maybe need to do an overarching evaluation – risk management based – before coming up with categories.
- Focus on how local health departments implement to avoid unintended consequences of varying directives from different localities.
- What is measurable versus a prescriptive approach? What are the outcomes? What is the baseline?
- VDH should reach out to various groups - VEHA, Environmental Health Managers, EHSs (who do the work), realtors, Farm Bureau, etc. to discuss initial big picture concepts for revisions.

#### Voluntary Upgrade and SAP Policy Discussion

Mr. Gregory discussed a recent issue that was brought to his attention regarding voluntary upgrades and SAPs. Sometime a system is not failing, predates regulations, has no increasing flow, but everyone agrees the system is not expected to function properly (e.g. severely undersized). The question arose of whether the Code allows the issuance of a voluntary upgrade permit to serve a condition of issue of an SAP. The answer is yes it can if the voluntary upgrade improve if there is agreement that with the upgrade the system can be expected to function properly. VDH is seeking to revise the GMPs for voluntary upgrades and SAPs in hopes of clearing matter up relative to § 32.1-165.D of the Code.

Members asked whether the issue represents selective enforcement; if his system is no good but not “failing,” why can’t the owner build a garage? In the example, neither VDH nor the private sector were willing to say that the existing system was SAP even though it might not qualify as failing. VDH suggests bringing proposed revisions for the policies to the SHADAC for review. Chairman Lynn noted that the forms are kind of confusing, and suggested reviewing them as well.

#### Wastewater Infrastructure Workgroup Update and Discussion

Mr. Gregory reported on recent work of the Wastewater Infrastructure Workgroup, created by the secretaries of Health, Natural Resources, Commerce & Trade, with representatives from VDH, DEQ, VIMS, DHCD, and William & Mary to better coordinate efforts and funding resources to address wastewater infrastructure needs. Mr. Gregory shared a presentation updating some of that work, including the:

- Wastewater Problem Area Identification Map.
- Wastewater Data Viewer.

The workgroup is currently review recommendations for next steps, such as data improvement needs, investigating the barrier to reporting failures and seeking to address barriers, improving education on wastewater issues, evaluating the effects of climate change on wastewater infrastructure, and increased funding for assistance.

**Final Business**

The next meeting will also be done online, and will be a short meeting to go over updated information for the Hardship Guidelines. Mr. Gregory will send out a poll on meeting dates.

Motion to adjourn by Ms. Farley, seconded by Mr. Tolley.

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

**Date:** June 5, 2020  
**Time:** 10 am to 2 pm  
**Location:** Webinar using Webex (use instructions below to join)

You can access the meeting on your computer, phone, or mobile device with the meeting link below.

<https://vdhoep.webex.com/vdhoep/j.php?MTID=m283698930c99c4dc6ec2bdb550e0296f>

If accessing via a mobile device, you will need to download the Webex Meet app prior to joining the meeting.

When joining the meeting, please use the meeting number and password below:

Meeting number (access code): 132 838 6617  
Meeting password: F2PpDEMBw89

**Agenda**

**Administrative (20 minutes)**

1. Welcome and instruction on using Webex system. (5 minutes)
2. Approve agenda. (5 minutes)
3. Review summary from August 20, 2019 meeting. (10 minutes)

**Public Comment Period (15 minutes)**

**Standing Agenda Items (10 minutes)**

1. Issues related to internal VDH policies and processes. (10 minutes)

**New Business (20 minutes)**

1. Environmental Health Database and Operation and Maintenance Portal (20 minutes)

Break (5 minutes)

**New Business Continued (60 minutes)**

2. 2020 General Assembly Session Update; HB 1266. (10 minutes)
3. Hardship Guideline Updates - Transition Progress. (50 minutes)

**Break (5 minutes)**

**New Business Continued (50 minutes)**

4. Revising the Sewage Handling and Disposal Regulations. (50 minutes)
  - a. Guiding principles. (10 minutes)

- b. Establishing subgroups. (30 minutes)
- c. Next steps. (10 minutes)

**Break (5 minutes)**

**New Business Continued (50 Minutes)**

- 5. Voluntary Upgrade and SAP Policy Discussion (20 minutes)
- 6. Wastewater Infrastructure Workgroup Update and Discussion (30 minutes)

# Operation and Maintenance Portal Version 2.0

Virginia Department of Health

Sonal Iyer

June 5, 2020

# New Data Entry Interface

## O&M Report Submission

Utilize the Direct Entry or Data Wizard below to enter your data either by entering each report separately on the interface. Once complete, it will ask you to verify the information before submitting it. Once you have verified all the information is complete and accurate, the "Data Wizard" will close and you will need to click "Submit" below to submit your reports.

