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## Fast-Track Regulation Agency Background Document

<b>Agency name</b>	Virginia Department of Health
<b>Virginia Administrative Code (VAC) Chapter citation(s)</b>	12VAC5-610
<b>VAC Chapter title(s)</b>	Sewage Handling and Disposal Regulations
<b>Action title</b>	Addition of Design Elements for Treated Effluent - Fast Track
<b>Date this document prepared</b>	11 03 2021

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Order 14 (as amended, July 16, 2018), the Regulations for Filing and Publishing Agency Regulations (1VAC7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code*.

### Brief Summary

*Provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.*

The purpose of this fast track amendment to the Sewage Handling and Disposal Regulations is to establish minimum design and installation criteria for conveyance pump stations and dispersal areas utilizing treated effluent (TL-2 and TL-3). Historically, the criteria were addressed via agency Guidance Memorandum and Policies (GMP). These types of designs were addressed piecemeal through product specific approvals beginning in 1995 and culminated in a comprehensive policy in 2009, GMP 147, which established procedures for treatment units to receive general approval, hydraulic loading rates for alternative onsite sewage systems, and design and installation criteria for the dispersal areas through a series of blanket variances to 12VAC5-610.

GMP 147 was rescinded following promulgation of the Regulations for Alternative Onsite Sewage Systems (12VAC5-613 AOSS Regulations). However, those regulations are performance regulations and therefore did not include the specific design and installation criteria found in GMP 147. To address this gap, the Virginia Department of Health (VDH) issued GMP 2016-03, noted that designers could continue to use design guidance from rescinded GMP 147 which would be in compliance with the AOSS Regulations. Parts of the rescinded GMP are superseded by 12VAC5-613 so there is conflicting and extraneous information that makes it confusing as a definitive reference. In working to resolve the confusion, VDH determined that moving the policy into regulation was necessary to resolve the discrepancies and confusion and also to provide clear design instruction and authority to licensed professionals in Virginia.

The proposed fast track amendments seek to incorporate the design elements from GMP 147, with appropriate revisions based on discussion with stakeholders. The fast track includes necessary definitions and modifies procedural requirements for these designs to conform with those allowed under GMP 147 and to recognize authorizations allowed to licensed individuals through §§54.1-402.A.11. Relevant design criteria for the various dispersal methods using TL-2 and TL-3 effluent are provided. These criteria provide relief from certain provisions in the existing 12VAC5-610 in recognition of the higher quality effluent. The amendments also include updates stakeholders agreed would be noncontroversial, including updates to pump designs to include pumps integral to a treatment system, wording to define how to characterize a seasonal water table, and the physical location of control panels.

## Acronyms and Definitions

*Define all acronyms used in this form, and any technical terms that are not also defined in the "Definitions" section of the regulation.*

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### **"GMP" means Guidance Memorandum and Policies**

"Effluent" means treated wastewater

"Onsite Soil Evaluator" is a designer licensed by the Department of Professional and Occupation Regulation to design onsite sewage systems within the limits of the license for size complexity of the system.

"TL-2" means treatment level 2 which is equivalent to a final effluent quality of less than or equal to 30 mg/l 5 Day Biochemical Oxygen Demand and 30 mg/l Total Suspended Solids

"TL-3" means treatment level 3 which is equivalent to a final effluent quality of less than or equal to 10 mg/l 5 Day Biochemical Oxygen Demand and 10 mg/l Total Suspended Solids

## Statement of Final Agency Action

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

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The State Board of Health approved this Fast Track Action to the Sewage Handling and Disposal Regulations on December 10, 2021.

