Regulatory Analysis Form

(Completed by Promulgating Agency)

(All Comments submitted on this regulation will appear on IRRC's website)

INDEPENDENT REGULATORY REVIEW COMMISSION

(1) Agency
Environmental Protection

(2) Agency Number: 7

Identification Number: 530

IRRC Number**:** 3199

(3) PA Code Cite: 25 Pa. Code Chapter 245

(4) Short Title: Administration of the Storage Tank and Spill Prevention Program

(5) Agency Contacts (List Telephone Number and Email Address):

Primary Contact: Laura Edinger, 717-772-3277, ledinger@pa.gov
Secondary Contact: Jessica Shirley, 717-772-5643, jesshirley@pa.gov

(6) Type of Rulemaking (check applicable box):

- ☐ Proposed Regulation
- ☒ Final Regulation
- ☐ Final Omitted Regulation
- ☐ Emergency Certification Regulation;
  - ☐ Certification by the Governor
  - ☐ Certification by the Attorney General

(7) Briefly explain the regulation in clear and nontechnical language. (100 words or less)

Chapter 245 must be updated to be no less stringent than the Federal underground storage tank (UST) requirements so the Department of Environmental Protection (Department) may re-apply for State Program Approval from the United States Environmental Protection Agency (EPA). This final-form rulemaking will strengthen the requirements for operation and maintenance of UST equipment. Currently, UST owners and operators are required to have spill prevention, overfill prevention and release detection equipment in place, but are not required to periodically verify the functionality of some of that equipment. This final-form rulemaking also adds a new certification category for persons that only perform minor modifications of UST systems. This final-form rulemaking shortens the in-service inspection cycle for aboveground storage tanks (AST) in underground vaults and small ASTs. This final-form rulemaking clarifies or corrects other provisions in Chapter 245 based on the Department's experience in implementing this chapter since the last comprehensive Department rulemaking occurring over 10 years ago.

(8) State the statutory authority for the regulation. Include <u>specific</u> statutory citation.

This final-form rulemaking was developed under the authority of section 106 of the Storage Tank and Spill Prevention Act (act) (35 P.S. § 6021.106), which authorizes the Board to adopt rules and regulations governing ASTs and USTs to accomplish the purposes and carry out the provisions of the act; section 301 of the act (35 P.S. § 6021.301), which authorizes the Department to establish program requirements for ASTs; section 501 of the act (35 P.S. § 6021.501), which authorizes the Department

to establish program requirements for USTs; and section 1920-A of The Administrative Code of 1929 (71 P.S. § 510-20), which authorizes the Board to formulate, adopt and promulgate rules and regulations that are necessary for the proper work of the Department.

(9) Is the regulation mandated by any Federal or state law or court order, or Federal regulation? Are there any relevant state or Federal court decisions? If yes, cite the specific law, case or regulation as well as, any deadlines for action.

This final-form rulemaking is required by Federal regulations for the Department to re-apply for State Program Approval and to continue to receive Federal grant funds.

The EPA codified comprehensive Federal regulations for USTs in 40 CFR Part 280 (relating to technical standards and corrective action requirements for owners and operators of underground storage tanks (UST)). The EPA initially promulgated the UST regulations in 1988. The EPA published final revisions to 40 CFR Part 280 at 80 FR 41566 (July 15, 2015 Final Rule), effective October 13, 2015. The revisions in the July 15, 2015 Final Rule, among other things: added secondary containment requirements for new and replaced tanks and piping; added operator training requirements; added periodic operation and maintenance requirements for UST systems; removed certain deferrals; added new release prevention and detection technologies; updated codes of practice; and made editorial and technical corrections. The Department incorporated secondary containment (November 10, 2007) and operator training (December 26, 2009) requirements that meet the Federal requirements into Chapter 245 through prior final-form rulemakings.

In its July 15, 2015 Final Rule, the EPA also updated the State Program Approval requirements in 40 CFR Part 281 (relating to approval of state underground storage tank programs). Under these revisions, the EPA requires that states amend their UST regulations and apply for initial or revised State Program Approval within 3 years of the October 13, 2015 effective date of the July 15, 2015 Final Rule.

Currently, the Commonwealth has State Program Approval. The Commonwealth receives approximately $2.3 million annually in Federal grant funding from the EPA under section 9014 of the Federal Solid Waste Disposal Act (42 U.S.C.A. § 6991m) to aid in administering the UST program. This final-form rulemaking is necessary to ensure continued receipt of Federal grant funds. To comply, the Department must update Chapter 245 to be no less stringent than the Federal requirements so the Department may re-apply for State Program Approval. The EPA has not codified companion AST regulations.

(10) State why the regulation is needed. Explain the compelling public interest that justifies the regulation. Describe who will benefit from the regulation. Quantify the benefits as completely as possible and approximate the number of people who will benefit.

This final-form rulemaking is necessary to further prevent releases of regulated substances from USTs into the environment. There were 210 confirmed releases from USTs in this Commonwealth from October 1, 2016, through September 30, 2017. The lack of proper operation and maintenance of UST systems is the main cause of new releases. Information on sources and causes of releases shows that, in addition to releases from tanks, releases from piping and spills and overfills associated with deliveries have emerged as common problems. In addition, releases at the dispenser are one of the leading sources of contamination at UST facilities. Finally, according to EPA in its preamble to the July 15, 2015 Final Rule (80 FR at 41567), data shows that release detection equipment at all UST

facilities is only successfully detecting approximately 50 percent of releases it is designed to detect. These release detection problems are similarly due in part to improper operation and maintenance.

The primary goal of this final-form rulemaking is to further reduce the potential for releases of regulated substances from USTs by strengthening the requirements for properly operating and maintaining release detection equipment. This final-form rulemaking will require that UST equipment be inspected and tested regularly, which will help to further reduce the number of releases from USTs and in turn protect public health and the environment. Incorporation of these UST amendments into Chapter 245 will enable the Commonwealth to re-apply for UST State Program Approval from the EPA and remain eligible for continued substantial Federal funding for the UST program.

A significant portion of the beneficial impacts associated with this final-form rulemaking are avoided cleanup costs from preventing releases and reducing the severity of releases from USTs. The EPA, in the analysis of the potential benefits associated with its July 15, 2015 Final Rule, estimated the typical cost of a small-extent, soil-only remediation to be $25,300, and the typical cost of a large-extent, groundwater-contamination remediation to be $428,200 (https://www.epa.gov/sites/production/files/2015-07/documents/regs2015-ria.pdf (page 4-9)). These costs are in 2008 dollars. During calendar year 2017, the average cost per closed claim paid by the Underground Storage Tank Indemnification Fund (USTIF) was $308,389, and the total paid for all open claims was $33,287,724 (https://ustif.pa.gov/documents/10184/0/2017_PAUSTIF_Annual+Report_Final_2018-03-01.pdf/178c0ef5-8ef1-4931-b6fa-528014d9be38).