### System Location Information

<b>Bldg Number</b> <input type="text" value="Enter a value for Bldg Number"/>	<b>Street Name/PO Box</b> <input type="text" value="Enter a value for Street Name/PO Box"/>
<b>Suite / Apt</b> <input type="text" value="Enter a value for Suite / Apt"/>	<b>City</b> <input type="text" value="Enter a value for City"/>
<b>Physical County</b> <input style="border: none; background-color: #f0f0f0; padding: 2px 5px;" type="text" value="Select an Option"/> ▼	<b>Tax Map / GPIN</b> <input type="text" value="Enter a value for Tax Map / GPIN"/>

### Operator Information

## Some operator information will auto populate

<b>Operator ID</b>	<b>Company Name</b>
z1	Tatooine
<b>License Number</b>	<b>First Name</b>
0987654321	Yoda
<b>Middle Name</b>	<b>Last Name</b>
z1	The Master

Owner address will auto populate if same as system address

**Owner Information**

<b>Owner Name</b>	<b>Owner Phone</b>
<input type="text" value="Enter a value for Owner Name"/>	<input type="text" value="(000) 000-0000"/>
<b>Same as System Info?</b>	
<input type="text" value="Yes"/>	
<b>Owner Building Number</b>	<b>Owner Street Name / PO Box</b>
<input type="text" value="1"/>	<input type="text" value="z2"/>

# Check boxes for maintenance needed and provided

<b>Visit Purpose</b>	<b>Actual/Estimated Flow (gpd)</b>
Select an Option <span>▼</span>	Enter a value for Actual/Estimated Flow (gpd)
<b>Maintenance Needed</b>	<b>Maintenance Provided</b>
<input checked="" type="checkbox"/> Attached Growth Medium <input type="checkbox"/> Auxiliary Filter	<input type="checkbox"/> Attached Growth Medium <input type="checkbox"/> Auxiliary Filter
<input type="checkbox"/> BlowerCompressorAerator Operation <input type="checkbox"/> Control Operation <input type="checkbox"/> Disinfection	<input type="checkbox"/> BlowerCompressorAerator Operation <input type="checkbox"/> Control Operation <input type="checkbox"/> Disinfection
<input checked="" type="checkbox"/> Dispersal System Operation <input type="checkbox"/> Distribution Pump Operation <input type="checkbox"/> Effluent Screens	<input type="checkbox"/> Dispersal System Operation <input type="checkbox"/> Distribution Pump Operation <input type="checkbox"/> Effluent Screens
<input type="checkbox"/> Level Sensor Operation <input type="checkbox"/> Recirculation Pump <input type="checkbox"/> Septic Tank Baffles	<input checked="" type="checkbox"/> Level Sensor Operation <input type="checkbox"/> Recirculation Pump <input type="checkbox"/> Septic Tank Baffles
<input type="checkbox"/> SludgeScum Accumulation <input type="checkbox"/> Other <input type="checkbox"/> None	<input type="checkbox"/> SludgeScum Accumulation <input type="checkbox"/> Other <input type="checkbox"/> None

# Dropdown options for several field tests

**Field Tests**

<b>Odor</b>	<b>Turbidity/Color</b>
Select an Option	Select an Option
<b>pH</b>	<b>DO in Aeration Tank (mg/L)</b>
Enter a value for pH	Enter a value for DO in Aeration Tank (mg/L)
<b>Settleable Solids (%)</b>	<b>TRC After Contact Tank (mg/L)</b>
Enter a value for Settleable Solids (%)	Enter a value for TRC After Contact Tank (mg/L)
<b>Other Test</b>	
Enter a value for Other Test	

**Laboratory Tests**

<b>Date Collected</b>	<b>Collection Point</b>
06/03/2020	Select an Option

# Ability to attach reports

**Certification of Inspection and Results**

**I hereby certify** **Date**

This AOSS is not functioning as designed or in accordance with the performance/maintenance r 06/03/2020

**Time**

05:45 PM

**File Uploads**

**File**

No file chosen

File

Test file for O and M reports.docx

Saved submissions from above will appear here

# Ability to review and edit reports prior to submission

## Data Review and Submission

Below is the data you have currently entered for this session. Please review the information prior to clicking the "Submit" button. If you need to edit or delete any of your current records, or add other records, select the appropriate buttons below.