**Mandate and Impetus**

*Identify the mandate for this regulatory change and any other impetus that specifically prompted its initiation (e.g., new or modified mandate, petition for rulemaking, periodic review, or board decision). For purposes of executive branch review, “mandate” has the same meaning as defined in Executive Order 14 (as amended, July 16, 2018), “a directive from the General Assembly, the federal government, or a court that requires that a regulation be promulgated, amended, or repealed in whole or part.”*

*As required by Virginia Code § 2.2-4012.1, also explain why this rulemaking is expected to be noncontroversial and therefore appropriate for the fast-track process.*

There are two classes of designers licensed in Virginia to design onsite wastewater treatment systems: onsite soil evaluators and professional engineers. Onsite soil evaluators (OSEs) are limited by Virginia Code §§54.1-402.A.11 to certain size and types of designs. One limitation is that OSEs can only use “packaged equipment, such as equipment of catalogued standard design that has been coordinated and tested by the manufacturer, and complies with all applicable codes...” By moving these design criteria into regulation, OSEs can clearly access the regulation for the design and eliminate any potential conflict that may exist with the referenced Code section. Currently, OSEs use “packaged equipment” approved via agency policy.

VDH presented a first draft of the amendments to the Sewage Handling and Disposal Regulation Advisory Committee (SHADAC) in December 2020. Since then VDH has produced six (6) additional drafts and presented them to the SHADAC. Comments were collected from SHADAC, VDH staff, and the public throughout the process. The drafts and comments are posted on the VDH [website here](#). Presentations were also made to VDH staff and to the Virginia Onsite Wastewater Recycling Association. VDH has worked with the SHADAC to create a regulation that has stakeholder support.

**Legal Basis**

*Identify (1) the promulgating agency, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia and Acts of Assembly chapter number(s), if applicable. Your citation must include a specific provision, if any, authorizing the promulgating agency to regulate this specific subject or program, as well as a reference to the agency’s overall regulatory authority.*

- (1) Virginia Department of Health
- (2) Title 32.1 of the Code of Virginia, and specifically §§ 32.1-12 and 32.1-164, provide that the State Board of Health has 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. Pursuant to §2.2-4012.1 of the Code of Virginia,

rules that are expected to be noncontroversial may be promulgated or repealed in accordance with the process set out in that section.

## Purpose

*Explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety or welfare of citizens, and (3) the goals of the regulatory change and the problems it's intended to solve.*

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The purpose of this fast track amendment to the Sewage Handling and Disposal Regulations is to establish minimum design and installation criteria for dispersal areas receiving treated wastewater. The Virginia Department of Health (VDH) and stakeholders have used design criteria contained in policy to ensure designs are protective of public health and the environment. While this process has allowed for permitting and design of such systems, incorporation of these criteria into the regulations is necessary to ensure clarity of design and installation criteria. VDH worked closely with the SHADAC to review existing guidance for these designs to ensure previous guidance was still appropriate, and to make improvements where necessary for inclusion in the proposed fast track. The SHADAC includes representation from a wide range of program stakeholders, and based on feedback from the SHADAC, VDH believes the proposed revisions will be noncontroversial.

The proposed changes are essential to protect the public health because there is no clear design criteria in the Regulations, and the original guidance are superseded by the Regulations for Alternative Onsite Sewage Systems (12VAC5-613). The confusion can lead to conflicts over designs submitted at a minimum and, more importantly, designs that are not as protective of public health being installed due to the ambiguity.

The proposed changes address design ambiguity and design authority by clearly spelling out the design requirements for systems utilizing TL-2 and TL-3 effluent.

## Substance

*Briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the "Detail of Changes" section below.*

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The proposed amendments modify the formal plan requirements for designs that meet the authorization limits for OSE designs under §§54.1-402.A.11. New definitions are added for wastewater treatment levels and others related to the addition of the new dispersal area requirements. Of primary importance are modifications to trench and elevated sand mound design criteria when treated wastewater is applied as well as the addition of a new dispersal method, pads, which are not currently in the regulations. The amendments also include revisions to the section on pumps to clarify different standards for pumps integral to treatment systems and conveyance pumps for TL-2 or TL-3 effluent systems as compared to pumps dispersing septic tank wastewater from conventional systems.

