



## Final Regulation Agency Background Document

<b>Agency name</b>	Virginia Department of Health
<b>Virginia Administrative Code (VAC) citation</b>	12VAC5-640
<b>Regulation title</b>	Alternative Discharging Sewage Treatment Regulations for Individual Single Family Home Dwellings
<b>Action title</b>	Update and modify the regulations for less than or equal to 1000 gallons per day individual single family home discharging systems to incorporate policy documents and new technology and consider impacts to the Chesapeake Bay Total Maximum Daily Load (TMDL).
<b>Date this document prepared</b>	April 28, 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 14 (2010) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual*.

### Brief summary

*Please provide a brief summary (no more than 2 short 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of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed.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. Also, please include a brief description of changes to the regulation from publication of the proposed regulation to the final regulation.*

The proposed amendments to the existing regulation provide greater flexibility for the design and use of discharging systems and ensure that these systems protect public health and the environment. The changes include: simplifying the application process, adding requirements to assure that discharging systems are properly operated and maintained, adding requirements to assure reliability of system function, improving and simplifying the process that the Virginia Department of Health (VDH) uses to evaluate treatment units for general approval, addressing discharges to wetlands, amending administrative processes to ensure efficiency, and eliminating inconsistencies with the Code of Virginia and the administrative process act (APA).

Public comments on the proposed regulations resulted in two main changes to the final regulation. First, an allowance to reduce departmental inspections of systems from once a year to once in three years was provided for regulatory compliant systems. Second, modifications were made to address the cost of maintenance contracts. Those modifications included deleting references to terms of contracts and contract requirements; eliminating the requirement to submit a maintenance contract to the department;

and redefining the duties of an operator and owner to focus on outcomes. The proposed amendments had already expanded the classes of operators who can provide operation and maintenance which will increase the available population of operators. These changes should result in more competition and more flexibility for homeowners who are negotiating with operators for operation and maintenance of their system.

**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 or board taking the action, and (3) the title of the regulation.*

The final amendments to the Alternative Discharging Sewage Treatment Regulations for Individual Single Family Home Dwellings were approved by the State Board of Health on June 5, 2014.

**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.*

The *Code of Virginia* at §§ 32.1-12, 32.1-163 and 32.1-164 provides the statutory authority and mandates that the Board protect public health and the environment. *Code of Virginia* § 32.1-12 authorizes the Board to make, adopt, promulgate and enforce regulations that may be necessary to carry out the provisions of title 32.1 and other laws of the Commonwealth administered by it or the Commissioner. Further, *Code of Virginia* § 32.1-164.A. states that “the Board shall have supervision and control over the safe and sanitary collection, conveyance, transportation, treatment, and disposal of sewage by onsite sewage systems and alternative discharging sewage systems, and treatment works as they affect the public health and welfare.” Moreover, *Code of Virginia* § 32.1-164.B mandates that the Board promulgate regulations that govern the collection, conveyance, transportation, treatment and disposal of sewage by onsite sewage systems and alternative discharging sewage systems. *Code of Virginia* § 32.1-164.A mandates that the Board require, and that the Department conduct, regular inspections of alternative discharging sewage systems. The subsection further mandates that the Board establish requirements for maintenance contracts for alternative discharging sewage systems.

**Purpose**

*Please explain the need for the new or amended regulation. Describe the rationale or justification of the proposed regulatory action. Detail the specific reasons it 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 Board has not updated the regulations since 1992. Since the regulations became effective, new technologies have emerged that offer more cost effective solutions to homeowners. These new technologies offer a higher degree of protection of public health and the environment. The regulations simplify the application processes, improve the process for conferring general approval on treatment units, and provide greater flexibility for the design and use of discharging systems. Further, the regulations protect the health, safety and welfare of citizens by ensuring that these systems are properly designed, operated and maintained to prevent system failure and to protect Commonwealth citizens from the deleterious effects of raw sewage.

## Substance

*Please identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. A more detailed discussion is required under the "All changes made in this regulatory action" section.*

Definitions added include the following: "alternative onsite sewage system," "BOD5," "biological treatment unit," "combined application," "conventional onsite sewage system," "dechlorination," "maintenance," "modify," "operate," "operation," "operation and maintenance contract," "general approval," definitions for reliability and treatment levels, "wetlands," "surface waters," "emergency pump and haul," "post aeration unit," "total residual chlorine" "point source discharge," "NPDES," and "VPDES". A requirement was added so that owners of discharging systems permitted after the effective date of the regulations must have an operation and maintenance manual. The regulation:

1. Expands the onsite options that must be evaluated and found unsatisfactory before a discharge is considered;
2. Eliminates redundancies and inconsistencies with the APA and Title 32.1 of the Code with regard to hearings, orders and enforcement;
3. Increases the length of time that a construction permit is valid and allows for a one time renewal for 18 months under limited circumstances;
4. Provides for the transfer of construction and operation permits under limited circumstances;
5. Modifies the application process in an effort to simplify it;
6. Eliminates any reference to permit suspension;
7. Requires wetland delineation by the U.S. Army Corps of Engineers when the proposed discharge is to a wetland;
8. Simplifies the general approval process for treatment units;
9. Reduces the sampling and monitoring requirements to the homeowner for most systems;
10. Eliminates the requirement to submit a written operation and maintenance contract, and substitutes a certification statement from the owner that the system will be operated, maintained and monitored, and reports will be filed in accordance with the regulation;
11. Requires reliability assurances for discharging systems to protect against the public health and environmental problems associated with component or system failure. VDH added three levels of reliability that are based on the available discharge area and the discharge point;
12. Repeals the prohibition on the use of discharging systems for dwellings subject to intermittent use and allows it under certain circumstances;
13. Requires systems to be designed to accommodate peak flow rates and to protect against adverse weather conditions;
14. Restricts access between humans, animals, and effluent for wetland discharges and provides more design flexibility;

15. Adds design requirements for system components to parallel requirements contained in the Sewage Collection and Treatment Regulations (9VAC25-790 et seq.);
16. Modifies the informal control testing to more accurately assesses system performance;
17. Expands the number of allowed individuals who can perform maintenance, to include Alternative Onsite Sewage System Operators in addition to the existing Class IV or higher wastewater works operator license; and
18. Requires electronic reporting of inspection results.