Enter Records Directly Launch Data Wizard Add Another Report

Bldg Number: 1	Street Name/PO Box: z2	Suite / Apt: z1	City: z1	Physical County: Testing	Tax Map / GPIN: z1	Operator ID: z1	Company Name: Tatooine	<span>Edit</span> <span>Delete</span>			
License Number: 987654321	First Name: Yoda	Middle Name: z1	Last Name: The Master	Suffix: z1	Email Address: sonal.iyer@vdh.virginia.gov						
Building Number: 1	Street Name/PO Box:	Suite / Apt:	City:	State:	Zip:	County:	Phone: 1234567890		Owner Name:	Owner Phone:	Same as System Info?: YES
Owner Building Number: 1	Owner Street Name / PO Box: z2	Owner Suite / Apt: z1	Owner City: z1	Owner State:	Owner Zip:	Number of Tanks:	Tank Capacity:				
Treatment Unit 1:	Treatment Unit 2:	Conveyance:	Distribution:	Dispersal:	Disinfection:	Visit Date: 06/03/2020	Visit Time: 05:45 PM		Visit Purpose:		
Actual/Estimated Flow (gpd):	Maintenance Needed: Attached Growth Medium, Dispersal System Operation	Maintenance Provided: Level Sensor Operation									
Effluent Screen Cleaned:	Odor:	Turbidity/Color:	pH:	DO in Aeration Tank (mg/L):	Settleable Solids (%):	TRC After Contact Tank (mg/L):	Other Test:				
Date Collected: 06/03/2020	Collection Point:	Laboratory Name:	5-Day Biochemical Oxygen Demand (mg/L):	TRC (ppm):	Fecal Coliform (CFU/100 mL):						
Total Suspended Solids (mg/L):	Total Nitrogen (mg/L):	Total Phosphorus (mg/L):	Laboratory Results are:	Sewage Handler Name/Inspector Name:							
Reason for Pumping:	Date Pumped: 06/03/2020	Disposal Site:	Outcome of Visit:	Effluent Returning Back into Tank After Pumping:	Septic Tank 1 (gal):						
Septic Tank 2 (gal):	Pump/Siphon Tank (gal):	Treatment Unit 1 (gal):	Treatment Unit 2 (gal):	Other Tank/Unit (gal):							

**1 records ready to upload**

*Note that your information has not been submitted yet.*

Please click "Submit" below to finalize and complete your submission.

# Pay later, print reports, print receipt

### Recent Submissions

O&M Report Submission

[Print 2 Reports](#)

[Receipt for 2 Reports](#)

**Address:** [Print](#)

**Application ID:**

**Effluent Level Within Operation Limits:** NO

**Date Pumped:** 05/22/2020

**Visit Date:** 05/22/2020

**Visit Time:** 11:55 AM

**Date Collected:** 05/22/2020

### Recent Submissions

O&M Report Submission

[Print 1 Reports](#)

[Pay for 1 Unpaid Reports](#)