**Issues**

*Identify the issues associated with the regulatory change, 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, include a specific statement to that effect.*

The primary advantage the proposed amendments provide for homeowners, onsite sewage system designers, onsite sewage system installers and VDH is that they provide clarity of design and installation criteria for dispersal systems receiving TL-2 and TL-3 by shifting them from policy to regulations. Moving the design criteria into regulation maintains the authority of OSEs to utilize such designs as allowed by their licensure under §§54.1-402.A.11 and maintains the cost effective nature of an owner to hire an OSE rather than the professional engineer for routine standard designs. This does create a disadvantage to the agency and stakeholders in that future changes deemed necessary cannot be expedited quickly by agreed upon updates to guidance documents. The proposed amendments also provide an advantage for designers and system manufacturers by establishing clear criteria for pumps integral to treatment. This will help reduce any confusion with pump requirements contained in the regulations that were intended for pumps moving raw or minimally treated wastewater for dispersal, which is a different purpose and has different minimum requirements.

**Requirements More Restrictive than Federal**

*Identify and describe any requirement of the regulatory change which is more restrictive than applicable federal requirements. Include a specific citation for each applicable federal requirement, and a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements, or no requirements that exceed applicable federal requirements, include a specific statement to that effect.*

There are no federal requirements, other than non-enforceable general guidance, addressing the design and construction of onsite sewage systems.

**Agencies, Localities, and Other Entities Particularly Affected**

*Identify any other state agencies, localities, or other entities particularly affected by the regulatory change. "Particularly affected" are those that are likely to bear any identified disproportionate material impact which would not be experienced by other agencies, localities, or entities. "Locality" can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulation or regulatory change are most likely to occur. If no agency, locality, or entity is particularly affected, include a specific statement to that effect.*

Other State Agencies Particularly Affected

Department of Environmental Quality, Department of Professional and Occupational Regulations, Department of Housing and Community Development.

Localities Particularly Affected

The regulations apply equally in all localities throughout the Commonwealth.

Other Entities Particularly Affected

Onsite sewage system owners, onsite soil evaluators, professional engineers, onsite sewage system installers, onsite sewage system operators, system manufacturers, home builders, and realtors.

**Economic Impact**

*Pursuant to § 2.2-4007.04 of the Code of Virginia, identify all specific economic impacts (costs and/or benefits), anticipated to result from the regulatory change. When describing a particular economic impact, specify which new requirement or change in requirement creates the anticipated economic impact. Keep in mind that this is change versus the status quo.*

**Impact on State Agencies**

<p><i>For your agency:</i> projected costs, savings, fees or revenues resulting from the regulatory change, including:                  a) fund source / fund detail;                  b) delineation of one-time versus on-going expenditures; and                  c) whether any costs or revenue loss can be absorbed within existing resources</p>	<p>VDH does not anticipate any significant additional costs or savings as a result of the proposed amendments. The amendments do not affect fees or revenues, as those are addressed in the Regulations Governing Application Fees for Construction Permits for Onsite Sewage Disposal Systems and Private Wells (12VAC5-620).</p>
<p><i>For other state agencies:</i> projected costs, savings, fees or revenues resulting from the regulatory change, including a delineation of one-time versus on-going expenditures.</p>	<p>VDH does not anticipate any additional costs or savings for other state agencies.</p>
<p><i>For all agencies:</i> Benefits the regulatory change is designed to produce.</p>	<p>The benefit of the regulations is that it improves clarity of design criteria. This is not anticipated to impact agency cost or savings.</p>

**Impact on Localities**

<p>Projected costs, savings, fees or revenues resulting from the regulatory change.</p>	<p>VDH does not anticipate any additional costs or savings for localities.</p>
<p>Benefits the regulatory change is designed to produce.</p>	<p>The designs permitted by the proposed amendments can be permitted today via agency policy. Therefore, VDH does not anticipate any economic benefit to localities.</p>