While the reduced cleanup costs associated with this final-form rulemaking cannot be accurately quantified, a decrease in release frequency and severity is expected to result in both a reduction of the average cost per closed claim and the total annual claim payments made by the USTIF. Groundwater contamination incidents and vapor intrusion remediation costs are expected to be reduced or avoided, which will reduce the need for USTIF claims and payments and potentially reduce fees paid by UST owners to fund USTIF. These fees are typically passed on to the public at motor fuel retail locations. Thus, any decrease in release frequency achieved by this final-form rulemaking will benefit the public and the environment by protecting soil and water resources, and reducing costs associated with necessary corrective action.

Other benefits of decreasing the frequency of releases from storage tanks that cannot be quantified or monetized include the avoidance of human health risks, protection of ecological receptors, protection of gallons of groundwater each year, and avoided property devaluation.

This final-form rulemaking will also benefit storage tank owners and operators, and certified installers and companies. For example, this final-form rulemaking adds a new UST certification category to allow individuals to perform tank handling activities such as repairs that do not involve excavation without having to obtain the (full) certification to install and modify storage tank systems, and to perform tests of UST systems required by this final-form rulemaking. Creation of this new certification category will afford UST owners the opportunity to employ individuals who specialize in modifications only, which could save UST owners some of the costs associated with minor modification work and system testing. This “minor modification” certification category will also provide opportunities for existing certified companies to employ individuals who specialize in minor modification work. In addition, it may create an incentive for persons interested in only performing “minor modification” work to become certified and establish their own companies. In either case, the establishment of this new certification category is expected to result in the creation of a significant

number of jobs within the certified installer community, which may reduce the cost of UST system testing over time.

The increase in required inspections and testing by storage tank owners is expected to reduce Department costs. For example, this final-form rulemaking requires all ASTs in underground vaults that require an in-service inspection to be inspected within 6 and 12 months of installation and at least every 3 years thereafter due to their history of noncompliance. This mirrors the inspection requirement for USTs. Also, the initial inspection requirement and in-service inspection cycle for small ASTs is shortened from 10 years to 5 years. Based on current in-service inspections, the compliance rate with regulatory requirements such as performance standards, design criteria, and release prevention and leak detection is less than 50%. When the facility operations inspection cycle for USTs was shortened from 5 years to 3 years in a prior rulemaking, the Department observed increased regulatory compliance, fewer releases and a reduction in the severity of releases from USTs, which reduced Department staff time needed to follow-up on noncompliant facilities and corrective action cases.

Finally, this final-form rulemaking is needed for the Department to re-apply to EPA for State Program Approval and to continue to receive Federal grant funds.

(11) Are there any provisions that are more stringent than Federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulations.

The provisions in this final-form rulemaking are consistent with EPA's July 15, 2015 Final Rule amending the Federal UST regulations in 40 CFR Part 280, which took effect on October 13, 2015. Provisions that are more stringent than the Federal requirements are discussed below.

Subsection 245.306(e) (relating to interim remedial actions) has been added to require a responsible party to notify the Department by telephone or electronic mail as soon as practicable, but no later than 24 hours, after the initiation of interim remedial actions. This differs from the Federal regulations. The notice in § 245.306(e) is less onerous than requiring a report of initial abatement steps and will allow the Department to monitor early actions taken to clean up a release of regulated substances. For releases associated with USTs, 40 CFR § 280.62 of the Federal regulations does not require the initiation of initial abatement measures to be reported. However, 40 CFR § 280.62(b) (relating to initial abatement measures and site check) requires a report to be submitted within 20 days after release confirmation summarizing the initial abatement steps taken. The initial corrective actions in the final-form rulemaking are extremely important in limiting the complexity of the release, the amount of corrective action that must be undertaken and the ultimate cost of the corrective action.

Subsection 245.309(c)(24) (relating to site characterization) has been added to require a responsible party to notify the Department by telephone or electronic mail as soon as practicable, but no later than 24 hours, after the initiation of site characterization activities. Concurrent with the implementation of interim remedial actions, site characterization activities are to be initiated. This provision will assure the Department that responsible parties are proceeding with the required site characterization tasks. Too often, responsible parties delay the implementation of site characterization activities and find themselves requesting an extension to submit the site characterization report. It is believed that this added requirement will have responsible parties immediately on track to complete the site characterization and result in significantly fewer site characterization report extension requests being submitted to the Department. The Federal requirements at 40 CFR Part 280 do not include such a provision. However, 40 CFR §§ 280.63(b) and 280.64(d) (relating to initial site characterization; and free product removal) require that owners and operators submit an initial site characterization report

and a free product removal report within 45 days of release confirmation, respectively. While the Department has not incorporated these specific Federal regulatory provisions under the final-form rulemaking, Chapter 245 remains no less stringent than the corresponding Federal requirements for release response and corrective action.

Three requirements in the final-form rulemaking pertaining to tanks containing radioactive materials or coolants and certain USTs at nuclear power generation facilities are more stringent than Federal requirements. The background is set forth here, followed by the three requirements. The definition of "underground storage tank" in § 245.1 (relating to definitions) has been amended to delete the exclusions in Subparagraphs (xiii) and (xviii) for "Tanks containing radioactive materials or coolants that are regulated under The Atomic Energy Act of 1954 (42 U.S.C.A. §§ 2011—2297)" and "An underground storage tank system that is part of an emergency generator system at nuclear power generation facilities regulated by the Nuclear Regulatory Commission under 10 CFR Part 50, Appendix A (relating to general design criteria for nuclear power plants)." Deletion of these current exclusions is consistent with the Federal definition of "underground storage tank" in 40 CFR § 280.12 (relating to definitions) and necessary for Pennsylvania to re-apply for State Program Approval from EPA. Also, the definition of "underground storage tank" in Subparagraph (xiv) has been amended to modify the exclusion for a wastewater treatment tank system. The amended definition clarifies that the exclusion only applies to systems regulated under section 307(b) or 402 of the Clean Water Act (33 U.S.C. § 1317(b) or § 1342) (relating to toxic and effluent pretreatment standards and national pollutant discharge elimination system (NPDES) permits). This current exclusion has been amended to be consistent with the Federal regulations at 40 CFR § 280.10(b)(2) (relating to applicability). Modification of this current exclusion is necessary for Pennsylvania to re-apply for State Program Approval from EPA.