**Address:** [Print](#)

**Application ID:**

**Effluent Level Within Operation Limits:** N/A

**Date Pumped:**

**Visit Date:**

**Visit Time:**

**Date Collected:**

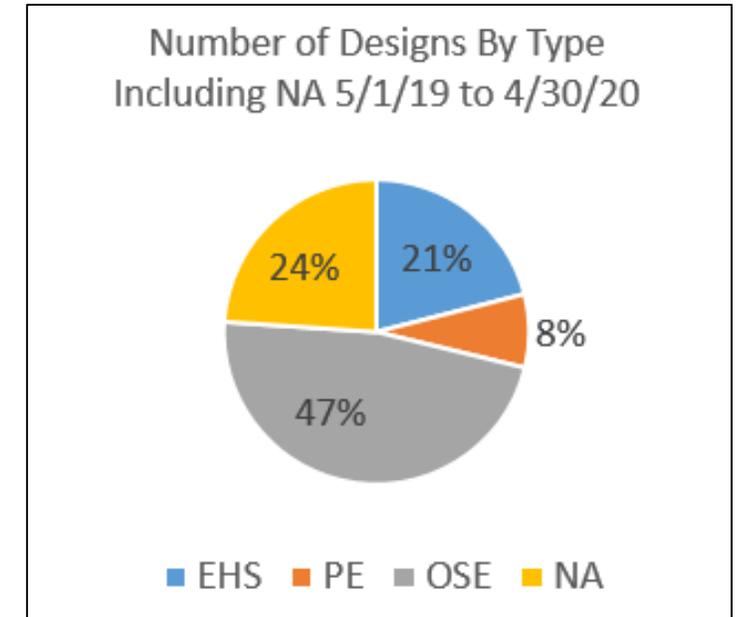
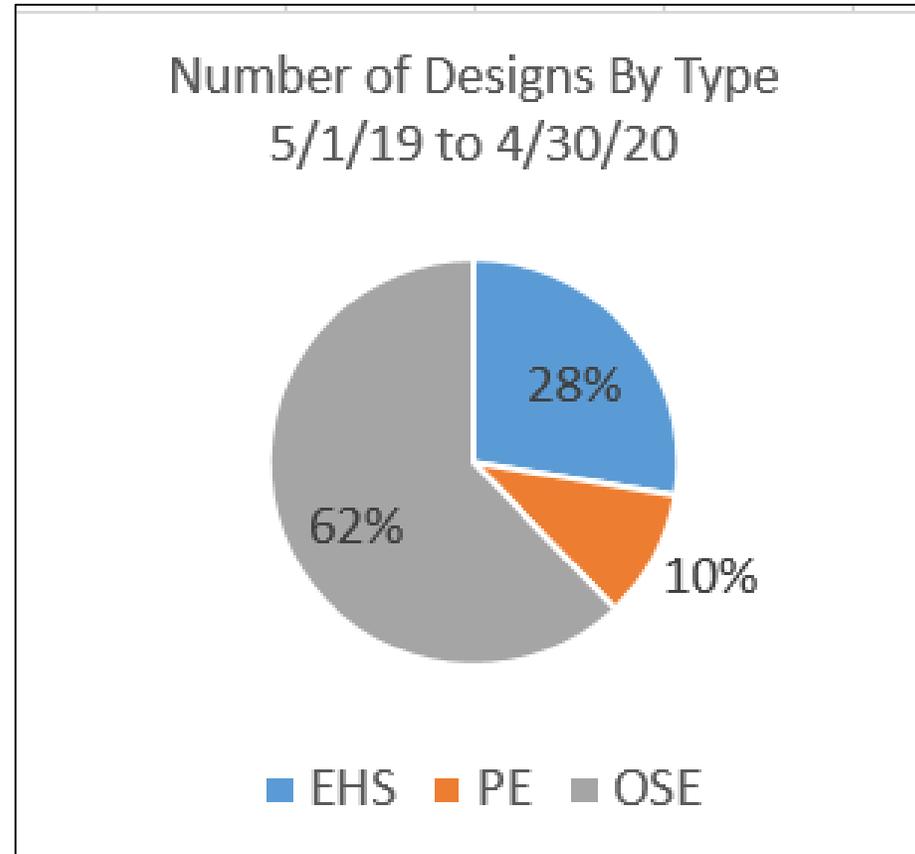
# Updates to Hardship Guidelines

# Items for Annual Review

- Recommendations for revision by SHADAC and other stakeholders.
- Appropriateness of means testing criteria.
- Estimated versus actual increase.
- Further consideration request.
- Analysis of % private sector SAPs.
- Analysis of OSE/PE designs for COSS and AOSS.
- Cost of services.
- Update changes based on FPG.