**Impact on Other Entities**

<p>Description of the individuals, businesses, or other entities likely to be affected by the regulatory change. If no other entities will be affected, include a specific statement to that effect.</p>	<p>System owners, onsite soil evaluators, professional engineers, onsite sewage system installers, and onsite sewage system operators all currently rely upon agency policy for these alternative onsite sewage systems dispersal area designs, and would thus rely on the proposed amendments moving forward.</p>
<p>Agency's best estimate of the number of such entities that will be affected. Include an estimate of the number of small businesses affected. Small business means a business entity, including its affiliates, that:</p> <ul style="list-style-type: none"> <li>a) is independently owned and operated and;</li> <li>b) employs fewer than 500 full-time employees or has gross annual sales of less than \$6 million.</li> </ul>	<p>VDH receives approximately 1,200 designs each year for alternative systems. Those systems are designed by onsite soil evaluators and professional engineers. Over the past year 197 onsite soil evaluators, and 90 professional engineers have submitted onsite sewage system designs to VDH. There are approximately 354 alternative onsite sewage system installers in the Commonwealth, that could potentially install alternative systems, and 244 alternative onsite sewage system operators that could potentially maintain alternative systems.</p>
<p>All projected costs for affected individuals, businesses, or other entities resulting from the regulatory change. Be specific and include all costs including, but not limited to:</p> <ul style="list-style-type: none"> <li>a) projected reporting, recordkeeping, and other administrative costs required for compliance by small businesses;</li> <li>b) specify any costs related to the development of real estate for commercial or residential purposes that are a consequence of the regulatory change;</li> <li>c) fees;</li> <li>d) purchases of equipment or services; and</li> <li>e) time required to comply with the requirements.</li> </ul>	<p>The designs permitted by the proposed amendments can be permitted today via agency policy. The goal of moving the policy into regulation is to maintain the ability for designers to continue to utilize such designs by eliminating any ambiguity as to the authority for the designs. Therefore, there is no anticipated increase in the cost of reporting, recordkeeping, or other administrative cost for small businesses. One modification from current agency policy to the proposed amendments is an increase in the depth of cover over dispersal systems receiving treated wastewater from 4 inches to 6 inches of cover. This is anticipated to have an average increased development cost of less than \$500 for alternative system designs that require soil cover be brought in. However, most designers already utilize 6 inches or more of cover, meaning the amendments would not impact those designs. The proposed amendments are not anticipated to have an impact on the purchase of equipment or services, or time to comply with requirements, and will not impact fees.</p>
<p>Benefits the regulatory change is designed to produce.</p>	<p>The proposed amendments are intended to provide clarity to the requirements for the design and installation of TL-2 and TL-3 dispersal systems, with the goal of reducing the need for designers to amend design plans or VDH to deny permit applications. The proposed amendments include updates to pump designs to include pumps integral to treatment units, creation of a new dispersal category of pads, clarification of the distinction between pads and sand mounds, and minimum design criteria for trenches receiving treated effluent, which should also reduce design changes and denials.</p>

## Alternatives to Regulation

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

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The original GMP 147 has been superseded in part by 12VAC5-613 which created performance requirements for alternative onsite sewage systems. 12VAC5-613 did not include the specific design criteria for alternative onsite sewage systems found in the GMP. The Agency and private sector have been relying on a rescinded policy. The language in the policy is somewhat confusing and it relied on blanket variances to the Sewage Handling and Disposal Regulations. Moving the pertinent parts of the policy into regulation will codify the requirements, eliminate confusion, and provide a firm design basis for both professional engineers and OSEs. There is no alternative to a regulatory amendment.

## Regulatory Flexibility Analysis

*Pursuant to § 2.2-4007.1B of the Code of Virginia, describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the regulatory change.*

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The intent of the Fast Track action is to maintain flexibility for designs and reduce confusion for owners, designers, manufacturers, installers, operators, and VDH. This will help to streamline application review times and reduce denials saving owners time and money.

## Public Participation

*Indicate how the public should contact the agency to submit comments on this regulation, and whether a public hearing will be held, by completing the text below.*

*As required by § 2.2-4011 of the Code of Virginia, if an objection to the use of the fast-track process is received within the 30-day public comment period from 10 or more persons, any member of the applicable standing committee of either house of the General Assembly or of the Joint Commission on Administrative Rules, the agency shall: 1) file notice of the objections with the Registrar of Regulations for publication in the Virginia Register and 2) proceed with the normal promulgation process with the initial publication of the fast-track regulation serving as the Notice of Intended Regulatory Action.*

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If you are objecting to the use of the fast-track process as the means of promulgating this regulation, please clearly indicate your objection in your comment. Please also indicate the nature of, and reason for, your objection to using this process.