**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.*

1. The regulations provide benefits to the public by: allowing more cost-efficient technologies, simplifying the application process, clarifying the operation and maintenance requirements, expanding the available operator pool, reducing the number of annual departmental inspections for compliant systems, and allowing the transfer of construction and operation permits to new owners under certain circumstances.
2. The regulations provide advantages to the agency and Commonwealth by: simplifying the application process, allowing private sector individuals to perform site evaluations, and modifying the general approval process for treatment components to mirror other regulatory programs.
3. The regulations provide greater protection to public health and the environment by requiring reliability assurances against component or system failure. The proposed amendments provide system designers and users with greater flexibility by reducing the separation distance between discharge points, by defining requirements for discharges to wetlands, and by allowing these systems for dwellings subject to intermittent use.

There are no known disadvantages to the public or Commonwealth.

**Changes made since the proposed stage**

*Please describe all changes made to the text of the proposed regulation since the publication of the proposed stage. For the Registrar’s office, please put an asterisk next to any substantive changes.*

<b>Section number</b>	<b>Requirement at proposed stage</b>	<b>What has changed</b>	<b>Rationale for change</b>
5	No definition of operation and maintenance contract.	Added definition for operation and maintenance contract.	Definition added to address public comments.
5	No definition for total residual chlorine	Added definition for total residual chlorine	Acronym of “TRC” used in text and not defined. Definition added for clarity.
30D	Identified the department, licensed onsite soil	Modified the section to an individual licensed in Virginia to	Change made to address public comment.

	evaluators, and professional engineers as eligible parties to submit a required evaluation.	evaluate and design onsite sewage systems, such as a licensed onsite soil evaluator or professional engineer, and added a reference to 12VAC5-610 and 12VAC5-613, which describe evaluations.	
220B	Defined the lifespan of a construction permit, but did not consider if it could be renewed.	Added a statement that a construction permit may be renewed one time for an additional 18 months if no conditions have changed.	During internal review, it was recognized that an owner could receive a construction permit with a very short expiration date if obtained just before the General Permit expired. As long as the reissued General Permit and the design and site conditions are unchanged, then the construction permit will be eligible for a one time, 18 month renewal.
220D	Defined the lifespan of an operation permit and tied it to having maintenance or monitoring contracts in place.	The section was modified to indicate that if operator reports are being received as required, and the system is in compliance, then the operation permit will be renewed.	Previously, a written contract was required to verify maintenance was being done. Verifying proper maintenance based on operator reports is a better approach. This change will eliminate maintenance contract monitoring. This change was made based on public comments.
220E	Allows for the transfer of a construction or operation permit to a new owner under limited circumstances.	Clarified that the expiration date of the permit does not change with a transfer of ownership.	Eliminates confusion on transfer of permits.
266	Identified required items for issuance of an operation permit.	Deleted requirement to submit maintenance and monitoring contracts.	Change made to address public comments.
270B	Identified that an operation or construction permit could be denied without submission of a valid maintenance or monitoring contract.	Removed the reference to submission of a contract. A certification statement was added to the Combined Application and the Transfer of Ownership Application to ensure the owner is aware that the system must be properly operated and maintained.	Change made to address public comments.
280D.2	A construction or operation permit can be revoked if a maintenance or monitoring contract is not kept in force.	This statement was deleted.	Failure to comply with the operation and maintenance requirements is already covered by the regulations.
460.A.2g	Used term 'sensors' in describing how a	Modified to state 'a sensor'	The intention is to have the unit monitored for operability

	disinfection system is to be monitored.		and not imply that multiple sensors are required. Modification was made for clarity.
470M	Provide a sign at the discharge point with the maintenance provider's name and phone number	Modified sign verbiage to 'licensed operator with oversight of the system'	Reflects the requirement that all maintenance providers must be licensed operators.
490.B	Allowed for suspending a permit.	Modified to remove the term 'suspending' and only allow a revocation of a permit.	Modification made to be consistent with other APA changes.
490 Table 3.3	Uses the acronym 'UV' in right hand side of table without defining the term	UV is defined as 'ultraviolet disinfection' in the left side of column	Modified to provide clarity.
490F	Stated that the department shall conduct annual inspections at a minimum.	Allows for a reduction in department inspections to once every 3 years if compliance for 3 consecutive years is observed.	Public comment objected to the cost of department inspections (\$75). The fee is mandated by Code, but the department allowed that a less frequent inspection schedule could be afforded for those systems that were in compliance.
490G	Described a separate monitoring contract and the conditions under which an existing waiver to the contract could be revoked.	This section was deleted. The discussion on how an existing waiver can be revoked was moved to 500A.	The regulation separated monitoring and maintenance into two separate contractual items. This change provides for a single entity to provide operation and maintenance services that include monitoring.
500	Maintenance.	Operation and Maintenance Requirements.	Modified title to reflect contents.
500A	Set the general requirement to have a maintenance contract.	Modified to require that the owner engage a licensed operator	Change is based on public comment and is related to removing requirements for submission of contracts.
500B	Required that a maintenance contract be in force at all times and that a copy be kept on file with the department.	Deleted and replaced with owner responsibilities.	Public comments indicated confusion on owner responsibilities and operator responsibilities. This clarifies expectations.
500C	Itemized elements of a maintenance contract.	Deleted and replaced with operator responsibilities.	See previous rationale.
500D	Allows for waiver of maintenance and/or monitoring contracts if system is operated by a utility.	Modified to use term operation and maintenance.	Change is consistent with operation and maintenance expectations. Change based on public comment.
Form	Combined application.	Added a certification statement to ensure owner is aware to engage a licensed operator to operate, maintain, monitor, and submit reports.	Change based on public comment.