# General Onsite Data – 5/1/19 to 4/30/20

Designed By	Count
EHS	2563
PE	949
OSE	5768
NA	2922

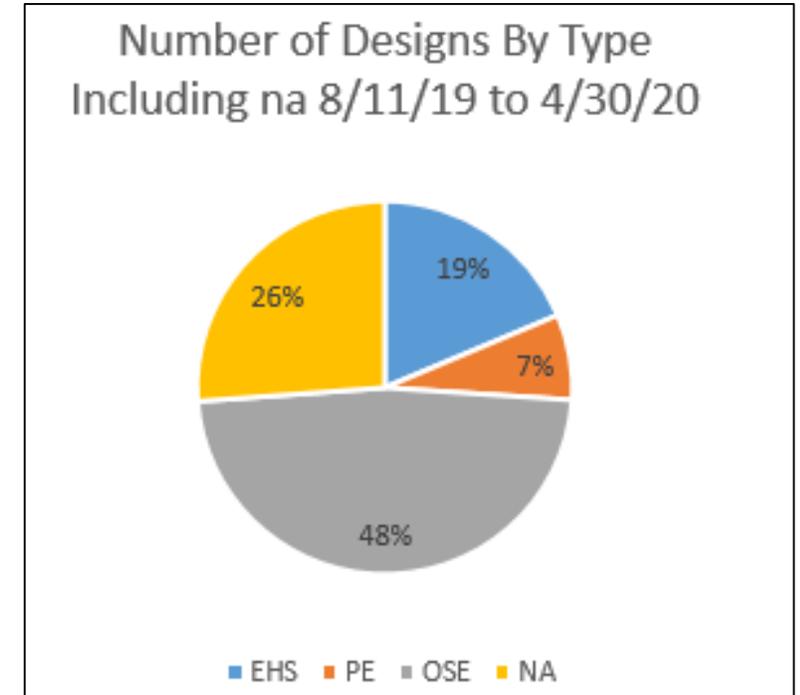
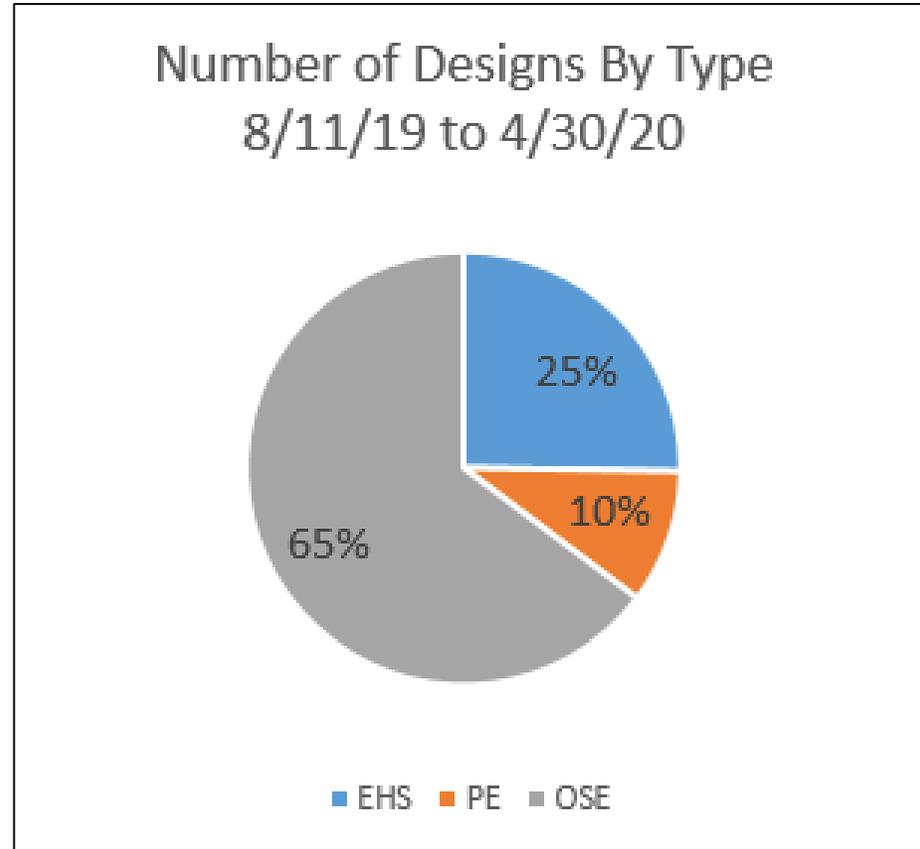


# Estimate vs. Actual

- Services Provide 5/1/18 to 4/30/19: 6,854
- Projected Increase: 1,486
- Projected Total: 8,340
- Services Provided 5/1/19 to 4/30/19: 6,717
- 72% of NA: 2,103
- Initial Estimated Total: 8,821

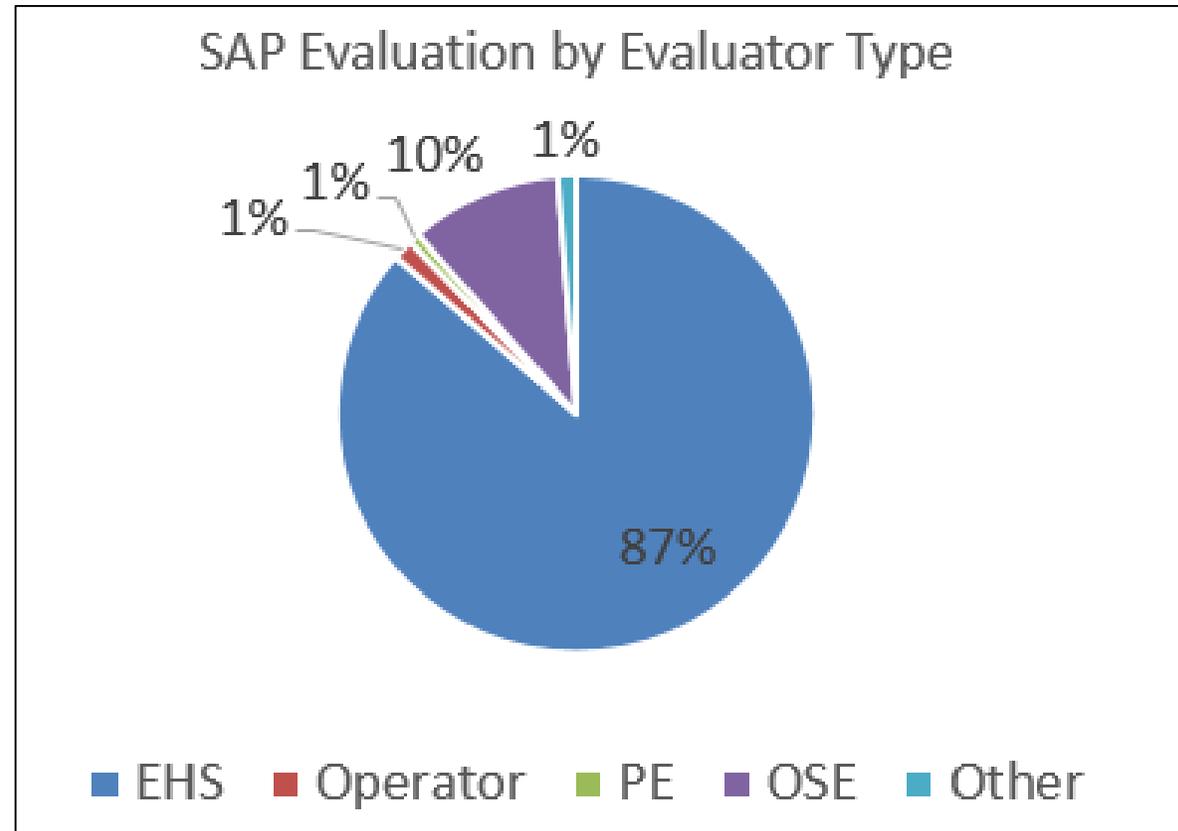
# General Onsite Date – 8/11/19 – 4/30/20