The Virginia Department of Health is providing an opportunity for comments on this regulatory proposal, including but not limited to (i) the costs and benefits of the regulatory proposal and any alternative approaches, (ii) the potential impacts of the regulation, and (iii) the agency's regulatory flexibility analysis stated in this background document.

Anyone wishing to submit written comments for the public comment file may do so through the Public Comment Forums feature of the Virginia Regulatory Town Hall web site at: <https://townhall.virginia.gov>. Comments may also be submitted by mail, email or fax to Marcia Degen, VDH – 5<sup>th</sup> floor, 109 Governor St., Richmond VA 23219; phone 804-387-1883; fax 804-864-7454; or email [Marcia.degen@vdh.virginia.gov](mailto:Marcia.degen@vdh.virginia.gov). In order to be considered, comments must be received by 11:59 pm on the last day of the public comment period.

### Detail of Changes

*List all regulatory changes and the consequences of the changes. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Use all tables that apply, but delete inapplicable tables.*

*If an existing VAC Chapter(s) is being amended or repealed, use Table 1 to describe the changes between existing VAC Chapter(s) and the proposed regulation. If existing VAC Chapter(s) or sections are being repealed and replaced, ensure Table 1 clearly shows both the current number and the new number for each repealed section and the replacement section.*

**Table 1: Changes to Existing VAC Chapter(s)**

Current chapter-section number	New chapter-section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
12VAC5-610-120		Definitions	Adding 5 definitions. Three are being copied from 12VAC5-613 for Treatment Level 2 effluent, Treatment Level 3 effluent, and Treatment unit or Treatment system. Two new definitions are added for infiltrative surface and working volume. The new definitions provide clarity and ready reference for the proposed amendments.
12VAC5-610-250		Formal plans and specifications are required for certain complexity and size of system.	Formal plans and specifications are waived for designs less than or equal to 1000 gallons per day that are exempt from license requirements for professional engineers under §§54.1-402.A.11. OSEs are provided design

			authority for defined systems. For those systems that OSEs are allowed to design, formal plans and specifications are not required. This has been allowed through a rescinded policy. Moving this into regulation will allow this cost saving practice to continue.
12VAC5-610-880.B		Design standards for pumps, pump stations, and force mains pumping raw or septic tank effluent are defined.	880.B.6 allows for vertical turbine and suction lift pumps to be used. 880.B.7 is modified to require that control panels be located to allow for working access.  Stakeholders agree that vertical turbine and suction lift pumps are viable alternatives to the current centrifugal pumps. Stakeholders requested that control panel access be addressed.
	12VAC5-880.C	None	Provides criteria for pumps and pump stations that move treated wastewater to a dispersal system. Because these are dealing with water with very little solids, some of the criteria for raw sewage pump stations do not apply. This section allows a reduction in force main velocity and allows for emergency storage volume to be provided in a treatment tank which will provide greater design flexibility. It clarifies that standards for alarms, valves, access, controls, etc. are maintained.
	12VAC5-610-880.D.	None	Recognizes that pumps that are integral to treatment systems (units) cannot be held to the same design criteria as a raw sewage pump station. This will avoid confusion by staff and designers of trying to apply inappropriate criteria to these pumps.
12VAC5-610-950.C & C1		C. States that a perched water table is indicated by free standing water, gray mottling or coloration  C1 states that a lateral groundwater interceptor shall extend a distance of 10 feet on either side of the soil absorption area.	C. The science of identifying perched water tables through soil coloration has advanced and this statement has been updated to use current soil science terminology of 'free standing water, gray mottlings, or redoximorphic features'. This will lead to more accurately defining perched water tables leading to better designs that are more protective of public health.  C1 has created confusion and is clarified by saying 'shall extend for a distance of 10 feet on <u>both</u> sides of the absorption area'.