EPA has long regulated these UST systems, and owners and operators have been required to comply with "interim prohibition" requirements pertaining to corrosion protection and compatibility with the regulated substance stored, since May 7, 1985. The "interim prohibition" requirements were established in 1984 when Subtitle I was added to the Solid Waste Disposal Act, 42 U.S.C.A. §§ 6921—6939g, through the Hazardous and Solid Waste Amendments which authorized the Federal program to regulate USTs. On December 22, 1988, the same "interim prohibition" requirements, along with release response and corrective action requirements, were promulgated in 40 CFR Part 280, Subparts A and F. At that time, these UST systems were deferred from Federal regulation except for Subparts A and F. In its July 15, 2015 Final Rule, EPA maintained its position that these regulated USTs only need to comply with Subparts A and F. To summarize the Federal requirements, these UST systems installed on or after May 7, 1985, need to be protected against corrosion and be compatible with the substance stored. Further, these UST systems regulated as of December 22, 1988, need to comply with the release response and corrective action requirements in 40 CFR Part 280.

As noted above, these UST systems are currently exempt from the definition "underground storage tank," and, as a result are exempt from regulation. The final-form rulemaking amends the definition so that these will now be regulated to be as stringent as Federal regulations. Section 245.403(a) has been amended to state that these USTs must meet the same requirements that all other regulated UST systems must meet. However, for UST systems installed on or after May 7, 1985, § 245.403(c) has been amended to provide that UST owners and operators will not need to comply with §§ 245.411, 245.421(b)(3), 245.421(b)(4)(ii)-(iii), 245.422(d), 245.432(g), and 245.436- 245.446. UST owners will not be required to conduct facility inspections, install spill and overfill prevention equipment, check for water in petroleum storage tanks, implement operator training, conduct periodic operation and maintenance walkthrough inspections, or perform release detection.

While exempt from certain requirements under the final-form rulemaking, the Department believes that it is important for owners of these USTs to register the USTs, use DEP-certified installers and inspectors, and maintain financial responsibility. These three requirements are specific to Chapter 245 and while considered more stringent than Federal requirements, are beneficial to both the storage tank owner and the Department. These USTs are now regulated and all regulated USTs need to be registered with the Department, under current § 245.41 (relating to tank registration requirements). If the USTs are not registered with the Department, then the Department will not know where these USTs are, the number of these newly regulated USTs, and whether the USTs are in compliance with applicable regulations. In addition, all regulated USTs in the Commonwealth need to be installed, modified and removed by Department-certified installers.

Now that these UST's are no longer exempt, owners and operators will need to meet the corrective action process requirements of Chapter 245, Subchapter D (relating to corrective action process for owners and operators of storage tanks and storage tank facilities and other responsible parties) and the financial responsibility requirements of Chapter 245, Subchapter H (relating to financial responsibility requirements for owners and operators of underground storage tanks and storage tank facilities). Financial responsibility is met by participating in the USTIF, which provides coverage for corrective action and third-party damages should a release occur. In addition, specifically with regard to Subchapter E (relating to technical standards for underground storage tanks), provisions concerning variances, applicable codes and standards, performance standards for new UST systems, upgrade requirements for existing UST systems, reuse of removed USTs, spill and overfill control, operation and maintenance including corrosion protection, compatibility, repairs allowed, reporting and recordkeeping, and closure, will apply to these UST systems. New § 245.403(c)(4) has been added in Subchapter E to clarify that UST systems installed before May 7, 1985, are not required to comply with §§ 245.411-245.422, 245.424, 245.432, 245.433, and 245.436-245.446.

Subsection 245.421(b)(3)(i)(B)(III) has been deleted. In 1991, the EPA finalized a minor technical amendment to the Federal UST regulations (40 CFR § 280.20(c)(1)(ii)(C)) allowing this alternative overfill prevention equipment to be used closer to the tops of larger tanks if it could be done in a manner that achieved certain minimum levels of performance. Since this overfill prevention equipment option is being deleted, the final-form rulemaking may be viewed as being more stringent than the EPA requirements. The Department has deleted this overfill prevention equipment option as there is no known testing procedure to adequately evaluate the effectiveness of this equipment. EPA staff informed the Department that EPA is also not aware of an adequate testing procedure. Further, Department records indicate that there are no facilities using this method of overfill prevention. The Department requested public comment as to whether there are known facilities using this particular overfill prevention method, and if so, what testing procedure is used to evaluate the effectiveness of the equipment. The Department received no responsive comments.

Subsection 245.434(5)(ii) (relating to repairs allowed) has been deleted. This subsection stated that the repaired portion of the UST system may be monitored monthly for releases in lieu of performing tightness testing. Deletion of this subsection results in this final-form rulemaking being more stringent than the Federal requirement at 40 CFR § 280.33(d)(2) (relating to repairs allowed) as the EPA allows this option in lieu of tightness testing. The fact is that most manufacturers' specifications and nationally-recognized codes of practice call for tightness testing of the UST system to determine competency prior to placing product in the UST system.

(12) How does this regulation compare with those of the other states? How will this affect Pennsylvania's ability to compete with other states?

In its July 15, 2015 Final Rule, the EPA revised the Federal UST program requirements in 40 CFR Part 280. At the same time, the EPA updated the State Program Approval requirements in 40 CFR Part 281. Under these changes, the EPA requires that states revise their UST regulations and apply for initial or revised State Program Approval. Currently, Pennsylvania has State Program Approval. Therefore, the Department, along with all other states seeking initial or revised State Program Approval, needs to revise its UST program regulations to be no less stringent than the Federal requirements. In states that do not have State Program Approval, EPA's July 15, 2015 Final Rule took effect on October 13, 2015. Therefore, in general, all states will be at least as stringent as Federal UST program requirements. The EPA has not codified companion AST regulations. Pennsylvania's AST program was developed and based on the statutory authority in the act. For these reasons, this final-form rulemaking will not put the Commonwealth or the regulated community at a competitive disadvantage with other states.

(13) Will the regulation affect any other regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.

This final-form rulemaking will not affect any other existing regulations of the Department or any regulations promulgated by other state agencies.

(14) Describe the communications with and solicitation of input from the public, any advisory council/group, small businesses and groups representing small businesses in the development and drafting of the regulation. List the specific persons and/or groups who were involved. ("Small business" is defined in Section 3 of the Regulatory Review Act, Act 76 of 2012.)