Designer	Number of Designs
EHS	1651
PE	655
OSE	4230
NA	2316
Total	8852



# General SAP Data

Evaluator	Count
EHS	1310
Operator	21
PE	11
OSE	155
Other	19
Total	1516



# Private Well Data

Data unavailable.

# Petition for Service Information – 8/11/19 to 4/30/20

Petition for Service	Designer	Total
No	Total	7628
	EHS	1052
	PE	641
	OSE	4197
	NA	1738
Yes	Total	1223
	EHS	599
	PE	14
	OSE	32
	NA	567

Petition Type	Totals
Hardship	1181
Means Testing	97

Hardship Type	Count
AVPSP, Eligible for Fee Waiver	2
AVPSP, NPSP	38
AVPSP	221
Eligible for Fee Waiver	21
NPSP, Eligible for Fee Waiver	2
NPSP	771
Eligible for Fee Waiver, Replacement Well, Well Abandonment	1
Other	117
Replacement Well	2
Well Abandonment	1
*AVPSP = Availability of Private Sector Providers	
*NPSP = Number of Private Sector Providers	

# Petition Information Continued

Means Testing		
Income Level	Count	%
>400%	38	36.19%
400%-301%	23	21.90%
300%-201%	12	11.43%
200%-101%	22	20.95%
100% or less	10	9.52%
Total	105	

# Initial Projections for Localities Making Transition

- Working on improve data which may impact final results.
- Project 20%+ of remain counties to make transition.
- Accomack
- Buckingham
- Clarke
- Cumberland
- Essex
- Halifax
- Nottoway
- Surry
- Sussex
- Westmoreland

# Recommendations for Consideration

- Professional Geologist Well Evaluations.
- Eastern Shore Designer Capacity.
- Limited Occupancy Permits, No Change to System.
- Others?

# Sewage Handling and Disposal Regulations Revisions

# Guiding Principle #1

That the standards established by the regulations ensure that all systems are fully protective of public health and the environment.

- Standards are applied equally to all systems to ensure all system owners received the same health and environmental protection.
- Where barriers exist to the installation of fully protective systems, we seek to address those barriers when possible through regulations, and where not possible through regulations make recommendations for further actions to be taken by VDH to address those barriers.
- Fully protective standards are those supported by national industry standards and/or evidence based research.

# Guiding Principle #2

That the revisions reduce the complexity of the onsite program in Virginia.

- Evaluation, design, installation, and operation and maintenance of onsite system is inherently complex because conditions are unique on each property served by an onsite system, and there are over 1 million properties in the Commonwealth using onsite sewage disposal. However, the process for conducting evaluations, designs, installations, and O&M can in most cases follow a standard systematic procedure. To the extent possible, we should seek to improve, clarify, and streamline those procedures in a manner that reduces program complexity (e.g. provide clear definitions).
- Incorporate agency policies as appropriate within the regulations.
- To the extent possible, use language and terms that are easily understood by the general public.

# Guiding Principle #3

Account for industry practices and programmatic changes that have occurred since the last revision, and provide flexibility within the revisions to be inclusive of future industry improvements and strategic goals of the Commonwealth.

- Recognize the shift from a program where designs were primarily done by VDH, to a program where VDH provides programmatic oversight of private sector service providers.
- When appropriate, identify national standards so that our program can evolve alongside evolving national standards.

