

Office of Regulatory Management

Economic Review Form

<b>Agency name</b>	Department of Environmental Quality – State Water Control Board
<b>Virginia Administrative Code (VAC) Chapter citation(s)</b>	9 VAC 25-580
<b>VAC Chapter title(s)</b>	Underground Storage Tanks: Technical Standards and Corrective Action Requirements
<b>Action title</b>	Periodic Review
<b>Date this document prepared</b>	July 25, 2023
<b>Regulatory Stage (including Issuance of Guidance Documents)</b>	Periodic Review

**Cost Benefit Analysis**

**Agency Note:** As this action involves a Periodic Review, Tables, 1a, 1b, and 1c have not been completed pursuant to the ORM Regulatory Economic Analysis Manual.

**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)	<p>Currently, 86 localities in Virginia operate regulated USTs. A regulated UST is defined as any one or combination of tanks (including underground pipes connected thereto) that are used to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is 10% more beneath the surface of the ground.</p> <p>Direct Costs:</p> <p>The costs described below were developed by the US Environmental Protection Agency (USEPA) during the initial promulgation of the federal Underground Storage Tank (UST) regulation in 1988 and a subsequent amendment that occurred in 2015. Costs associated with the base requirements of the regulation, e.g., equipping a UST with release detection, spill prevention, overfill prevention and corrosion protection equipment averaged about \$9,970 per UST in 1988, which is approximately \$25,700 today. The UST Technical regulation also requires owners to clean up UST releases which averaged about \$18,800 per UST in 1988 which</p>
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is approximately \$48,500 today. Although this figure represents the average national cost of cleanup, the average cost to a tank owner in Virginia can be significantly less. By law, the Virginia Petroleum Storage Tank Fund is available to reimburse tank owners and operators for reasonable and necessary cleanup costs in excess of their statutory financial responsibility amount. Reimbursed cleanups account for over 90 percent of tank cleanups in Virginia. The out-of-pocket cost to the owner is assessed on a sliding scale based on the amount of total annual amount of petroleum flowing through all tanks the owner operates/owns in Virginia. The range is from \$5,000 per cleanup to \$50,000 depending upon the amount of throughput.

USEPA added additional UST equipment testing requirements in the 2015 federal amendments. Based on USEPA’s cost benefit analysis, the additional cost to tank owners and operators for the new testing requirements was approximately \$300 per UST per year in 2015 which is approximately \$392 per UST in 2023 dollars.

**Indirect Costs:** Indirect costs to local government tank owners could be the cost of an enforcement action if the owner does not comply with the UST regulatory requirements resulting in civil penalties ranging from \$300 to \$13,000. (The higher end is assessed for violations such as failing to report a UST release.)

**Direct Benefits:** This regulation ensures that local government tank owners and operators store petroleum in tanks that are designed and equipped to prevent petroleum releases to the environment and, if a release should occur, the release is discovered and cleaned up promptly. The regulated tank remediation and cleanups avoided costs can range from \$5,000 to \$50,000 which represents the statutory financial obligation a tank owner must meet in the event of a petroleum tank release before the Virginia Petroleum Storage Tank Fund will begin reimbursing.

**Indirect Benefits:** This regulation ensures that local government tank owners and operators store petroleum in tanks that are designed and equipped to prevent petroleum releases to the environment and, if a release should occur, the release is discovered and cleaned up promptly. All of which, ensures the protection of human health and the Commonwealth’s drinking water supply, natural resources and tourism.

(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Equipment installation/system operation: approx.. \$9970/UST (b) Testing: approx.. \$392/UST/year (c) Cleanup: typically, \$5,000 – 50,000 per cleanup	(b) Reduces the frequency and severity of petroleum UST releases which in turn protects the locality’s citizens, drinking water, other natural resources and tourism industry from the negative impacts of large-scale petroleum UST releases. Less releases means an avoided cost of \$5,000 - \$50,000 per cleanup.

(3) Other Costs & Benefits (Non-Monetized)	The requirements of this regulation effectively reduce the frequency and severity of petroleum UST releases which in turn protects the locality's citizens, drinking water, other natural resources and tourism industry from the negative impacts of large scale petroleum UST releases.
(4) Assistance	DEQ staff are available to assist tank owners and operators in determining which requirements apply to them and how to comply with the regulatory requirements.
(5) Information Sources	(1) Assessment Of The Potential Costs, Benefits, And Other Impacts Of The Final Revisions To EPA's Underground Storage Tank Regulations <a href="https://19january2017snapshot.epa.gov/sites/production/files/2015-07/documents/regs2015-ria.pdf">https://19january2017snapshot.epa.gov/sites/production/files/2015-07/documents/regs2015-ria.pdf</a> (2) USEPA Preamble to 40 CFR Part 280 (1988) (3) Inflation calculator found at <a href="http://in2013dollars.com">in2013dollars.com</a> used to calculate present value