Form	Permit Transfer	Added a certification statement to ensure owner is aware to engage a licensed operator to operate, maintain, monitor, and submit reports	Change based on public comment.
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**Public comment**

*Please summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. If no comment was received, please so indicate.*

<b>Commenter</b>	<b>Comment</b>	<b>Agency response</b>
Lisa Quillen	What will happen when sewer is extended to these homes? Will they still be required to pay the high cost of maintaining them? Suggests that there be some kind of program to help with the cost of the maintenance or at least someone local who can do the service.	If the treatment system is taken offline through connection to a public sewer, then the permit would be revoked. The individual treatment system would be abandoned or dismantled and the owner would contract with the utility for the service. The agency has expanded the types of operators who can operate discharging systems. This change will increase the population of operators, which should reduce costs. Any eligible owner may apply for a waiver to fees, such as the inspection fee. There is currently no funding to aid with operation and maintenance.
Douglas Darter	Commenter is an owner who has been maintaining his treatment system for over 20 years and the Health Department has been testing and monitoring during that period. He's been told that the system has tested well and there are no problems. He would prefer to hook to central sewer as it is a 1/2 mile from his home, but no one can tell him when it will be extended to him. He understands that he will now be forced to hire a contractor to do the maintenance and monitoring. He is on a fixed income and cannot afford the cost. He explains that his system is simple to maintain but expensive. He noted costs of \$240/yr for chemicals and bearing replacements and a pumpout every 3 years at \$300. He checks his system every week and adds chlorine as needed. He contacted at least four operators from a list provided by VDH. One contract was \$250 for two years, but no testing was included and the	The requirement to have a maintenance contract is found in the Code of Virginia and is in the regulation. However, the regulation has been modified to allow more flexibility in how an owner contracts with an operator, which should help reduce costs. Evidence of a contract is submission of required reports, or for new or transferred permits, the owner's certification. The agency has expanded the types of operators who can operate discharging systems, which will increase the population of operators available and should reduce costs.

	<p>operator would charge extra to come out. One operator charged \$100 just to visit the site. Others said it was too far and would not offer a price. Availability is an issue for these remote areas. He would like to do the right thing, but needs a cheaper a solution.</p>	
<p>Elaine Sheldon</p>	<p>Commenter had previously maintained the system. They supplied the Health Department with the schedule of aerator cleaning (quarterly) and tablet replacement (every 2-3 weeks), and had the tank pumped every couple of years. Recently, they purchased a maintenance contract at the insistence of VDH. They note that it seems like a lot of money just to say that if something goes wrong, they will call on a contractor. They are questioning the 'new' requirement for a monitoring contract and thought that VDH was doing the monitoring. They also understand that there will be a charge for the VDH inspections of \$75. They question who can sample besides VDH. They note it is expensive enough to purchase tablets, clean the tank, and keep the equipment running, without paying for contracts, as well.</p>	<p>The requirement to have a maintenance contract is found in the Code of Virginia and has been in effect since 1992. However, the regulation has been modified to allow more flexibility in how an owner contracts with an operator. Submission of the contract is no longer required. This flexibility should help reduce costs. Evidence of a contract is submission of required reports, or for new or transferred permits, the owner's certification. The agency has expanded the types of operators who can operate discharging systems. This change will increase the population of operators available, which should reduce costs. A separate monitoring contract has been deleted from the regulation. The intention is that an owner would engage an operator to provide operation, maintenance, monitoring, and reporting of the system. The operator is the one licensed to do routine operation and maintenance visits, monitor the system, and report the results to the agency. The Code of Virginia requires the Agency to charge \$75 for department inspections. Annual inspections have been extremely useful in reducing public health threats. For those systems that are being operated, maintained, monitored, and reported properly, the regulation was modified to allow a reduction in department inspections when a system has been in compliance for three consecutive years. In those cases, the department inspection frequency is reduced to once every three years. The owner is still obligated to have an operator complete all required visits and testing in accordance with the regulation and General Permit.</p>
<p>Richard Holland</p>	<p>The commenter is an owner who currently does the routine maintenance on his system. He checks it weekly, adds chemicals (\$150/bucket, cleans the motor, and has it pumped every 2 to 3 years at a cost of \$750). He takes a sample to a lab for analysis (\$65) and sends results to VDH. He keeps a</p>	<p>The requirement to have a maintenance contract is found in the Code of Virginia and has been in this regulation since 1992. However, the regulation has been modified to allow more flexibility in how an owner contracts with an operator and submittal of the contract itself is no longer required. That flexibility should help reduce costs. Evidence of a contract is submission of required reports or, for new or transferred permits, the owner's</p>