The Department worked with the Storage Tank Advisory Committee (STAC) during development of this rulemaking. STAC, which was established by section 105 of the act (35 P.S. § 6021.105), consists of persons representing a cross-section of organizations having a direct interest in the regulation of storage tanks in this Commonwealth. As required under section 105 of the act, STAC was given the opportunity to review and comment on both the draft proposed and draft final-form annex. At December 8, 2015 and June 7, 2016 STAC meetings, individual STAC members were provided with the opportunity to review Department concepts and present concepts that they would like to see incorporated into Chapter 245. STAC was also afforded the opportunity to review and discuss draft proposed regulatory language at its December 6, 2016, and March 7, 2017, meetings. On March 7, 2017, STAC voted unanimously to support the amendments and recommended that the Board consider the amendments for publication as a proposed rulemaking. The Board adopted the proposed rulemaking on October 17, 2017, and published it at 48 Pa.B. 1101 (February 24, 2018). On May 17, 2018, STAC reviewed draft final-form regulatory language. At that meeting, STAC voted unanimously to support the amendments and recommended that the Board consider the amendments for publication as a final-form rulemaking.

A listing of STAC members and minutes of STAC meetings are available on the Department's website at www.dep.pa.gov (select "Public Participation," then "Advisory Committees"). The Citizens Advisory Council received monthly updates on the status of this rulemaking.

Additionally, in developing the proposed rulemaking, the Department contacted five Department-certified companies from various regions of the Commonwealth to provide cost estimates for the

various testing requirements. The Department requested the companies to provide cost estimates to include mobilization fees, paperwork fees, labor costs and any necessary waste disposal costs. Cost information collected for the proposed rulemaking remains relevant today. Therefore, the costs presented in Question 19 of this Regulatory Analysis Form and Section F of the Preamble to this final-form rulemaking for the new UST testing requirements are inclusive of the reporting requirements. Going forward, the Department will continue outreach and communication with the regulated community.

(15) Identify the types and number of persons, businesses, small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012) and organizations which will be affected by the regulation. How are they affected?

This final-form rulemaking will affect approximately 7,000 storage tank owners at nearly 12,600 storage tank facilities. Industry sectors potentially affected by this final-form rulemaking include retail motor fuel sales, commercial, institutional, manufacturing, transportation, communications and utilities, and agriculture. Federal, State and local government owners of regulated storage tanks will also be affected.

All 7,655 UST facilities will be affected by the periodic walkthrough inspections. At least every 30 days, spill prevention and release detection equipment must be checked. However, spill prevention equipment associated with UST systems receiving deliveries at intervals greater than every 30 days may be checked prior to each delivery. Containment sumps and handheld release detection equipment must be checked a minimum of every 12 months.

All 22,203 UST systems will be affected by the overfill prevention equipment inspections. All UST systems have overfill prevention equipment. Overfill prevention equipment is to be evaluated at least once every three years to ensure that the equipment is set to activate at the correct level and will activate when the regulated substance stored reaches that level.

All 22,203 UST systems will be affected by the spill prevention equipment tests. Spill prevention equipment is to be tested once every three years to ensure the equipment is liquid-tight.

Forty-one percent or 9,103 UST systems will be affected by the containment sump testing requirement. Containment sump testing is only required when the containment sump is used for interstitial monitoring of piping. Containment sump testing is to be conducted once every three years to ensure the equipment is liquid-tight.

This final-form rulemaking prohibits ball float valves as an option for overfill prevention when these devices need to be replaced. A total of 3,306 UST systems are reported to have ball float valves as the current form of overfill prevention and will be affected by this requirement.

All 22,203 UST systems will be affected by the annual operability testing of electronic and mechanical components of release detection equipment. The required tests shall apply to automatic tank gauges and other controllers, probes and sensors, automatic line leak detectors, vacuum pumps and pressure gauges, and hand-held electronic sampling equipment associated with groundwater and vapor monitoring.

The removal of the release detection deferral for emergency generator tanks will only affect 605 or 2.7 % of the UST systems.

The number of UST systems that will be affected by the removal of the regulatory deferral by EPA for field-constructed tanks is unknown. However, this will only affect existing underground field-constructed storage tanks installed on or before October 11, 1997, that are currently exempt from regulation under Chapter 245 under Department technical guidance titled, "Policy for Existing Field-Constructed Hazardous Substance Underground Storage Tanks at Facilities Regulated under the Safe Drinking Water Act."

Wastewater treatment tank systems subject to Section 402 or 307(b) of the Clean Water Act will remain excluded from regulation under Chapter 245.

The number of UST systems that will be affected by the removal of the regulatory exclusion for USTs containing radioactive material and emergency generator UST systems at nuclear power generation facilities regulated by the Nuclear Regulatory Commission is not known. Since owners and operators of these UST systems had to meet Federal UST regulations dating back to May 7, 1985, that require systems to be designed and constructed to prevent releases during the operating life of the facility due to corrosion or structural failure, these systems should already be in compliance.

The Department is aware of 35 AST systems in underground vaults that will be affected by the requirement to have an in-service inspection conducted within 6 and 12 months of installation and at least every 3 years thereafter.

The Department has 6,756 small AST systems (systems with capacity equal to or less than 21,000 gallons) registered that will be affected by the shortened initial inspection requirement and in-service inspection cycle from 10 years to 5 years.

Please see the response to Question 24(a) for small business information.

(16) List the persons, groups or entities, including small businesses, that will be required to comply with the regulation. Approximate the number that will be required to comply.

This final-form rulemaking will affect approximately 7,000 storage tank owners at nearly 12,600 storage tank facilities. Industry sectors potentially affected by this final-form rulemaking include retail motor fuel sales, commercial, institutional, manufacturing, transportation, communications and utilities, and agriculture. Federal, State and local government owners of regulated storage tanks will also be affected. Retail motor fuel sales is the industry sector most impacted by these regulations. For the most part, this sector consists of gasoline stations with or without convenience stores. Other entities and groups affected include: wholesale trade; retail trade; accommodation; food services; hospitals; refineries; chemical manufacturers; air, water, truck, transit, pipeline and airport operations; wired telecommunications carriers; electric power generation, transmission and distribution; crop and animal production; volunteer fire companies; and emergency medical service organizations.

Department-certified storage tank installers, inspectors and companies will also need to comply with this final-form rulemaking. Nearly 875 individuals and approximately 350 companies have certifications from the Department under Chapter 245.

Responsible parties, as defined in § 245.1, are responsible for complying with this final-form rulemaking in terms of the corrective action provisions contained in Subchapter D. Responsible parties include tank owners and operators, landowners and occupiers, and product distributors.

(17) Identify the financial, economic and social impact of the regulation on individuals, small businesses, businesses and labor communities and other public and private organizations. Evaluate the benefits expected as a result of the regulation.

