

Office of Regulatory Management

Economic Review Form

Agency name	Board For Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals
Virginia Administrative Code (VAC) Chapter citation(s)	18 VAC 160-40
VAC Chapter title(s)	Onsite Sewage System Professionals Licensing Regulations
Action title	General Review of Onsite Sewage System Professionals Licensing Regulations
Date this document prepared	February 29, 2024
Regulatory Stage (including Issuance of Guidance Documents)	Proposed (Action 5961 / Stage 10281)

Cost Benefit Analysis

Complete Tables 1a and 1b for all regulatory actions. You do not need to complete Table 1c if the regulatory action is required by state statute or federal statute or regulation and leaves no discretion in its implementation.

Table 1a should provide analysis for the regulatory approach you are taking. Table 1b should provide analysis for the approach of leaving the current regulations intact (i.e., no further change is implemented). Table 1c should provide analysis for at least one alternative approach. You should not limit yourself to one alternative, however, and can add additional charts as needed.

Report both direct and indirect costs and benefits that can be monetized in Boxes 1 and 2. Report direct and indirect costs and benefits that cannot be monetized in Box 4. See the ORM Regulatory Economic Analysis Manual for additional guidance.

Table 1a: Costs and Benefits of the Proposed Changes (Primary Option)

<p>(1) Direct & Indirect Costs & Benefits (Monetized)</p>	<p>As a result of the general review, there are several proposed changes that may have an economic impact.</p> <ol style="list-style-type: none"> 1. A new provision to allow passing license examination scores to remain valid for a period of 10 years from the date of examination. 2. Revision of the entry qualifications for onsite sewage system installers to include (i) provisions allowing for individuals to qualify for master installer licenses without holding prerequisite credentials; (ii) a provision allowing for individuals with requisite training and experience to be exempt from the examination requirement for a master conventional installer license; and (iii) expanding the types of individuals who may verify experience. 3. Revision of the entry qualifications for onsite sewage system operators to include (i) a provision allowing for individuals with interim onsite alternative operator, master conventional installer, or journeyman alternative operator licenses to qualify for a master conventional operator license; (ii) a provision allowing for individuals with interim alternative operator or master conventional operator licenses to qualify for a master alternative operator license; and (iii) expanding the types of individuals who may verify experience. 4. Revision of licensure requirements for the operation and maintenance of alternative onsite sewage systems that are designed to exceed 10,000 gallons flow per day. 5. Revision to reinstatement provisions to require an individual reinstating a license to provide proof of completing required continuing professional education (CPE) in order to reinstate. <p>Direct Costs: \$0</p> <ul style="list-style-type: none"> • There are no monetizable direct costs associated with this change. <p>Indirect Costs: \$0</p> <ul style="list-style-type: none"> • There are no monetizable indirect costs associated with this change. <p>Direct Benefits: \$0</p> <ul style="list-style-type: none"> • There are no monetizable direct benefits associated with this change. <p>Indirect Benefits: \$0</p> <ul style="list-style-type: none"> • There are no monetizable indirect benefits associated with this change.
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(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) \$0	(b) \$0
(3) Net Monetized Benefit	\$0	
(4) Other Costs & Benefits (Non-Monetized)	<p>Costs:</p> <ul style="list-style-type: none"> • Individuals who reinstate a license must provide proof of completing CPE. This may impose an increased administrative cost on those who reinstate a license. This could potentially affect about 22 individuals per year. (Direct.) <ul style="list-style-type: none"> ○ During the years 2020-2022, there were a total of 65 individuals who applied for reinstatement of an expired license. The average number of reinstatements per year is about 22. <p>Benefits:</p> <ul style="list-style-type: none"> • Individuals who fail to reinstate a license¹ would not be required to re-take the license examination if such individuals had passed the license examination within the previous 10 years. (Direct.) <ul style="list-style-type: none"> ○ The current license examination fee is \$80. These individuals would not be required to pay the examination fee. ○ In addition to saved cost for examination fee, such individuals would experience time savings that would have been spent on preparing for and taking the re-examination. • Some individuals may qualify for the exemption for examination as a master conventional installer. This would allow individuals with considerable experience in the profession to obtain licensure as a master conventional installer. (Direct.) • Individuals who are licensed as a master conventional installer can qualify a contractor business for licensure under the Board for Contractors licensing regulations to perform conventional sewage disposal system contracting. (Indirect.) • Individuals seeking licensure as a master onsite sewage system installer or master onsite sewage system operator benefit from changes to qualification provisions. There is no available data on how many more individuals would qualify licensure. (Direct.) 	