	<p>detailed record of everything. The County Health Department comes once a year and also checks the system and he maintains copies of those records as well. He does not see why he must get a maintenance contract when operators charge \$250 to write a letter stating they will do maintenance on the system if called and told what the problem is, which he would do anyway. He will still have to do all of the regular maintenance on it, keep detailed records and pay out \$250 for the contract. No value in a contract. He lives within 1/2 mile of a sewer plant, but no lines on his side of the road. He cannot afford anymore additional costs. He is on a limited budget. Commenter provided additional letters he sent to Congressman Morgan and Delegate Kilgore to describe the same issues.</p>	<p>certification. The intention is that an owner would engage an operator to provide operation, maintenance, monitoring, and reporting of the system. The operator is the one licensed to perform routine operation and maintenance, monitor the system, and report the results to the agency. The agency has expanded the types of operators who can operate discharging systems, which will increase the population of operators available and should reduce costs.</p>
<p>Tim and Brenda Greene</p>	<p>The commenters have been maintaining their system for over 20 years and have been conscientious in maintaining the system. They contact a local company if they need help with maintenance or repairs. They are dismayed to learn that there may be changes in the law which would require them to purchase a maintenance contract in order to continue running their system. First, there are not many companies in the area who service these units. Second, they are still going to have to do the routine maintenance themselves. They will have to pay someone to inspect a couple of times a year but not receive any real service from the contract. The installers told them the contracts are essentially a payment to insure there is someone available to do repairs just in case which they already do now but only have to pay for actual services performed. The goal should be that when system owners whose monitoring doesn't meet criteria (possibly two times in a row) then they would have to purchase this</p>	<p>The requirement to have a maintenance contract is found in the Code of Virginia and has been in effect since 1992. The regulation was modified to allow more flexibility in how an owner contracts with an operator. Submission of the contract is no longer required. This flexibility should help reduce costs. Evidence of a contract is submission of required reports, or for new or transferred permits, the owner's signature on a certification statement. The intention is that an owner would engage an operator to provide operation, maintenance, monitoring, and reporting of the system. The operator is the one licensed to do routine operation and maintenance visits, monitor the system, and report the results to the agency. The agency has expanded the types of operators who can operate discharging systems. This change will increase the population of operators available, which should reduce costs. The Code of Virginia requires the agency to charge \$75 for department inspections. Annual inspections have been extremely useful in reducing public health threats. For those systems that are being operated, maintained, monitored, and reported properly, the regulation was modified to allow a reduction in department inspections when a system has been in compliance for three consecutive years. In those cases, the department inspection frequency is reduced to</p>

	<p>service contract. Please do not punish owners who have continually had good inspections and never had problems. They want to run the system correctly and be good stewards of the environment. They object to making the cost of running the system so high that it is not affordable.</p>	<p>once every three years. The owner is still obligated to have the operator complete all required visits and testing in accordance with the regulation and their General Permit.</p>
<p>Stuart Mullins</p>	<p>The commenter is an owner who currently pays around \$500/year to maintain his ATU unit and have it tested. His contractor [operator] is licensed by the state and does an excellent job. He feels the \$75 charge for a VDH inspection is not fair since he is already paying for someone to maintain it. If VDH wants to inspect it, that is great. He respects the fact that VDH wants to ensure that diseases are not being spread. However, he already pays plenty to maintain his unit and this additional fee is a tax. He already pays taxes.</p> <p>Additional information relayed via email from Delegate Ogburn's office. In 2002, he installed a treatment unit as his land did not 'perc'. He contracted with a company to do routine maintenance, provide chlorine and dechlorination tablets, add bacteria, test the discharge, etc. The company that he uses, "does a wonderful job", and he pays around \$500 per year. A couple of years ago, he was surprised to receive a bill for \$75 from the County Health Dept. for inspection of his unit. He investigated and informed that this was a new requirement and that he would have to pay it once per year. He recognizes that \$75 is not an oppressive amount, but he thinks it is unfair especially since he uses a licensed firm to maintain his system and the licensed firm does a more thorough inspection than the health department.</p>	<p>The Code of Virginia requires the agency to charge \$75 for department inspections. Annual inspections have been extremely useful in reducing public health threats. For those systems that are being operated, maintained, monitored, and reported properly, the regulation was modified to allow a reduction in department inspections when a system has been in compliance for three consecutive years. In those cases, the department inspection frequency is reduced to once every three years. The owner is still obligated to have an operator complete required visits and testing in accordance with the regulation and General Permit.</p>
<p>Penni Mullins</p>	<p>The Health Department should not be allowed to charge a fee to inspect a system when the owner is</p>	<p>The Code of Virginia requires the agency to charge \$75 for department inspections. Annual inspections have been extremely useful</p>