In general, this final-form rulemaking requires additional storage tank testing for USTs and inspection of small ASTs and ASTs in vaults, and does not require large-scale investments in equipment or significant changes to operations at the facility level. The only exception are the one-time costs to replace ball float valves following failure of the overfill prevention evaluation with alternate overfill prevention equipment and to add release detection to those emergency generator USTs that were previously deferred from regulation. These one-time costs apply to a limited number of UST systems. Of the 22,203 existing UST systems regulated in this Commonwealth, 3,306 have ball float valves for overfill prevention and 605 are emergency generator UST systems without a form of release detection.

Most of the amendments are necessary for the Commonwealth's regulations in Chapter 245 to be consistent with Federal requirements for USTs and re-apply for EPA State Program Approval. Without these amendments, the EPA could not continue to approve the State program and would then be required to implement the UST program in this Commonwealth. Therefore, UST owners would incur the increased costs for their UST facilities to comply with 40 CFR Part 280 if Chapter 245 was not amended due to the EPA's July 15, 2015 Final Rule for USTs.

The primary goal of this final-form rulemaking is to further reduce the potential for releases of regulated substances from USTs by strengthening the requirements regarding properly operating and maintaining release detection equipment. This final-form rulemaking requires that UST equipment be inspected and tested regularly, which will help to further reduce the number of releases from USTs and in turn protect public health and the environment. Incorporation of these UST amendments into Chapter 245 will enable the Commonwealth to re-apply for UST State Program Approval from the EPA and remain eligible for continued substantial Federal funding for the UST program.

A significant portion of the beneficial impacts associated with this final-form rulemaking are avoided cleanup costs from preventing releases and reducing the severity of releases from USTs. The EPA, in the analysis of the potential benefits associated with its July 15, 2015 Final Rule, estimated the typical cost of a small-extent, soil-only remediation to be $25,300, and the typical cost of a large-extent, groundwater-contamination remediation to be $428,200 (https://www.epa.gov/sites/production/files/2015-07/documents/regs2015-ria.pdf (page 4-9)). These costs are in 2008 dollars. During calendar year 2017, the average cost per closed claim paid by the USTIF was $308,389, and the total paid for all open claims was $33,287,724 (https://ustif.pa.gov/documents/10184/0/2017_PAUSTIF_Annual+Report_Final_2018-03-01.pdf/178c0ef5-8ef1-4931-b6fa-528014d9be38).

While the reduced cleanup costs associated with this final-form rulemaking cannot be accurately quantified, a decrease in release frequency and severity is expected to result in both a reduction of the average cost per closed claim and the total annual claim payments made by the USTIF. Groundwater contamination incidents and vapor intrusion remediation costs are expected to be reduced or avoided, which will reduce the need for USTIF claims and payments and potentially reduce fees paid by UST owners to fund USTIF. These fees are typically passed on to the public at motor fuel retail locations.

Thus, any decrease in release frequency achieved by this final-form rulemaking will benefit the public and the environment by protecting soil and water resources, and reducing costs associated with necessary corrective action.

Other benefits of decreasing the frequency of releases from storage tanks that cannot be quantified or monetized include the avoidance of human health risks, protection of ecological receptors, protection of gallons of groundwater each year, and avoided property devaluation.

This final-form rulemaking will also benefit storage tank owners and operators, and certified installers and companies. For example, this final-form rulemaking adds a new UST certification category to allow individuals to perform tank handling activities such as repairs that do not involve excavation without having to obtain the (full) certification to install and modify storage tank systems, and to perform tests of UST systems required by this final-form rulemaking. Creation of this new certification category will afford UST owners the opportunity to employ individuals who specialize in modifications only, which could save UST owners some of the costs associated with minor modification work and system testing. This "minor modification" certification category will also provide opportunities for existing certified companies to employ individuals who specialize in minor modification work. In addition, it may create an incentive for persons interested in only performing "minor modification" work to become certified and establish their own companies. In either case, the establishment of this new certification category is expected to result in the creation of a significant number of jobs within the certified installer community, which may reduce the cost of UST system testing over time.

The increase in required inspections and testing by storage tank owners is expected to reduce Department costs. For example, this final-form rulemaking requires all ASTs in underground vaults that require an in-service inspection to be inspected within 6 and 12 months of installation and at least every 3 years thereafter due to their history of noncompliance. This mirrors the inspection requirement for USTs. Also, the initial inspection requirement and in-service inspection cycle for small ASTs is shortened from 10 years to 5 years. Based on current in-service inspections, the compliance rate with regulatory requirements is less than 50%. When the facility operations inspection cycle for USTs was shortened from 5 years to 3 years in a prior rulemaking, the Department observed increased regulatory compliance, fewer releases and a reduction in the severity of releases from USTs, which reduced Department staff time needed to follow-up on noncompliant facilities and corrective action cases.

(18) Explain how the benefits of the regulation outweigh any cost and adverse effects.

Since the beginning of the UST program, preventing petroleum and hazardous substance releases from UST systems into the environment has been one of the primary goals of the program. Although the EPA and other states have made significant progress in reducing the number of new releases, approximately 5,700 releases were discovered nationwide for the Federal fiscal year that ended September 30, 2017 (https://www.epa.gov/sites/production/files/2017-11/documents/ca-17-34.pdf). In comparison, using the same parameters (underground storage tank system releases only and October 1, 2016 through September 30, 2017), Pennsylvania had 210 confirmed releases. Lack of proper operation and maintenance of UST systems is the main cause of new releases. Information on sources and causes of releases shows that releases from tanks are less common than they once were. However, releases from piping and spills and overfills associated with deliveries have emerged as more common problems. In addition, releases at the dispenser are one of the leading sources of contamination at UST facilities. Finally, data show that release detection equipment is only detecting approximately 50% of

releases it is designed to detect. These problems are partly due to improper operation and maintenance.

Through increased emphasis on properly operating and maintaining UST equipment as required by this final-form rulemaking, ongoing problems with release detection practices and routine operation and maintenance will significantly improve. In time, this will result in a higher rate of UST facility compliance with regulations and fewer releases of regulated substances in the Commonwealth. Last year, the USTIF paid over $33 million on cleanup of releases from USTs in this Commonwealth. The projected annual cost of these UST amendments (see response to Question 19 in this Regulatory Analysis Form) is insignificant compared to the cost of cleanup of released regulated substances. Further, the Department stands to lose substantial Federal funding for the UST program if it fails to implement a UST program that meets the Federal requirements.