¹ Information on the number of individuals who re-apply for licensure after failing to reinstate is not reasonably available.

	<ul style="list-style-type: none"> • Owners of alternative onsite sewage systems that exceed 10,000 gallons per day design flow would benefit as these owners would not be limited to hiring an individual with two licenses. According to the Board’s license records, there are fewer than 50 individuals who hold both a wastewater works operator license (of any class) and an alternative onsite sewage system operator license that could potentially satisfy the requirements of the current rule. The change would mean that up to 325 Class 4 wastewater operators and 245 alternative onsite sewage system operators could potentially satisfy the requirements of the proposed rule change. (Direct.)
(5) Information Sources	<ol style="list-style-type: none"> 1. WWWOSSP Board Licensing Records. 2. According to program staff, there is anecdotal evidence, based on feedback received during trade shows and other industry events, that there are individuals, particularly in the south and southwestern regions of the state that have many years of experience as conventional onsite sewage system installers, but are hesitant to take the examination due to concern about not being able to pass it.

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)

(1) Direct & Indirect Costs & Benefits (Monetized)	<ol style="list-style-type: none"> 1. Under the current regulation, a licensee that fails to reinstate a license must re-apply as a new applicant and meet current entry requirements, to include passing the licensing examination. <p>Direct Costs: \$0</p> <ul style="list-style-type: none"> • There are no new monetizable direct costs associated with maintaining the status quo. <p>Direct Benefits: \$0</p> <ul style="list-style-type: none"> • There are no new monetizable direct benefits associated with maintaining the status quo. <p>Indirect Costs: \$0</p> <ul style="list-style-type: none"> • There are no new monetizable indirect costs associated with maintaining the status quo. <p>Indirect Benefits: \$0</p> <ul style="list-style-type: none"> • There are no new monetizable indirect benefits associated with maintaining the status quo.
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(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) \$0	(b) \$0
(3) Net Monetized Benefit	\$0	
(4) Other Costs & Benefits (Non-Monetized)	<p>Costs:</p> <ul style="list-style-type: none"> • All applicants for a master conventional installer license must pass the license examination to obtain a license. <ul style="list-style-type: none"> ○ Associated time cost to prepare for and take examination. ○ Individuals who do not pass examination would need to re-take and pass the examination. • Individuals who do not meet current qualifications for licensure would need to obtain additional education or work experience in order to qualify. • Owners of alternative onsite sewage systems that exceed 10,000 gallons per day design flow must have the system operated by an individual who is licensed as both a Class 4 wastewater works operator and an alternative onsite sewage system operator. There are only approximately 50 individuals who are so credentialed. Owners may not be able to find, or pay for, an individual who has both types of licenses. <p>Benefits:</p> <ul style="list-style-type: none"> • Under the current regulation, individuals do not assume an administrative cost to provide proof of complete of CPE in order to reinstate a license. 	
(5) Information Sources	1. WWWOSSP Board Licensing Records.	

Table 1c: Costs and Benefits under Alternative Approach(es)

(1) Direct & Indirect Costs & Benefits (Monetized)	Refer to Box #4.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) N/A	(b) N/A

(3) Net Monetized Benefit	N/A
(4) Other Costs & Benefits (Non-Monetized)	Prior to undertaking this regulatory action, the Board has attempted to address some of the concerns brought to its attention through issuing interpretive guidance. However, these efforts are insufficient to adequately address these concerns on a long-term basis, as interpretive guidance cannot be a substitute for amending a regulation. No other viable alternatives to a regulatory change have been identified. One of the objectives of the regulatory review has been to identify areas where the regulation can be changed to reduce or mitigate regulatory burdens on applicants and licensees.
(5) Information Sources	

Impact on Local Partners

Use this chart to describe impacts on local partners. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 2: Impact on Local Partners

(1) Direct & Indirect Costs & Benefits (Monetized)	N/A – See Box #3.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)
(3) Other Costs & Benefits (Non-Monetized)	There are no anticipated direct or indirect costs to local partners. There are no anticipated direct or indirect benefits to local partners.	
(4) Assistance		
(5) Information Sources		

Impacts on Families

Use this chart to describe impacts on families. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 3: Impact on Families

