

FREQUENTLY ASKED QUESTIONS
REGULATIONS FOR ALTERNATIVE ONSITE SEWAGE SYSTEMS
(AOSS)
[12VAC5-613](#)

I received an AOSS owner notification letter. Why did I receive this letter, and what does it mean?

Records on file with the local health department indicate that you are the owner of a property served by an Alternative Onsite Sewage System (AOSS). The letter was meant to provide you with information regarding owner responsibilities and proper operation and maintenance of your AOSS under the *Regulations for Alternative Onsite Sewage Systems* (12 VAC 5-613-20 et. seq.; the *AOSS Regulations*).

How can I tell if I have a conventional onsite sewage system (COSS) or an AOSS?

A COSS is defined as “a treatment works system consisting of one or more septic tanks with gravity, pumped, or siphoned conveyance to a gravity sub surface drainfield”. A typical COSS in Virginia consist of a sewer line, a septic tank, a conveyance line, a distribution box, header lines, and multiple absorption trenches. In most cases these components are not visible from the surface. If the COSS requires a pump you may notice a riser typically 24 inches in diameter and roughly 12 inches above the ground surface.

An AOSS is defined as “a treatment works system that is not a conventional onsite sewage system and does not result in a point source discharge”. A typical AOSS in Virginia consist of a sewer line, septic tank/trash tank, treatment unit, pump chamber, conveyance line, distribution system, and absorption field (trenches, pad, drip tubing, etc.). However, the exact set of components that make up your system will be site specific. These specific components are covered in your Operation and Maintenance Manual (O&M Manual). Alternative onsite sewage systems typically, but not always, have multiple components visible from the ground surface. **If you have questions about the AOSS serving your property, you may contact the designer of the system, a licensed alternative onsite sewage system operator or the local health department.**

Direct discharge systems require a VPDES permit from DEQ, and typically discharge directly from the treatment unit to a dry ditch or stream. Operation and maintenance of direct discharge systems are covered under separate regulations.

I don't have an AOSS but I still received a letter. What do I do?

If you believe you have received the AOSS owner notification letter in error please contact your local health department. You can find the telephone number for you local health department [here](#).

I have an AOSS, so how do these regulations affect me?

Section 12VAC5-613-140 of the *AOSS Regulations* requires the owner of an alternative onsite sewage system to do the following:

1. Have the AOSS operated and maintained by an operator;
2. Have an operator visit the AOSS at the frequency required by this chapter;
3. Have an operator collect any samples required by this chapter;
4. Keep a copy of the log provided by the operator on the property where the AOSS is located in electronic or hard copy form, make the log available to the department upon request, and make a reasonable effort to transfer the log to any future owner;
5. Follow the O&M manual and keep a copy of the O&M manual in electronic or hard copy form for the AOSS on the property where the AOSS is located, make the O&M manual available to the department upon request, and make a reasonable effort to transfer the O&M manual to any future owner; and
6. If your AOSS is located within a Chesapeake Bay Preservation Area, comply with the onsite sewage system requirements contained in local ordinances adopted pursuant to the Chesapeake Bay Preservation Act (§ 10.1-2100 et. seq. of the Code of Virginia) and the Chesapeake Bay Preservation Area Designation and Management Regulations (9VAC10-20).

What do I need to know about my AOSS, and where can I find more information?

The best place to find information concerning your particular AOSS is your O&M Manual. Your O&M Manual should be written to be easily understood by any potential owner and should include:

1. Basic information on the AOSS design including treatment unit capacity, installation depth, pump operating conditions, a list of the components comprising the AOSS, a dimensioned site layout, sampling locations, and contact information for replacement parts for each unit process;
2. A list of any control functions and how to use them;
3. All operation, maintenance, sampling, and inspection schedules for the AOSS, including any requirements that exceed the minimum requirements of the *AOSS Regulations*;
4. The performance (laboratory) data sampling and reporting schedule;
5. The limits of the AOSS design and how to operate the system within those design limits;
6. Other information deemed necessary or appropriate by the designer.

If you have not already received a copy of your O&M Manual, or have lost the original, a copy can be attained by contacting the designer of the system, a licensed alternative onsite sewage system operator or the [local health department](#).

When did this new regulation take affect?

It became effective December 7, 2011. (12VAC5-613)

Why were these regulations adopted?

There are four specific reasons for the adoption of these *AOSS Regulations*.

1. The performance requirements contained in the *Sewage Handling and Disposal Regulations* (12 VAC5- 610-10 et seq., the SHDR) are inadequate for AOSS.
2. Statutory changes in 2008 (§ 32.1-163.5 of the *Code of Virginia*) allow licensed professional engineers to design AOSS that are not required to comply with the SHDR. Instead, these designs must be compliant with performance requirements established by the board. Since current performance requirements were inadequate, the *AOSS Regulations* seek to establish measurable performance requirements appropriate for all AOSS, including engineered designs under 32.1-163.5 of the *Code of Virginia*.
3. Proper operation and maintenance are essential to ensure that AOSS function as design.
4. To protect public health and the environment.

Are there any exemptions from these regulations for an existing system?

No, but the permit application date will effect some aspects of the operation and maintenance required by *AOSS Regulations*. If the permit application date was on or after December 7, 2011, then the AOSS must abide by the performance requirements and laboratory sampling requirements. Any AOSS in operation prior to December 7, 2011 must comply with the performance requirements that were in effect at the time the system was permitted.

Who can perform the maintenance of my AOSS?