With regard to the AST program, an increased inspection frequency is needed for all ASTs in underground vaults and small ASTs due to their history of noncompliance. Based on current in-service inspections, the regulatory compliance rate is less than 50%. The Department shortened the facility operations inspection cycle for USTs from 5 years to 3 years in a prior rulemaking which has resulted in increased regulatory compliance. Increased compliance with regulatory requirements means less Department staff time needed to follow-up on noncompliant facilities, fewer releases and a reduction in the severity of releases from ASTs.

(19) Provide a specific estimate of the costs and/or savings to the **regulated community** associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

In general, this final-form rulemaking requires additional storage tank testing for USTs and inspection of small ASTs and ASTs in vaults, and does not require large-scale investments in equipment or significant changes to operations at the facility level. The only exception is the one-time cost to replace ball float valves following failure of the UST overfill prevention evaluation with alternate overfill prevention equipment and to add release detection to those emergency generator USTs that were previously deferred from regulation. This one-time cost applies to a limited number of UST systems. Of the 22,203 existing UST systems regulated in this Commonwealth, 3,306 have ball float valves for overfill prevention and 605 are emergency generator UST systems without a form of release detection.

Most of the changes are necessary for the Commonwealth's regulations in Chapter 245 to be consistent with Federal requirements for USTs and re-apply for EPA State Program Approval. Without these amendments, the EPA could not continue to approve the State program and would then be required to implement the UST program in this Commonwealth. Therefore, UST owners would incur the increased costs for their UST facilities to comply with 40 CFR Part 280 due to the EPA's July 15, 2015 Final Rule for USTs.

Analysis of UST compliance costs

Within this Commonwealth, 7,655 UST facilities are regulated consisting of 22,203 UST systems, for an average of 2.90 UST systems per facility. Compliance costs for these new UST regulatory requirements are estimated in this analysis based on a UST facility with 3 UST systems that have the following features: three 10,000-gallon UST systems with two storing gasoline and one storing diesel; 100 feet of piping per UST system; one fill port per UST system; spill prevention equipment at each

UST system; two drop tube shut-off devices and one ball float valve for overfill prevention equipment; four dispensers each with an under-dispenser containment sump; one submersible turbine pump sump/tank top sump per UST system; and one automatic tank gauge (ATG) with an ATG probe per UST system.

Costs presented on a facility basis were adjusted for the fact that each UST facility has on average 2.90 UST systems. The Department contacted five Department-certified companies from various regions of this Commonwealth to estimate cost for the various requirements in this final-form rulemaking for the UST facility described in the preceding paragraph. In doing so, the Department requested the companies to provide cost estimates to include mobilization fees, paperwork fees, labor costs, and any necessary waste disposal costs.

The maintenance walkthrough inspection requirement for UST facilities involves a visual inspection of spill prevention equipment and release detection every 30 days and a visual inspection of containment sumps and handheld release detection devices annually. All 7,655 UST facilities are required to conduct 30-day maintenance walkthrough inspections. The 5,806 UST facilities with containment sumps are required to conduct the annual visual inspection. These inspections may be performed by the UST owner, operator or other employee of the UST owner resulting in no cost other than the necessary time to conduct the inspections. However, some UST owners may choose to use third-party companies to conduct the maintenance walkthrough inspections. If a UST owner chose to hire a third-party company, the owner will incur costs. However, this action will be voluntary and is not required by this final-form rulemaking.

Testing of spill prevention equipment and containment sumps and evaluation of overfill prevention equipment at UST facilities is required every 3 years. All 22,203 UST systems have overfill prevention equipment and are required to conduct evaluations. Likewise, all UST systems require spill prevention equipment tests. Forty-one percent, or 9,103 UST systems at 3,324 UST facilities, have containment sumps used for interstitial monitoring of piping that will need to be tested. These tests and evaluations will need to be conducted by appropriate certified individuals.

Although the cost for testing and evaluation will only be incurred every 3 years, the costs are estimated on an annualized basis for purposes of this analysis (that is, the testing and evaluation costs are divided by three to estimate the cost per year). The estimated annual cost range and average annual cost for each evaluation or test per facility are summarized as follows:

Evaluation or Test	*Estimated Range of Annual Costs*	*Estimated Average Annual Cost*
Overfill prevention equipment	$97—$161	$113
Spill prevention equipment	$89—$209	$127
Containment sump	$258—$902	$548

Based on the estimated average annual cost, the total annualized cost to a UST facility owner for equipment testing and evaluation every 3 years is estimated to range from $240—$788. The lower cost will apply to a facility that does not have containment sumps used for interstitial monitoring of piping. Based on these per facility costs, the annualized cost to evaluate and test equipment at all UST facilities is estimated to be $3,658,752.

This final-form rulemaking prohibits continued use of ball float valves as an option for overfill prevention when these devices need to be replaced. A total of 3,306 UST systems are reported to have ball float valves as the form of overfill prevention. The increased cost to repair a ball float valve or

replace a ball float valve with another ball float valve versus providing another form of overfill prevention (for example, shut-off device or alarm) is estimated to range from $975—$1,100 with the average cost to be $1,038. The average cost represents the one-time increased cost to a UST owner for this overfill prevention equipment replacement. Replacement of a ball float valve will only be necessary when the equipment no longer functions as originally designed and fails the 3-year overfill evaluation requirement. Based on the average cost, the total one-time increased cost to replace ball float valves with another form of overfill prevention for all UST systems is estimated to be $3,431,628.

Annual release detection equipment testing is required by this final-form rulemaking for all 22,203 UST systems. Operability tests will need to be conducted of the electronic and mechanical components of release detection equipment. The annualized cost to a UST facility owner for this release detection testing requirement is estimated to range from $338—$1,039, with the average cost to be $595. Based on the average cost, the annual cost to test release detection equipment at all UST facilities is estimated to be $4,554,725. These costs are based on an average UST facility consisting of three UST systems and four dispensers. Facilities that have fewer UST systems are expected to have lower costs.

This final-form rulemaking requires release detection for emergency generator USTs. An estimated 605 UST systems are reported as not having any form of release detection. For this analysis, an ATG is used as the form of release detection for these systems and will need to be tested annually for operability; however, other lower cost methods of tank release detection could be chosen by the UST owner depending on type and location of the UST system. The cost for the operability tests for these systems were included in the cost for release detection equipment testing previously described. The cost for the addition of an ATG ranges from $4,000—$30,000 with the average estimated cost to be $16,875. Cost estimates are dependent on several factors including amount of excavation required to install wiring and conduit, access to the UST system and location of the UST system to utilities and buildings. The average cost represents the one-time cost to a UST owner to add an ATG for release detection. Based on the average cost, the total one-time cost to add release detection to emergency generator USTs is estimated to be $10,209,375.