(1) Direct & Indirect Costs & Benefits (Monetized)	N/A – See Box #3.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)
(3) Other Costs & Benefits (Non-Monetized)	There are no anticipated direct or indirect costs to families. There are no anticipated direct or indirect benefits to families.	
(4) Information Sources		

Impacts on Small Businesses

Use this chart to describe impacts on small businesses. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 4: Impact on Small Businesses

(1) Direct & Indirect Costs & Benefits (Monetized)	See Box #3.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) N/A	(b) N/A
(3) Other Costs & Benefits (Non-Monetized)	As noted in the ABD, onsite sewage system professional licenses are issued to individuals, and not to business entities. However, many licensed onsite sewage system professionals are likely owners or employees of business entities that meet the definition of "small business" in § 2.2-4007.1 of the Code of Virginia. In addition, training course providers are likely business entities that meet the definition of "small business" in § 2.2-4007.1 of the Code of Virginia.	

	<p>The costs and benefits of this regulatory change are identified in Table 1(a). To the extent that additional costs are assumed by a small business entities owned by licensees or that employ licensees, this regulatory change would impact small businesses.</p>
(4) Alternatives	<p>The Board considered the potential adverse effects of the proposed amendments on applicants and licensees during the development process.</p> <p>The Board determined the compliance and reporting requirements in the proposed amendments are necessary to protect the public health, safety, and welfare. These amendments do not pose an unreasonable administrative or financial burden. The enabling statute establishing the onsite sewage system professionals licensing program provides no exemption for small business; therefore there are no such exemptions contained in the proposed change.</p>
(5) Information Sources	

Changes to Number of Regulatory Requirements

Table 5: Regulatory Reduction

For each individual action, please fill out the appropriate chart to reflect any change in regulatory requirements, costs, regulatory stringency, or the overall length of any guidance documents.

Change in Regulatory Requirements

VAC Section(s) Involved*	Authority of Change	Initial Count	Additions	Subtractions	Total Net Change in Requirements
40-60	(M/A):	1	2	0	+2
	(D/A):	2	0	2	-2
	(M/R):	0	0	0	0
	(D/R):	6	3	1	+2
40-105	(M/A):	0	0	0	0
	(D/A):	7	0	7	-7
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
40-115	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	1	0	+1
40-140	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	2	0	+2
40-170	(M/A):	0	0	0	0
	(D/A):	2	0	0	0
	(M/R):	1	0	0	0
	(D/R):	7	1	2	-1
40-175	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	1	0	+1
40-235	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	1	0	+1
40-275	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	1	0	1	-1

40-280	(M/A):	0	0	0	0
	(D/A):	1	0	0	0
	(M/R):	0	0	0	0
	(D/R):	6	0	1	-1
40-290	(M/A):	0	0	0	0
	(D/A):	1	0	1	-1
	(M/R):	0	0	0	0
	(D/R):	5	0	5	-5
40-295	(M/A):	0	0	0	0
	(D/A):	0	1	0	+1
	(M/R):	0	0	0	0
	(D/R):	0	4	0	+4
40-300	(M/A):	0	0	0	0
	(D/A):	1	0	1	-1
	(M/R):	0	0	0	0
	(D/R):	5	5	4	+1
40-330	(M/A):	0	0	0	0
	(D/A):	5	0	1	-1
	(M/R):	0	0	0	0
	(D/R):	6	0	1	-1
40-380	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	6	1	0	+1
40-385	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	2	0	+2
40-390	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	15	19	15	+4
40-400	(M/A):	0	0	0	0
	(D/A):	1	0	1	-1
	(M/R):	0	0	0	0
	(D/R):	32	0	32	-32
40-405	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	4	0	+4
40-410	(M/A):	0	0	0	0

	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	5	12	5	+7
40-415	(M/A):	0	0	0	0
	(D/A):	0	1	0	+1
	(M/R):	0	0	0	0
	(D/R):	0	2	0	+2
40-420	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	4	2	0	+2
40-450	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	9	5	8	-3
40-460	(M/A):	1	0	0	0
	(D/A):	2	0	1	-1
	(M/R):	0	0	0	0
	(D/R):	8	0	1	-1
40-470	(M/A):	1	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	15	4	10	-6
40-515	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	6	0	+6
40-520	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	2	0	+2
Grand Total of Changes in Requirements:					(M/A): +2
					(D/A): -12
					(M/R): 0
					(D/R): -9