	<p>already paying a licensed contractor to maintain the unit.</p>	<p>reducing public health threats. For those systems that are being operated, maintained, monitored, and reported properly, the regulation was modified to allow a reduction in department inspections when a system has been in compliance for three consecutive years. In those cases, the department inspection frequency is reduced to once every three years. The owner is still obligated to have an operator complete all required visits and testing in accordance with the regulation and General Permit.</p>
<p>Wendell Dingus</p>	<p>Mr. Dingus opposes the maintenance contract. There is no reason for it. The owner has to contract an authorized agency to test the system once a year, then the VDH comes and tests once a year. Why is this needed? Records are kept on the system to record chemical addition so why do you need the VDH inspection? No one wants to contaminate the streams, but EPA regulations are becoming too burdensome for ordinary folks to live with. Before adding more cost to the folks with alternative systems, how about spot checking traditional septic systems to see how long since they have been pumped and if they are working properly. If they do not operate properly, that sewage goes directly into the watershed untreated.</p>	<p>The requirement to have a maintenance contract is found in the Code of Virginia and has been in effect since 1992. The regulation was modified to allow more flexibility in how an owner contracts with an operator. Submission of the contract is no longer required. This flexibility should help reduce costs. Evidence of a contract is submission of required reports, or for new or transferred permits, the owner's certification. The intention is that an owner would engage an operator to provide operation, maintenance, monitoring, and reporting of the system. The operator is licensed to perform routine operation and maintenance visits, monitor the system, and report the results to the agency. The Code of Virginia requires the agency to charge \$75 for department inspections. Annual inspections have been extremely useful in reducing public health threats. For those systems that are being operated, maintained, monitored, and reported properly, the regulation was modified to allow a reduction in department inspections when a system has been in compliance for three consecutive years. In those cases, the department inspection frequency is reduced to once every three years. The owner is still obligated to have an operator complete required visits and testing in accordance with the regulation and General Permit.</p>
<p>Regulator (1)</p>	<p>The commenter agrees with those who oppose the \$75 annual inspection fee that VDH charges. He/she believes the annual visit by VDH should be optional, not mandatory. This would be more consistent with the onsite sewage system program requirements under the AOSS Regulations. This program has been turned over to the private sector. Let them have it.</p>	<p>The Code of Virginia requires the Agency to charge \$75 for required department inspections. Annual inspections have been extremely useful in reducing public health threats. The regulation was modified to allow a reduction in department inspections when a system has been in compliance for three consecutive years.</p>

<p>Regulator (2)</p>	<p>Alternative Discharging systems that are not operated properly can and do pose a greater risk to public health and the environment since they discharge sewage effluent directly to the surface of state waters and drainways leading to state waters. Humans, pets, insects, etc. can be exposed to this effluent so assurance that these systems are operated and maintained properly is critical. VDH is charged with protecting public health and the environment and does so by inspecting and assuring these systems are in compliance with minimum regulatory requirements, by conducting at least an annual inspection with follow-up inspections when necessary, and by evaluating operation and testing data submitted by operators. The commenter notes that § 32.1-164.E. of the Code of Virginia requires VDH to charge a \$75 fee for an inspection but is out dated and should be rescinded. Legislators amended the Code of Virginia to require civil penalties for violations to VDH's regulations which states: § 32.1-164.E J. <i>"The Board shall establish a uniform schedule of civil penalties for violations of regulations promulgated pursuant to subsection B that are not remedied within 30 days after service of notice from the Department..."</i> Homeowners who operate and maintain their systems in compliance should not be charged fee for an inspection and those who fail to do so should be dealt with in accordance with the law.</p>	<p>Department inspections have been extremely useful in protecting public health. The Code requires the agency to charge \$75 fee for such an inspection. The fees offset the cost to the local health department for conducting the inspections. The fees collected from civil penalties go to a different fund and are not available to offset the cost of the program. The regulation was modified to allow a reduction in department inspections when a system has been in compliance for three consecutive years.</p>
<p>Peter Brooks</p>	<p>This program, based on his experience, allowed poor people or people with family owned land with poor soils or oftentimes both, to live on the property which is a good thing. He has also observed few well maintained systems, with disinfection in particular neglected. Lack of o+m [operation and maintenance] is due, in his</p>	<p>The Code of Virginia requires the agency to charge \$75 for department inspections. Annual inspections have been extremely useful in reducing public health threats. For those systems that are being operated, maintained, monitored, and reported properly, the regulation was modified to allow a reduction in department inspections when a system has been in compliance for three consecutive years. The owner must have an operator</p>

	<p>opinion, to two reasons: the owner is not held accountable for compliance with effluent limits and limited dollars to spend on operation and maintenance. Assurance that systems are operating properly must be required or significant public health problems will occur. He suggests VDH allocate resources to local health departments to perform inspection services to make owners accountable for their systems. When problems are observed, VDH will have an opportunity to educate the homeowner on the need to properly operate the system, assist him/her to locate an operator and alternative funding sources for low income owners.</p>	<p>complete required visits and testing in accordance with the regulation and General Permit. Any eligible owner may apply for a waiver to the fee. There is currently no funding source to help with routine operation and maintenance of a system.</p>
Bill Sledjeski	<p>12VAC5-640-20, Add licensed soil scientist as equivalent profession to conduct onsite evaluations. New wording would be "<u>or a licensed onsite soil evaluator, licensed soil scientist or professional engineer</u>"</p>	<p>The correct section reference is 30.D. The agency recognizes that the Department of Professional and Occupational Regulation (DPOR) licenses professionals and determines responsibilities for regulants. The regulation was modified to read that any person licensed in Virginia to evaluate and design onsite systems could submit an evaluation of a site. Licensed soil scientists are not eligible to design onsite systems at this time.</p>

**All changes made in this regulatory action**

*Please list all changes that are being proposed and the consequences of the proposed changes. Describe new provisions and/or all changes to existing sections.*