The following table and discussion summarize the total estimated annualized cost that UST facilities will incur for the testing and inspections in this final-form rulemaking when UST owners, operators or other employees of the UST owner conduct all maintenance walkthrough inspections:

	Annualized Operation and Maintenance Costs[1]	*One-Time Costs*[2]	*Number of Potentially Affected Facilities/Systems*	*Total Annualized Operation and Maintenance Costs*[3]	*Total One-Time Costs*[4]
Maintenance walkthrough inspections	$0	$0	7,655 facilities	$0	$0
Periodic testing and inspection of overfill prevention equipment, spill prevention equipment and containment sumps[5]	$240—$788	$0	7,655 facilities	$3,658,752	$0

Eliminate ball float valves when overfill prevention equipment is replaced	$0	$1,038	3,306 UST systems	$0	$3,431,628
Operability tests for release detection	$595	$0	7,655 facilities	$4,554,725	$0
Remove release detection deferral for emergency generator USTs	$0	$16,875	605 UST systems	$0	$10,209,375
	$835—$1,383			$8,213,477	$13,641,003

[1] Per UST facility.
[2] Per UST system. One-time costs do not apply to all UST systems.
[3] For all UST facilities.
[4] For all UST systems. One-time costs do not apply to all UST systems.
[5] The lower range of the annualized operation and maintenance costs is for facilities that do not have containment sumps used for interstitial monitoring of piping.

The annualized increased operation and maintenance costs to conduct maintenance walkthrough inspections, inspect overfill prevention equipment, test spill prevention equipment and containment sumps, and test release detection equipment per UST facility is estimated to range from $835—$1,383. The total annualized increased costs for these inspections and tests at all UST facilities are estimated to be $8,213,477.

The total one-time costs to replace all ball float valves with alternate overfill prevention equipment and to add release detection to emergency generator USTs is estimated to be $13,641,003. These one-time costs apply to a limited number of UST systems. Currently, 3,306 UST systems (less than 15%) have ball float valves for overfill prevention and 605 UST systems (less than 3%) are emergency generator USTs that will need to add release detection equipment. Owners of emergency generator UST systems will be afforded 1 year to 2 years under this final-form rulemaking to make an informed decision to either add the necessary release detection, close the UST system or close the UST system and install a new AST.

Analysis of AST compliance costs

As with UST systems, the primary focus of this final-form rulemaking for AST systems is on an increased inspection frequency for small ASTs and ASTs in vaults. The Department contacted five Department-certified companies from various regions of this Commonwealth to estimate the increased cost to AST owners for the revised inspection requirements. In doing so, the Department requested the companies to provide cost estimates to include paperwork fees.

This final-form rulemaking requires all ASTs in underground vaults that require an in-service inspection to be inspected within 6 to 12 months of installation and at least every 3 years thereafter. ASTs with a capacity greater than 5,000 gallons, and ASTs storing highly hazardous substances with a capacity greater than 1,100 gallons, are subject to these inspection requirements.

Currently, no large ASTs in underground vaults are registered with the Department and 35 small AST systems in underground vaults will need to increase inspections from once every 10 years to once every 3 years. These small ASTs have an average size of approximately 10,000 gallons.

The reported annualized cost range for an in-service inspection of a vaulted AST every 10 years, as currently required, is $78 to $315, and the average annualized cost is $179. The estimated annualized cost range for an in-service inspection of a vaulted AST every 3 years is $260 to $1,050, and the estimated average annualized cost is $595. Thus, the annualized increased cost to an owner of a vaulted AST for an in-service inspection every 3 years is estimated to be $416. The total annualized increased cost to all AST owners who will be subject to the 3-year inspection requirement is estimated to be $14,560.

This final-form rulemaking also shortens the initial inspection requirement and in-service inspection cycle for small ASTs (other than small ASTs in underground vaults) from 10 years to 5 years. This requirement applies to small ASTs with a capacity greater than 5,000 gallons, and small ASTs with a capacity greater than 1,100 gallons that store highly hazardous substances. An estimated 6,756 small ASTs with an average size of 11,400 gallons will need to increase their inspections to every 5 years under this final-form rulemaking.

The reported annualized cost range for an in-service inspection of a small AST every 10 years, as currently required, is $44 to $200, and the average annualized cost is $98. The estimated annualized cost range for an in-service inspection of a small AST every 5 years is $88 to $400, and the estimated average annualized cost is $196. Thus, the annualized increased cost to an owner of a small AST for an in-service inspection every 5 years is estimated to be $98. The total annualized increased cost to all AST owners who will be subject to the 5-year inspection requirement is estimated to be $662,088.

The following table summarizes the estimated increased annualized costs discussed above that will be incurred by AST system owners under this final-form rulemaking:

	Annualized Operation and Maintenance Costs	*One-Time Costs*	*Number of Potentially Affected Systems*	*Total Annualized Operation and Maintenance Costs*	*Total One-Time Costs*
Increased inspection frequency for vaulted ASTs	$416	$0	35 AST systems	$14,560	$0
Increased inspection frequency for small ASTs	$98	$0	6,756 AST systems	$662,088	$0
		$0		$676,648	$0

Additional compliance costs associated with this final-form rulemaking that cannot be estimated are the costs to UST systems that were previously excluded from the definition of a UST, but are subject to Chapter 245 under this final-form rulemaking (for example, tanks containing radioactive materials or coolants that are regulated under The Atomic Energy Act of 1954, wastewater treatment tank systems that are not part of a wastewater treatment facility regulated under section 307(b) or 402 of the Clean Water Act, and UST systems that are part of an emergency generator system at nuclear power generation facilities regulated by the NRC under 10 CFR Part 50, Appendix A). In addition, existing field-constructed USTs installed on or before October 11, 1997, are regulated under Chapter 245 under this final-form rulemaking.

The number of USTs in these categories that will be subject to Chapter 245 under this final-form rulemaking is unknown because they are not currently required to be registered with the Department. Registration will be required within 60 days after the effective date of this final-form rulemaking. Field-constructed USTs installed on or before October 11, 1997, are temporarily excluded from other regulatory requirements in Chapter 245 until 1 year after the effective date of this final-form rulemaking. Upon registration of a UST that was previously excluded from regulation, the Department will work with the tank owner to bring the UST into regulatory compliance. Due to the unique nature of these USTs, the steps that will be necessary to bring the USTs into compliance are expected to vary widely. Thus, compliance costs associated with the regulation of this universe of USTs cannot be estimated.