Key:

Please use the following coding if change is mandatory or discretionary and whether it affects externally regulated parties or only the agency itself:

(M/A): Mandatory requirements mandated by federal and/or state statute affecting the agency itself

(D/A): Discretionary requirements affecting agency itself

(M/R): Mandatory requirements mandated by federal and/or state statute affecting external parties, including other agencies

(D/R): Discretionary requirements affecting external parties, including other agencies

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
40-80 40-300	<p>An applicant who fails to reinstate a license after it has expired must apply for a new license and meet the entry requirements in effect at that time, to include passing the license examination where required.</p> <p>The proposed regulation allows for passing examination scores to be valid for 10 years from the date of examination.</p>	\$80 examination fee.	\$0 examination fee (for qualified applicants.)	An applicant whose passing score on the license examination is still valid would not have to pay the \$80 examination fee if such person was previously licensed and failed to reinstate.
40-130 40-140	An applicant for a master conventional onsite sewage system installer license must pass the license examination.	\$80 examination fee.	\$0 examination fee (for qualifying applicants.)	Applicants that qualify for the examination waiver will save \$80 by not having to take the license examination.

	The proposed regulation creates an exemption from the license examination for individuals who meet certain experience or training criteria.			
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Other Decreases or Increases in Regulatory Stringency (if applicable)

VAC Section(s) Involved	Description of Regulatory Change	Overview of How It Reduces or Increases Regulatory Burden
40-80	Subsection D is added to the section. The subsection provides that a passing examination score is valid for a period of 10 years from the date of examination.	This provision is added to mitigate a barrier to entry for individuals who were previously licensed, but allowed their license to expire and lapse. Under the current regulation, such individuals must re-take the license examination.
40-130	The qualifications table for a master conventional onsite sewage system installer is revised to create a qualification for individuals with no prerequisite credential. Such an individual may qualify for licensure as a master conventional onsite sewage system installer with five (5) years of documented qualifying experience and examination.	This change will allow individuals to qualify for licensure based on experience alone, without need for any prerequisite credential as is currently required.
40-140	The section is revised to create an exemption from examination as a master conventional onsite sewage system installer based on documentation of certain education and experience.	This change is made to allow for less stringent requirements for individuals who have been engaged in the profession as conventional installers for a long period of time to qualify as a master licensee without the need to take and pass the license examination.

<p>40-160</p>	<p>The qualifications table for a master alternative onsite sewage system installer is revised to create a qualification for individuals with no prerequisite and no Board-approved education. Such an individual may qualify for licensure as a master alternative onsite sewage system installer with five (5) years of documented qualifying experience and examination.</p>	<p>This change will allow individuals to qualify for licensure based on experience alone, without need for any prerequisite credential or education as is currently required.</p>
<p>40-170</p>	<p>Subsection F is revised to provide that an alternative onsite sewage system that exceeds 10,000 gallons per day design flow must have its operation and maintenance performed by either (i) an individual who is licensed as an alternative onsite sewage system operator and a Class 4 or higher wastewater works operator; or (ii) an individual who is licensed as an alternative onsite sewage system operator, and an individual who is licensed as a Class 4 or higher wastewater works operator, who are working together pursuant to an employment relationship, contract, or other written agreement.</p>	<p>The change incorporates previous Board guidance. This change is made to make the existing requirement less burdensome. According to the Board's license records, there are fewer than 50 individuals who hold both a wastewater works operator license (of any class) and an alternative onsite sewage system operator license. Allowing for two individuals who are properly licensed to operate such systems provides for flexibility for the owners of such systems, while still protecting the public health, safety, and welfare.</p>
<p>40-190</p>	<p>The qualifications table for a master conventional onsite sewage system operator is revised to create a qualification for individuals with (i) an interim alternative onsite sewage system operator, (ii) master conventional onsite sewage system installer; or (iii) journeyman alternative onsite sewage system operator</p>	<p>This change creates an additional pathway for individuals to qualify for a license.</p>