Current section number	Proposed new section number, if applicable	Current requirement	Proposed change, rationale, and consequences
10	10	Authority for Regulations.	VDH amended this section to clarify that the flows for these systems are calculated on a monthly, not yearly average.
20	20	Purpose of Regulations.	Stylistic changes made.
30	30	Scope of Regulations. The chapter applies to all discharge systems constructed and operated to serve individual single family homes with flows less than or equal to 1000 gallons per day. Location criteria do not	Amendments made to clarify flow calculation (monthly not yearly), to make sure other regulatory sections are cross-referenced correctly and to clarify the effective date of the applicability of the location criteria contained in this chapter.  VDH clarified that those owners who were

		<p>apply to systems installed prior to this chapter. A permit under this chapter will only be issued when no onsite options are available.</p>	<p>permitted prior to July 30, 1992, by DEQ that are exempted from the maintenance requirements are still required to collect and report the annual monitoring data required by the General Permit.</p> <p>VDH also amended this section to establish the requirement for owners to have an operation and maintenance manual; this requirement is to help ensure that these systems are being operated and maintained so as to preclude system failure. However, out of fairness to current system owners, the requirements will not be applied retroactively.</p> <p>VDH amended the requirement that onsite options must be evaluated and found unsatisfactory before a discharge option is to be considered so as to extend the evaluation to reduced footprint options available under 12VAC5-613-10 et seq. The rationale for the change is that more onsite options have become available since the effective date of this regulation.</p> <p>In addition, the amendments clarify that the performance requirements and horizontal setbacks in this chapter also apply to designs submitted under §32.1-163.6 of the Code of Virginia.</p> <p>In response to public comments, a clarification was made that any person licensed in Virginia to evaluate and design onsite systems could submit an evaluation of a site.</p>
40	40	<p>Establishes that this chapter is supplemental to Sewage Handling and Disposal Regulations.</p>	<p>Stylistic amendment.</p>
50	Repealed	<p>Established that this chapter relies on the Sewage Collection and Treatment Regulations for design criteria</p>	<p>Repealed as the pertinent sections were added to this regulation.</p>
60	60	<p>Establishes that this chapter is supplemental to the State Water Control Board's VPDES Regulations.</p>	<p>Amended to clarify that the flows for these systems are calculated on a monthly, not yearly average.</p>
70	70	<p>Establishes the relationship to the uniform building code.</p>	<p>Stylistic amendment.</p>
80	80	<p>Establishes the administration of this chapter and delegations of authority.</p>	<p>The Commissioner may delegate certain authority. Stylistic edits and cross-reference changes to this section were made.</p>

100	05	Definitions.	<p>Definitions for “aerobic treatment unit,” “intermittent sand filter system,” “generic system design,” “proprietary system design,” “onsite sewage disposal,” “pump and haul,” and “recirculating sand media filter system” were deleted because these terms are obsolete and unnecessary.</p> <p>Definitions for “alternative onsite sewage treatment system” and “conventional onsite sewage system” were added. Definition of “Five day biochemical oxygen demand” was changed to make it consistent with 12VAC5-613-10. Definitions of “Board,” “Division,” and “Department” were added. Definition of “reliability” and three reliability classes were added. The definitions achieve consistency with 9VAC25-790. A definition of “combined application” was added for the application process.</p> <p>Definitions of “dechlorination,” “biological treatment unit,” “disinfection unit,” “post aeration unit,” “post filtration unit,” “treatment system,” “TL-2 effluent,” and “TL-3 effluent” were added. Definitions of “operate,” “operation,” “maintenance,” and “modify” were added. A definition of “point source discharge” was added to parallel the definition in the Clean Water Act.</p> <p>Definitions of “family” and “income” were removed because they will be addressed by 12VAC5-620-10. The definition of “failing onsite sewage disposal system” was changed to make it consistent with 12VAC5-610-20. The definition of “failing alternative discharge treatment system” was changed. A definition of “emergency pump and haul” was added. The definition of “pump and haul” was deleted.</p> <p>Emergency pump and haul is specifically used in this regulation alone and has not been previously defined. The definition of “owner” was changed to parallel the definition found in Va. Code §32.1-163. The definitions of “NPDES” and “VPDES” were added to clarify this regulation’s relationship to the Clean Water Act and the State Water Control Board’s regulations. A definition of “surface waters” was added to parallel 9VAC25-31-10. A definition of “wetlands” was added to parallel the definition found in Va. Code §62.1-44.3. Definitions of “sewer,” “subsurface soil absorption,” and “subdivision” were deleted.</p>
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			because there is no statutory or regulatory basis for defining these terms. The definition of “dry ditch” was changed to make it more easily understood. A definition of “operation and maintenance contract” was added to address public comments.
110	110	Establishes compliance with the Administrative Process Act.	This section was changed to be consistent with the Administrative Process Act (APA).
120	120	No change.	No change.
130	None	Established the effective date of the original regulation.	Deleted this section because it is no longer necessary.
140	140	Emergency Orders	Section references were modified to reflect changes in section 150.
150	150	Sets duties and powers of the Commissioner or VDH pertaining to enforcing this chapter.	Amended subsection A to reconcile its content with the APA and the definition of a “case decision” found in §2.2-4001 of the Code. The APA requires that agencies decide cases through informal conference or consultation proceedings, and this subsection, as previously written, was inconsistent with the APA because it purported to authorize the issuance of a “case decision” prior to an informal conference or consultation proceeding. Subsections C through F were deleted as they overlapped and were redundant with Va. Code §32.1.
160	160	No changes proposed.	
170	170	Establishes the requirements for an applicant to obtain a variance and for the Commissioner to grant a variance.	Stylistic changes. Deleted references to a “hearing” when the agency is intending to refer to an informal conference or consultation proceeding pursuant to the APA and Va. Code §2.2-4019. The term “hearing” denotes a legal adjudicatory proceeding, while the APA contemplates informal proceeding. Deleted the requirement for the Commissioner to act on a variance within 60 days of receipt. The rationale is that the Commissioner, in many instances, does not need to act (i.e. grant or deny) a variance as there may be other viable regulatory options available to the applicant that would resolve the matter and would obviate the need for a variance.
180	180	Establishes proceeding and hearing types.	Amended this section to delete many extraneous provisions that either overlapped or conflicted with the APA.
190	None	Request for hearing.	Deleted this section because it is not enforceable. The APA prohibits VDH from denying a hearing request because it was sent to the wrong address; therefore, such a requirement is not enforceable and should not be in regulation.