**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)	Direct Costs: This regulation imposes no direct costs on families.  Indirect Costs: Families could potentially experience some financial impact of these regulations if localities are passing on a portion of regulated UST facility compliance costs through their tax rates.  Direct Benefits: The requirements of this regulation reduce the frequency and severity of releases from regulated petroleum USTs.  Indirect Benefits: The requirements of this regulation effectively reduce the frequency and severity of UST releases which in turn protects families, drinking water resources, other natural resources, recreation and tourist activities they enjoy from the negative impacts of petroleum UST releases.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) There may be potential impact on local tax rates if localities are passing on a portion of UST facility compliance costs through their tax rates, however these costs are unable to be determined	(b) This regulation directly benefits families by reducing the frequency and severity of petroleum UST releases which in turn protects families and the drinking water and other natural resources, recreation

		and tourist activities they enjoy from the negative impacts of petroleum UST releases.
(3) Other Costs & Benefits (Non-Monetized)	This regulation reduces the frequency and severity of petroleum UST releases which in turn protects families and the drinking water and other natural resources, recreation and tourist activities they enjoy from the negative impacts of petroleum UST releases.	
(4) Information Sources	N/A	

**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)	<p>Direct Costs:</p> <p>The costs described below were developed by the US Environmental Protection Agency (USEPA) during the initial promulgation of the federal Underground Storage Tank (UST) regulation in 1988 and a subsequent amendment that occurred in 2015. Costs associated with the base requirements of the regulation, e.g., equipping a UST with release detection, spill prevention, overfill prevention and corrosion protection equipment averaged about \$9,970 per UST in 1988, which is approximately \$25,700 today. The UST Technical regulation also requires owners, including small business tank owners, to clean up UST releases which averaged about \$18,800 per UST in 1988 which is approximately \$48,500 today. Although this figure represents the average national cost of cleanup, the average cost to a tank owner in Virginia can be significantly less. By law, the Virginia Petroleum Storage Tank Fund is available to reimburse tank owners and operators for reasonable and necessary cleanup costs in excess of their statutory financial responsibility amount. Reimbursed cleanups account for over 90 percent of tank cleanups in Virginia. The out-of-pocket cost to the owner is assessed on a sliding scale based on the amount of total annual amount of petroleum flowing through all tanks the owner operates/owns in Virginia. The range is from \$5,000 per cleanup to \$50,000 depending upon the amount of throughput.</p> <p>USEPA added additional UST equipment testing requirements in the 2015 federal amendments. Based on USEPA’s cost benefit analysis, the additional cost to tank owners and operators for the new testing requirements was approximately \$300 per UST per year in 2015 which is approximately \$392 per UST in 2023 dollars.</p>
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	<p>Indirect Costs: Indirect costs to small business tank owners could be the cost of an enforcement action if the owner does not comply with the UST regulatory requirements resulting in civil penalties ranging from \$300 to \$13,000. (The higher end is assessed for violations such as failing to report a UST release.)</p> <p>Direct Benefits: This regulation ensures that small business tank owners and operators store petroleum in tanks that are designed and equipped to prevent petroleum releases to the environment and, if a release should occur, the release is discovered and cleaned up promptly. The regulated tank remediation and cleanups avoided costs can range from \$5,000 to \$50,000 which represents the statutory financial obligation a tank owner must meet in the event of a petroleum tank release before the Virginia Petroleum Storage Tank Fund will begin reimbursing.</p> <p>Indirect Benefits: This regulation ensures that small business tank owners and operators store petroleum in tanks that are designed and equipped to prevent petroleum releases to the environment and, if a release should occur, the release is discovered and cleaned up promptly. All of which, ensures the protection of human health and the Commonwealth’s drinking water supply, natural resources and tourism.</p>
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(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	<p>a) Equipment installation/system operation: approx.. \$9970/UST</p> <p>b) Testing: approx.. \$392/UST/year</p> <p>c) Cleanup: typically, \$5,000 – 50,000 per cleanup</p>	<p>(b) Reduces the frequency and severity of petroleum UST releases which in turn protects the locality’s citizens, drinking water, other natural resources and tourism industry from the negative impacts of large scale petroleum UST releases. Less releases means an avoided cost of \$5,000 - \$50,000 per cleanup.</p>

(3) Other Costs & Benefits (Non-Monetized)	<p>The requirements of this regulation effectively reduce the frequency and severity of petroleum UST releases which in turn protects the locality’s citizens, drinking water, other natural resources and tourism industry from the negative impacts of large scale petroleum UST releases.</p>
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(4) Alternatives	<p>In order for Virginia to implement its own UST program, it must have regulations in place that are as stringent as the federal regulations. Virginia Code Section 62.1-44.34:9 authorizes the State Water Control Board to promulgate such regulations as may be necessary to carry out its powers and duties with regard to underground storage tanks in accordance with applicable federal laws and regulations. There is no viable alternative to having this regulation.</p>
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(5) Information Sources	<p>(1) Assessment Of The Potential Costs, Benefits, And Other Impacts Of The Final Revisions To EPA’s Underground Storage Tank Regulations <a href="https://19january2017snapshot.epa.gov/sites/production/files/2015-07/documents/regs2015-ria.pdf">https://19january2017snapshot.epa.gov/sites/production/files/2015-07/documents/regs2015-ria.pdf</a></p> <p>(2) USEPA Preamble to 40 CFR Part 280 (1988)</p> <p>(3) Inflation calculator found at <a href="http://in2013dollars.com">in2013dollars.com</a> used to calculate present value</p>

**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.

**Agency Note: This is a periodic review, and the Agency decision is to retain the regulation as written. No changes to the regulation are being proposed at this time.**

*Change in Regulatory Requirements*

VAC Chapter	Authority of Change	Initial Count	Additions	Subtractions	Net Change
9VAC25-580	Statutory:	383	0	0	0
	Discretionary:	0	0	0	0

*Cost Reductions or Increases (if applicable)*

VAC Section(s) Involved	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
N/A				

*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
N/A		

*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			