	license. Such individuals may qualify for licensure as a master conventional onsite sewage system operator with six (6) months of documented qualifying experience and examination.	
40-200	<p>The section is revised to allow for a master conventional or master alternative onsite sewage system installer to verify an applicant’s experience in order for the applicant to qualify for a waiver of examination as a master conventional onsite sewage system operator.</p> <p>The section is also revised to provide that experience gained outside of Virginia may be verified by individual with an equivalent credential to the licenses specified in the section.</p>	This change reduces the stringency of verification requirements in order for an individual to qualify for exemption from the license examination for a master conventional onsite sewage system operator license.
40-260	The qualifications table for a journeyman alternative onsite soil evaluator is revised to create a qualification for individuals with no prerequisite, but who have completed a VDH onsite sewage system training program. Such individuals may qualify for licensure as a journeyman alternative onsite soil evaluator with one (1) year of documented qualifying experience.	This change creates an additional pathway for individuals to qualify for a license.
40-270	The qualifications table for a master alternative onsite soil evaluator is revised to create a qualification for individuals with no prerequisite, but who have completed a VDH onsite sewage system training	This change creates an additional pathway for individuals to qualify for a license.

	<p>program. Such individuals may qualify for licensure as a master alternative onsite soil evaluator with three (3) years of documented qualifying experience.</p>	
40-280	<p>Subdivision #1 is revised to include the additional discipline of “applied sciences” as an acceptable degree program.</p>	<p>This change allows for individuals with a degree in applied sciences to potentially meet education qualifications for licensure as a master soil evaluator.</p>
40-300	<p>Individuals seeking to reinstate a license must provide proof of completing CPE in order to reinstate.</p>	<p>This change adds a small administrative burden to individuals who fall into reinstatement.</p>
40-330	<p>The section is revised to permit a licensee to request additional time to meet the CPE requirement. The granting of a request is at the discretion of the Board.</p>	<p>This change provides flexibility for licensees to meet the CPE hours requirement for license renewal.</p>
40-340	<p>The section is revised to add “electrical principles” to the list of acceptable topics for CPE.</p>	<p>This change allows for individuals who take a CPE course in electrical principles to receive CPE credit toward renewal of an onsite sewage system installer license.</p>
40-350	<p>The section is revised to add “electrical principles” to the list of acceptable topics for CPE.</p>	<p>This change allows for individuals who take a CPE course in electrical principles to receive CPE credit toward renewal of an onsite sewage system operator license.</p>
40-460	<p>Subdivision A 3 is revised to remove the provision that specified certain types of misdemeanor offenses be reported. A licensee will be required to report any misdemeanor conviction, with</p>	<p>This change expands the range of misdemeanor offenses that must be reported to the Board.</p> <p>This change will make the regulation easier to understand and removes the burden on</p>

	<p>the exception of marijuana convictions.</p>	<p>licensee with misdemeanor convictions to make a determination as to which criminal convictions should be reported, and which should not.</p> <p>It will also enhance the Board's protection of the public welfare to address licensee's fitness for licensure.</p>
40-480	<p>The prohibition on soliciting or accepting financial or other valuable consideration from material or equipment suppliers for specifying their products or services in subdivision #3 is revised to provide that such activity is prohibited unless the circumstances are full disclosed to, and agreed to by, all interested parties in writing.</p> <p>Similarly, the prohibition on soliciting or accepting gratuities, directly or indirectly, from contractors, their agents, or other parties dealing with a client or employer in connection with work for which the licensee is responsible in subdivision #4 is revised to provide that such activity is prohibited unless the circumstances are full disclosed to, and agreed to by, all interested parties in writing.</p>	<p>The changes to subdivisions #3 and #4 are made to make the regulation less restrictive than current requirements, while still ensuring the public welfare is protected.</p>
40-520	<p>The section provides that a conventional onsite sewage system operator with the appropriate sewage handling permit issued by VDH or a local independent health department may pump an alternative onsite sewage system without an alternative onsite sewage system operator</p>	<p>This change provides a less restrictive means for the pumping of alternative sewage systems.</p> <p>The change is designed to address a problem where an owner may have to pay for two licensees – an alternative operator and a conventional</p>

	<p>present, provided the conventional operator performs the pumping at the request and direction of the alternative operator. The conventional operator is only permitted to pump the tank, and is not authorized to perform any other functions associated with the operation and maintenance of the alternative onsite sewage system.</p>	<p>operator – in order to have an alternative system pumped because a conventional operator cannot perform maintenance on an alternative system without being under the supervision of an alternative operator.</p>
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Length of Guidance Documents (only applicable if guidance document is being revised)

Title of Guidance Document	Original Length	New Length	Net Change in Length
N/A	N/A	N/A	N/A