200	None	Hearing as a matter of right.	Deleted this section because it was inconsistent with the APA.
210	210	Establishes timelines for requesting appeals.	Amended this section to make timelines equal and consistent.
220	220	Establishes the basic need for construction and operation permits and sets conditions for validity.	Stylistic amendments were made for readability and clarity. The construction permit is now valid for up to 60 months instead of 54 months so that it has the same lifespan as the General Permit. Added a one-time renewal option for construction permits of 18 months under certain conditions. This section was modified to state that the operation permit would be renewed if evidence of proper operation and maintenance was received through reporting, and the system was in compliance. This section was amended to allow for the transfer of construction and operation permits under certain conditions. Clarified that the expiration date of a construction or operation permit was unchanged when such a permit is transferred to a new owner.
230	230	The current regulation combined the process for applying for a General Permit with the process of applying for a construction permit. This section also outlined how fees and fee waivers are handled.	The application for a General Permit using the Combined Application was split from the application for a construction permit. This section now only addresses applying for the General Permit with the Combined Application which will clarify the process for the public. Modifications were made to recognize that either VDH or a consultant could conduct the site evaluation for a suitable discharge point. Additional submittal requirements for proposed discharges to wetlands were added. All references to fees and fee waivers were struck as VDH has a separate regulation that addresses fees.
240	240	This section sets the minimum requirements for what must be submitted for receipt of a construction permit.	This section was clarified by adding in detail on what constitutes a proper construction application from the Sewage Handling and Disposal Regulations. Additional submittal requirements for proposed discharges to wetlands were added. Section references were corrected.
250	250	Describes that a construction permit shall be issued when this requirements of this section are met.	Section references were modified to match the general approval process. Minor stylistic edits were made.
260	260	Sites with failing onsite sewage disposal systems that do not meet the siting requirements of this regulation may have those	The section was modified to reflect reference section changes. Adds a requirement that waivers must be requested in writing and that VDH will issue the waiver in writing.

		requirements waived.	
300	262	Sets requirements for a contractor to submit a statement of completion at the end of construction.	This section was moved for clarity. It also added a requirement for an engineer's statement of completion and for the submittal of as-built drawings, if any changes were made during construction. 262.B. incorporates old section 310 which cautions that a system cannot be put into operation except for the purposes of testing without an operation permit.
None	264	None	An operation and maintenance manual has been added for new systems being constructed. This section outlines the basic information that is required. The changes provide consistency with 12VAC5-613.
320	266	Sets the standard for issuing the operation permit as receipt of the contractor's completion statement, maintenance/monitoring contract, and VDH inspection. Also addressed fees for inspections	The new section was relocated for clarity and includes requirements for the operation and maintenance manual; the engineer's completion statement; and as-built drawings. The requirement to submit maintenance and monitoring contracts was deleted due to public comment.
270	270	Sets the requirements for when a construction or operation permit can be denied.	Modified the section for compliance with the APA. Made changes to section references. In response to public comment, the section was modified to eliminate the reference to submittal of a contract. A certification statement from the owner was added to the Combined Application and the Transfer of Ownership
280	280	Sets standards for when a construction or operation permit can be suspended or revoked.	Changes were made to be consistent with the APA. In response to public comments and the removal of the requirement to submit contracts to VDH, failure to submit a contract was deleted as a reason for permit revocation.
290	290	Voidance of construction permits.	Edits made to comply with APA. A construction permit is valid 60 months.
300		See discussion for new Section 266 (old Section 320).	See discussion for Section 266 (old Section 320).
310	None	Requires VDH to inspect a system prior to issuing an operation permit.	This section was repealed as its components were rolled into new Sections 266 and 262.
320		See above under new Section 266.	Repealed. See new Section 266.
330	None	Sets conditions under which VDH may suspend an operation permit.	Repealed as VDH can revoke, but cannot suspend a permit.
340	None	Sets conditions under which VDH may reinstate an operation permit.	Repealed as VDH cannot reinstate an operation permit; VDH can only issue an operation permit.