# Guiding Principle #4

Incorporated Health in All Policies approach.

- Take into account the health implications of all decision, and avoid harmful health impacts in order to improve population health and health equity.
- Consider known future public health impacts of our decision (e.g. how does a decision impact systems permitted in areas of rural coastal Virginia impacted by sea level rise.)

# Guiding Principle #5

Ensure that all voices impacted by our revisions are heard, and their thoughts on future of Virginia's onsite program are considered.

# Subgroups

- How should these be established?
- Process for including non SHADAC members, improving system owner participation/feedback during the development process?

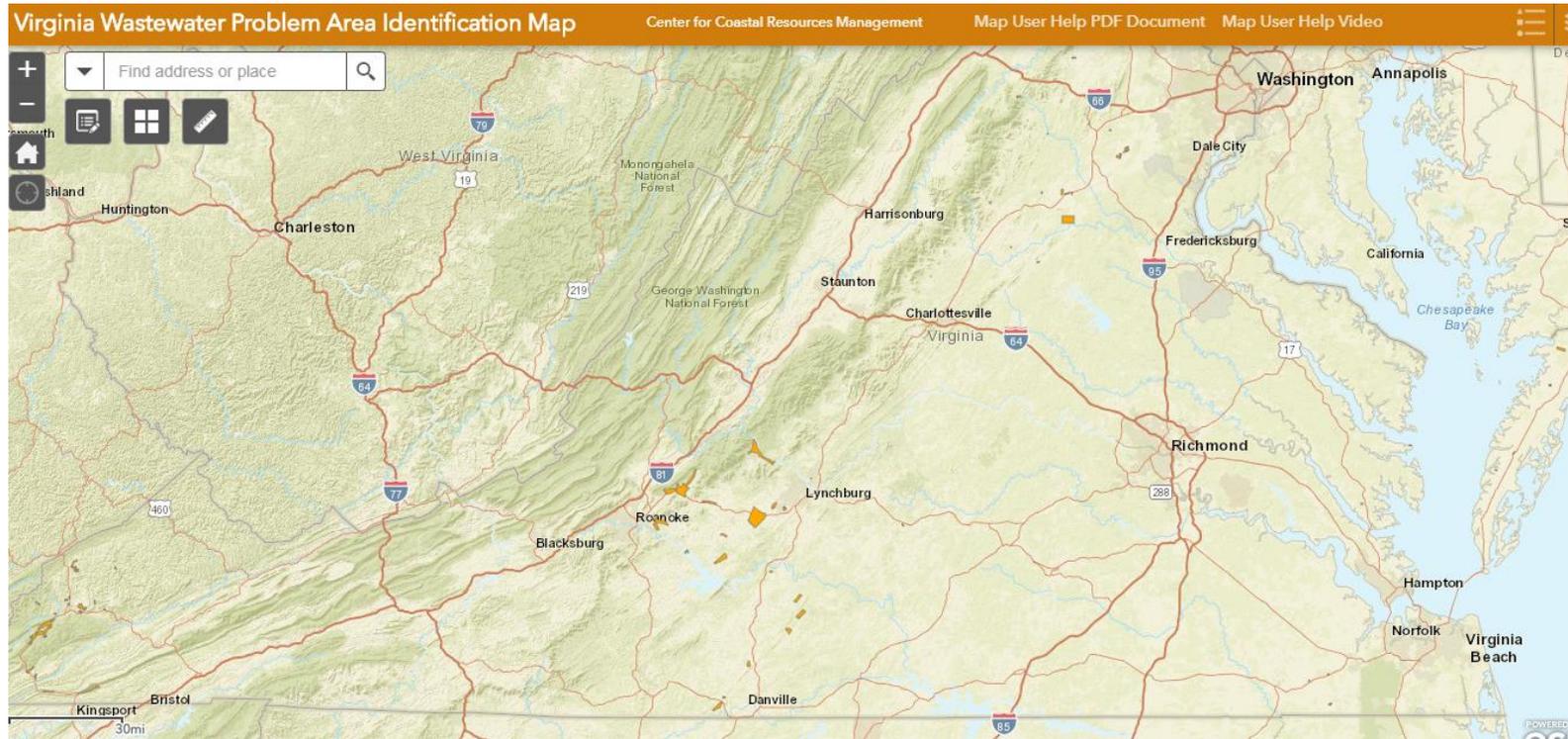
# Suggested Categories

- Administrative/APA (Parts 1 and 2)
- Site and Soils
- Installation/Inspections
- Separation Distances/Setbacks
- Design Flow
- Septic Tank/System Safety (e.g. child proofing)
- Minimum Installation Depths
- Absorption Area Sizing
- Pump and Haul
- Privies
- LGMI Placement and Design