Alternative onsite sewage system operators licensed by the Department of Professional and Occupational Regulation (DPOR).

How can I locate an operator?

The Department of Professional and Occupational Regulation (DPOR) website has a [license lookup](#) function. Under the section Onsite Sewage Professionals you will find a category for operators. If you select operator and put an Asterisk (*) in the Name area you will get a complete list of licensed operators. However, this list does not include contact information such as telephone numbers or email address. VDH has compiled a list of Alternative Onsite Sewage System Operators (AOSSO) which includes contact information [here](#).

What is the average cost to have my AOSS operated and maintained? How much should operation and maintenance cost?

The actual cost of operation and maintenance will depend on the type of AOSS you own and the level of operation and maintenance required/provided.

What are the minimum operation and maintenance requirements for my AOSS?

The operation and maintenance requirements for a specific system depend on the design of the system and the date on which it was permitted. To determine the requirements for a specific system, the owner should consult the O&M manual, the designer of the system, a licensed alternative onsite sewage system operator or the local health department.

What are the operator's requirements under the *AOSS Regulations*?

When performing activities pursuant to a visit that is required by the *AOSS Regulations* the operator is responsible for the entire AOSS, including treatment components and the soil treatment area components, and the operator shall follow the approved O&M manual. Under the *AOSS Regulations* operators are required to:

1. Inspect all components of the AOSS and conduct field measurements, sampling, and other observations required by this chapter, the O&M manual, or deemed necessary by the operator to assess the performance of the AOSS and its components.
2. Review and evaluate the operation of the AOSS, perform routine maintenance, make adjustments, and replace worn or dysfunctional components with functionally equivalent parts such that the system can reasonably be expected to return to normal operation.
3. If the AOSS is not functioning as designed or in accordance with the performance requirements of the *AOSS Regulations* and, in the operator's professional judgment, cannot be reasonably expected to return to normal operation through routine operation and maintenance report immediately to the owner the remediation efforts necessary to return the AOSS to normal operation.
4. Submit a copy of their report to VDH and the owner. The report should be submitted to VDH by the 15th of the month following the month in which the visit occurred using VDH's web-based reporting system.
5. Keep an electronic or hard copy log for the AOSS, provide a copy of the log to the owner, and make the log available to VDH upon request.

**The owner of the system should keep a copy of the log provided by the operator. This log should include dates of each site visit conducted by the operator, the finding of each site visit, and the results of any laboratory sampling that has been taken.

Are there different types of AOSS? Do different AOSS require more or less maintenance?

Yes, there are many different types of AOSS. The amount and type of maintenance is directly related to the components of the AOSS you own. While the *AOSS Regulations* set specific minimum site visit, performance, and sampling requirements, it is your O & M Manual that will determine your "maintenance schedule". Think of your O&M Manual like an Owner's Manual for your car. You will need to repair components due to normal wear-and-tear. Which components and how often should be laid out in your O&M Manual.

Can a homeowner be their own operator? Is there an exemption for homeowners to limit the requirements to become an operator? How do I become licensed?

All operation and maintenance activities must be performed by an operator who is properly licensed by DPOR. For information on licensing requirements for onsite sewage system operators, please contact [DPOR](#).

Do I need a permit for repairs to my AOSS? Do I need a permit for replacement of worn system components? Can my operator make the repairs/replacements?

Repairs or replacement of worn system components covered under the definition of maintenance in the *AOSS Regulations* will not require a permit and can be completed by your operator. Repairs or replacement of system components not covered under the definition of maintenance will require a permit and must be completed by a licensed installer. Code of Virginia § 32.1-163 defines maintenance as:

“unless otherwise provided in local ordinance, (i) performing adjustments to equipment and controls or (ii) in-kind replacement of normal wear and tear parts that do not require a construction permit for adjustment or replacement of the component such as light bulbs, fuses, filters, pumps, motors, sewer lines, conveyance lines, distribution boxes, header lines, or other like components. 'Maintenance' includes pumping the tanks or cleaning the building sewer on a periodic basis. Notwithstanding any local ordinance, "maintenance" does not include replacement of tanks, drain-field piping, subsurface drainfields, or work requiring a construction permit and installer. Unless otherwise prohibited by local ordinance, a conventional onsite sewage system installer or an alternative onsite sewage system installer may perform maintenance work limited to in-kind replacement of light bulbs, fuses, filters, pumps, sewer lines, conveyance lines, distribution boxes, and header lines.

If you are in doubt about whether or not a permit is required, please contact your local health department.

Is this a county or state regulation? Can counties have more stringent requirements for operation and maintenance of AOSS?

The *AOSS Regulations* are applicable statewide. The Honorable Attorney General Kenneth T. Cuccinelli, II offered an official [advisory opinion](#) on § [15.2-2157](#) stating that:

“It is my opinion that a Virginia locality cannot adopt requirements and standards for alternative onsite sewage systems that are in addition to or more stringent than those enacted by the Board of Health and administered through the Virginia Department of Health when the conditions set forth in § 15.2-2157(C) exist, namely that (i) there is no sewer or sewerage disposal facility available and (ii) the alternative onsite sewage system has been approved by the Virginia Department of Health for use in the particular circumstances and conditions in which the proposed system is to be operating.”

I have a remediator unit issued under GMP 122 (since rescinded). Does this classify as an AOSS? Do I need an operator?

Remediator units meet the definition of an AOSS and therefore do require operation and maintenance by a license operator.