350	None	Described a process for approval of treatment units that included progressively moving a design through 3 levels of testing. Each level of testing required numerous system installations and took over 5 years to complete.	This section was repealed as VDH has not been implementing this process. Section 432 describes the new process for considering a system generally approved, which is consistent with 12VAC5-613.
360	None	Registration requirements for a product design with VDH	Repealed. No longer needed.
370	None	Described submission of plans for 3 types of treatment units.	Repealed. No longer needed.
380	None	Describes how a product approval achieved under section 350 could be rescinded.	Repealed. No longer needed.
390	390	No change.	No change.
400	400	Identified all weather streams, intermittent streams, and dry ditches as appropriate discharge points and conditions under which they may be used.	Stylistic edits were made for clarity. The intermittent stream/dry ditch requirements were changed to eliminate the maximum slope requirement for the discharge channel, but added a requirement to protect the channel from erosion. Also it was recognized that engineered channels have been used to extend natural swales and drainage ways to improve the discharge channel. Wetlands have been added as a potential discharge point, but a wetlands delineation must be completed and submitted to confirm the presence of wetlands.
410	410	No change.	No change.
420	420	Prohibited discharges within one mile upstream of a drinking water intake and designated swimming areas; set a public notice/comment procedure for VDH to prohibit discharges to certain stream segments; established setback distances to wells, cisterns, limestone outcrops, sinkholes, springs, proximity to other discharge points,	The section was modified for clarity and identifies existing prohibitions; added an option for a VDH health director to increase the treatment level and reliability class if needed for public health protection; established setbacks for the treatment components (tanks, etc.) from wells and cisterns; establishes new setbacks for wetland discharges; adds a recognition that setback distances to other wells (i.e. gas, geothermal) will be established on a case by case basis; modifies the setbacks to sinkholes and limestone outcrops to be less stringent; clarifies the conditions under which the distance between discharges can be reduced for various categories of discharge points; and modified the distance from a Class IV well to the downstream channel of a discharge to be consistent with Class IIIC wells because the risk of contamination is the same.

430	430	Set the basic performance requirements equal to the General Permit.	Modified this section to recognize that the construction and operation standards in this regulation must be met and maintained.
None	432	None.	This section replaces old section 350 and represents the current VDH method for approving treatment unit technology. Additionally, it recognizes that all of the discharging systems are composed of additional treatment components such as disinfection and post aeration. This section establishes methods/procedures by which VDH will consider the whole system generally approved.
None	434	None.	A new concept of reliability was added to address implied levels of reliability for various discharge points that were found in old Table 3.2.
440	440	Special factors that affect design are discussed. Homes that have intermittent usage (less than three months) are prohibited from having a discharge permit. Other factors discussed include flow, organic loading, erosion, and restricted access.	Modified this section to remove the prohibition for a discharge permit on homes with intermittent/seasonal use. Recognizes that intermittent use can be successful if appropriate measures are taken. The specific requirement to record permits with conditional flows was deleted as now all permits will be recorded under section 266. Other minor clarifications were made.
450	450	Requires restricted access for dry ditches and intermittent stream discharge points with easements. Also sets treatment design requirements for these types of discharge points.	Restricted access and easement requirements were added for wetland discharge points. Table 3.2 was modified to reflect a performance standard for the treatment required. Reliability classification (I or II) is being used along with TL-3 to attain a similar level of public health protection.
460	460	Set the design standards for chlorine disinfection and recognized that other methods may be used if approved by VDH.	Design standards from 9VAC25-790 were added to this section to incorporate the more complete design standards for chlorine disinfection, dechlorination, ultraviolet disinfection, post aeration, and post-filtration. Constructed wetlands requirements were adopted from other agency policies.
470	470	Identifies numerous basic construction requirements for discharging systems	Stylistic edits were made; clarified sampling port requirements, and added a requirement to post a permanent sign at the discharge point. Modified signage requirements to reflect an operator rather than a maintenance provider in Section 470M.
480	480	Required VDH to inspect the site and for the engineer to inspect and note any comments/concerns	Repealed and combined into Sections 262 and 266.

490	490	<p>Required homeowners to sample treatment systems (up to quarterly) in excess of the General Permit requirements based on the classification of the system. Also provided for up to monthly visits with informal testing depending on the classification of the system. Allows homeowners to collect their own samples with approval from VDH.</p>	<p>Revised to reflect two categories of systems only: generally approved or not generally approved. If generally approved, then there is a startup sample. If acceptable from testing, then sampling frequency is changed to annual sampling, with two maintenance visits per year at a minimum. If not generally approved, four quarterly samples are required to demonstrate the system can comply with the general permit. If satisfactory, then reverts to same as generally approved. Informal tests (Table 3.3) have been modified to be more system specific and also reference the required operation and maintenance manual. Clarified that when VDH inspects a system, it may or may not collect informal or formal samples. The waiver to allow homeowners to collect their own samples has been deleted. Existing waivers will be recognized, but no new waivers will be issued. In response to public comment, VDH reduced department inspections to once every three years if the system is in compliance for three consecutive years. Section 490G was deleted and the pertinent sections regarding monitoring contract waivers were moved to 500A. This change was based on the modification to merge the operation and maintenance contracts into one document.</p>
500	500	<p>Sets the standards for the maintenance contract and states that only a Class IV wastewater works operator may provide maintenance</p>	<p>In response to public comments, this section was modified to reflect that an owner engages an operator and does not need to submit a contract. Specific maintenance contract items were eliminated and replaced with owner and operator expectations. The individuals who can provide maintenance have been expanded to include any wastewater works operator (Class IV or higher) and Alternative Onsite Sewage System Operators (AOSS) operators.</p>
510	510	<p>Requires owners to submit the results of all testing and activities to VDH.</p>	<p>Modified to require electronic reporting by the 15<sup>th</sup> of the month following the month in which the activity occurred to be consistent with 12VAC5-613.</p>
520	520	<p>Identifies that failure to conduct or report monitoring results can result in suspension or revocation of the operation permit.</p>	<p>Modified this section to remove suspension from the options and leave just revocation. It also states that VDH will notify DEQ of the revocation of the operation permit.</p>