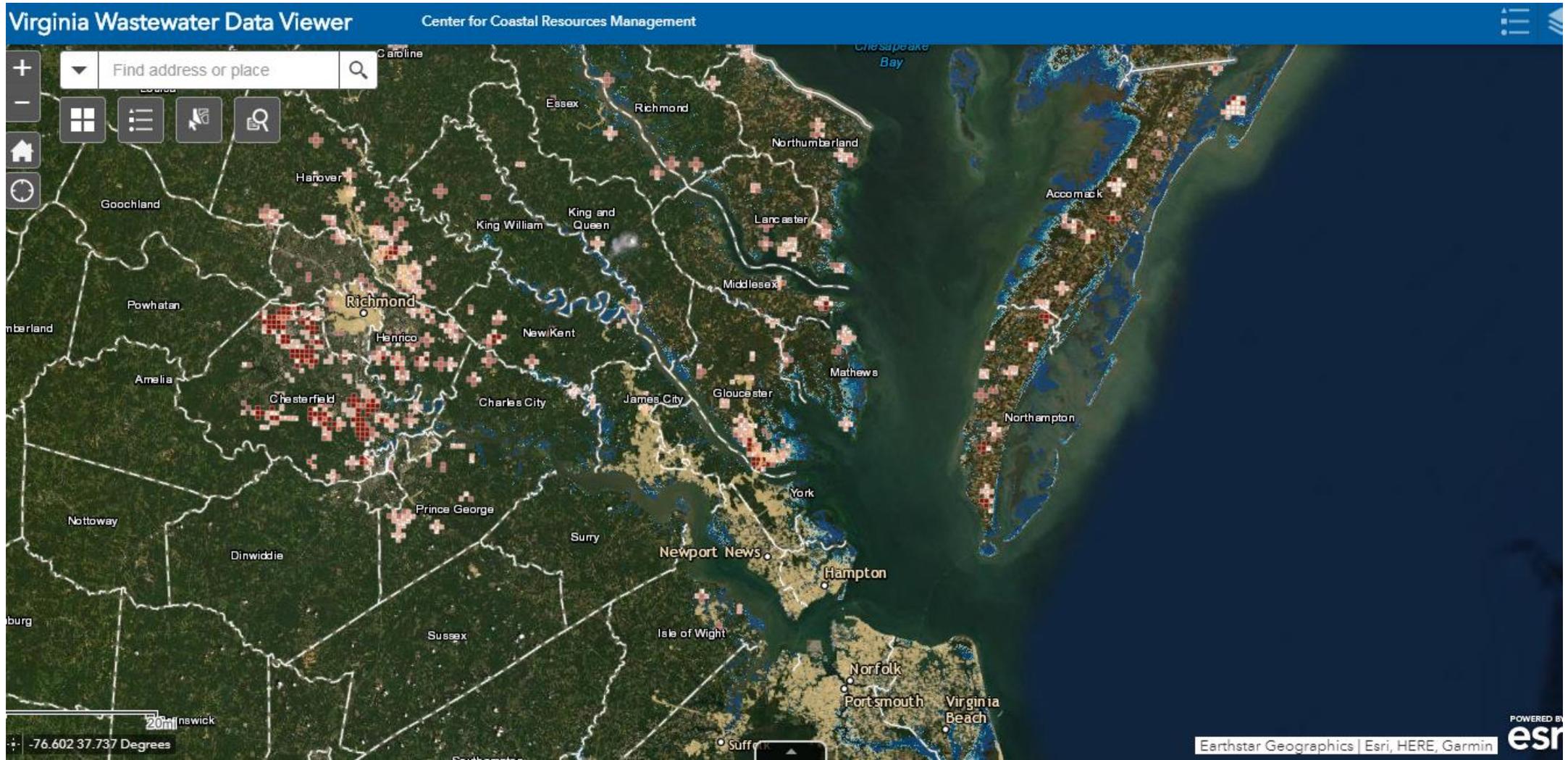
# Wastewater Infrastructure Workgroup

- Work with VIMS.
- Recommendations for next steps.

# Wastewater Problem Area Identification Map



# Wastewater Data Viewer



# Recommendations for Consideration

- Establish a policy for the Commonwealth to prioritize access to affordable wastewater treatment (e.g. education, innovation, etc.).
- Invest in wastewater data improvements (e.g. VIMS projects, inventory of systems, public facing information).
- Investigate barriers to the reporting wastewater issues and seek to address those barriers (e.g. septic shame).
- Improve education and maintenance.
- Evaluate impacts of climate change on wastewater infrastructure.
- Increase funding for assistance.