			The minor changes are supported by stakeholders as correcting outdated or confusing language in the regulation.
12VAC5-610-950.D & Table 5.4		Contains loading rates for absorption trenches	When this section was written, loading rates were only supplied for septic tank effluent but it was not stated as such. The section tag and the title of Table 5.4 have been modified to clarify that this section and table applies to systems receiving septic tank effluent.
	12VAC5-610-950.K	None	<p>Provides installation criteria for trenches receiving TL-2 and TL-3. This section provides relief from the current regulation in that it reduces the amount of soil cover required from 12 inches to 6 inches; eliminates the increase in trench depth with slope; and clarifies the sidewall depth requirement for trenches. This section maintains the minimum soil dispersal area of 400 square feet for a single family residential dwelling.</p> <p>The reduction in soil cover is a saving from the original regulation, however GMP 147 had reduced that requirement to 4 inches. After discussions with stakeholders, most designers are using at least 6 inches and only one commenter objected to the change from 4 to 6 inches.</p>
	12VAC5-610-950 Table 5.5	None	<p>Creates soil loading rates for TL-2 and TL-3 effluent for various dispersal systems.</p> <p>The increased rates have been used since approximately 2009 when GMP 147 was issued. 12VAC5-613 incorporated a very minimal loading rate chart as it was intended to be a performance regulation utilized primarily by engineers. The expanded Table 5.5 gives clear direction to OSEs and engineers on loading rates for various types of dispersal systems. Engineers can still design under 12VAC5-613 and are not required to follow Table 5.5.</p>
12VAC5-610-960		This section sets standards for elevated sand mounds receiving septic tank effluent. It references an outdated design manual.	The revisions update the design reference for mounds receiving septic tank effluent; eliminates a recordation requirement; eliminates the statement that formal plans are required as that is covered in section 250; eliminates the requirement that VDH be notified of work start including delivery of materials; reiterates the minimum size of 400 square feet for any single family

			<p>residential system. A statement is added to clarify the distinction between a pad and a mound.</p> <p>These changes eliminate items that cost money and time and that add no value to a project from a public health standpoint.</p>
	12VAC5-610-960.E.	None	<p>This new language provides design criteria for mounds receiving TL-2 or TL-3 effluent including referencing Table 5.5 for loading rates; setting a minimum sand depth of 6 inches (reduced from 12 inches for septic tank effluent); the soil cover is reduced to 6 inches; and allows for manufacturer supported designs that deviate from the requirement for pressure dosing.</p> <p>The addition of the design criteria will create clarity. The policy used the term pad and mound interchangeably to some degree and it was unclear which requirements applied to which type of system. This language clearly spells out what is required for a mound system.</p>
	12VAC5-610-966	None	<p>This new section provides design criteria for pads. Pads do not currently exist in the regulation and were only found in policy. In reviewing the policy, stakeholders found that some of the requirements were arbitrary. The new section here removes the arbitrary limits of a maximum size for a pad and allows for mixing of pads and trenches. It clarifies that all pads must be dosed due to the nature of the level bottom of the pad. Language was added to explain that pads are oriented parallel to the natural surface topographic contours and a tolerance for 'level' was added.</p> <p>The policy suggested that pads could be put on the surface of the ground. That was not the intention and in practice it does not work and breakouts of sewage can occur. The new language clarifies the minimum sidewall depth for a pad (8 inches) and provides a minimum center to center spacing for piping. There is an allowance for deviations from some criteria for manufacturer supported designs that have been tested and approved.</p>

*If a new VAC Chapter(s) is being promulgated and is not replacing an existing Chapter(s), use Table 2.*

**Table 2: Promulgating New VAC Chapter(s) without Repeal and Replace**

New chapter-section number	New requirements	Other regulations and law that apply	Intent and likely impact of new requirements

*If the regulatory change is replacing an **emergency regulation**, and the proposed regulation is identical to the emergency regulation, complete Table 1 and/or Table 2, as described above.*

*If the regulatory change is replacing an **emergency regulation**, but changes have been made since the emergency regulation became effective, also complete Table 3 to describe the changes made since the emergency regulation.*

**Table 3: Changes to the Emergency Regulation**

Emergency chapter-section number	New chapter-section number, if applicable	Current <u>emergency</u> requirement	Change, intent, rationale, and likely impact of new or changed requirements since emergency stage