USTs containing radioactive material and emergency generator UST systems at nuclear power generation facilities regulated by the NRC are subject to United States Department of Energy Orders and NRC regulations that are comparable to the Chapter 245 requirements for new and existing USTs regarding spill and overfill control, operation and maintenance of corrosion protection, and release detection. Since owners and operators of these UST systems had to meet Federal UST requirements, dating back to May 7, 1985, that require systems to be designed and constructed to prevent releases during the operating life of the facility due to corrosion or structural failure, these systems should already be in compliance with most requirements and therefore incur minimal additional costs.

A substantial portion of the beneficial impacts associated with this final-form rulemaking are avoided cleanup costs as a result of preventing releases and reducing the severity of releases from USTs. The EPA, in the analysis of the potential benefits associated with its July 15, 2015 Final Rule, estimated the typical cost of a small-extent, soil-only remediation to be $25,300, and the typical cost of a large-extent, groundwater-contamination remediation to be $428,200 (https://www.epa.gov/sites/production/files/2015-07/documents/regs2015-ria.pdf (page 4-9)). These costs are in 2008 dollars. During calendar year 2017, the average cost per closed claim paid by the USTIF was $308,389, and the total paid for all open claims was $33,287,724 (https://ustif.pa.gov/documents/10184/0/2017_PAUSTIF_Annual+Report_Final_2018-03-01.pdf/178c0ef5-8ef1-4931-b6fa-528014d9be38).

While the reduced cleanup costs associated with this final-form rulemaking cannot be accurately quantified, a decrease in release frequency and severity is expected to result in both a reduction of the average cost per closed claim and the total annual claim payments made by the USTIF. Groundwater contamination incidents and vapor intrusion remediation costs are expected to be reduced or avoided, which will reduce the need for USTIF claims and payments and potentially reduce fees paid by UST owners to fund USTIF. These fees are typically passed on to the public at motor fuel retail locations. Thus, any decrease in release frequency achieved by this final-form rulemaking will benefit the public and the environment by protecting soil and water resources, and reducing costs associated with necessary corrective action.

Other benefits of decreasing the frequency of releases from storage tanks that cannot be quantified or monetized include the avoidance of human health risks, protection of ecological receptors, protection of gallons of groundwater each year, and avoided property devaluation.

This final-form rulemaking will also benefit storage tank owners and operators, and certified installers and companies. For example, this final-form rulemaking adds a new UST certification category to allow individuals to perform tank handling activities such as repairs that do not involve excavation without having to obtain the (full) certification to install and modify storage tank systems, and to

perform tests of UST systems required by this final-form rulemaking. Creation of this new certification category will afford UST owners with the opportunity to employ individuals who specialize in modifications only, which could save UST owners some of the costs associated with minor modification work and system testing. This "minor modification" certification category will also provide opportunities for existing certified companies to employ individuals who specialize in minor modification work. In addition, it may create an incentive for persons interested in only performing "minor modification" work to become certified and establish their own companies. In either case, the establishment of this new certification category is expected to result in the creation of a significant number of jobs within the certified installer community, which may reduce the cost of UST system testing over time.

This final-form rulemaking does not require legal, accounting or consulting procedures for implementation of the regulation.

(20) Provide a specific estimate of the costs and/or savings to the **local governments** associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

Because local governments own and operate regulated ASTs and USTs, the costs to local governments are a subset of the costs to the regulated community and not additional costs.

The table below summarizes all increased costs as a result of this final-form UST regulatory requirements assuming UST owners, operators, or other employees of the UST owner conduct all walkthrough inspections:

	Annualized Operation and Maintenance Costs[1]	*One-Time Costs*[2]	*Number of Potentially Affected Facilities/Systems*	*Total Annualized Operation and Maintenance Costs*[3]	*Total One-Time Costs*[4]
Maintenance walkthrough inspections	$0	$0	501 facilities	$0	$0
Periodic testing and inspection of overfill prevention equipment, spill prevention equipment, and containment sumps[5]	$240—$788	$0	501 facilities	$189,836	$0
Eliminate ball float valves when overfill prevention equipment is replaced	$0	$1,038	50 UST systems	$0	$51,900
Operability tests for release detection	$595	$0	501 facilities	$298,095	$0
Remove release detection deferral for emergency generator USTs	$0	$16,875	63 UST systems	$0	$1,063,125
	$835—$1,383			$487,931	$1,115,025

[1] Per UST facility.
[2] Per UST system. One-time costs do not apply to all UST systems.
[3] For all UST facilities.
[4] For all UST systems. One-time costs do not apply to all UST systems.
[5] The lower range of the annualized operation and maintenance costs is for facilities that do not have containment sumps used for interstitial monitoring of piping.

The table below summarizes all increased costs as a result of the final-form AST regulatory requirements:

	Annualized Operation and Maintenance Costs	*One-Time Costs*	*Number of Potentially Affected Systems*	*Total Annualized Operation and Maintenance Costs*	*Total One-Time Costs*
Increased inspection frequency for vaulted ASTs	$416	$0	1 AST systems	$416	$0
Increased inspection frequency for small ASTs	$98	$0	297 AST systems	$29,106	$0
		$0		$29,522	$0

A substantial portion of the beneficial impacts associated with this final-form rulemaking are avoided cleanup costs as a result of preventing releases and reducing the severity of releases from USTs. While the reduced cleanup costs associated with this final-form rulemaking cannot be accurately quantified, a decrease in release frequency and severity is expected to result in both a reduction of the average cost per closed claim and the total annual claim payments made by the USTIF. Groundwater contamination incidents and vapor intrusion remediation costs are expected to be reduced or avoided, which will reduce the need for USTIF claims and payments and potentially reduce fees paid by UST owners to fund USTIF. These fees are typically passed on to the public at motor fuel retail locations. Thus, any decrease in release frequency achieved by this final-form rulemaking will benefit the public and the environment by protecting soil and water resources, and reducing costs associated with necessary corrective action.

This final-form rulemaking does not require legal, accounting or consulting procedures for implementation of the regulation.

(21) Provide a specific estimate of the costs and/or savings to the **state government** associated with the implementation of the regulation, including any legal, accounting, or consulting procedures which may be required. Explain how the dollar estimates were derived.

Because state government owns and operates regulated ASTs and USTs, the costs to state government are a subset of the costs to the regulated community and not additional costs.

The table below summarizes all increased costs of the final-form UST regulatory requirements assuming UST owners, operators, or other employees of the UST owner conduct all walkthrough inspections:

	Annualized Operation and Maintenance Costs[1]	*One-Time Costs*[2]	*Number of Potentially Affected Facilities/Systems*	*Total Annualized Operation and Maintenance Costs*[3]	*Total One-Time Costs*[4]
Maintenance walkthrough inspections	$0	$0	216 facilities	$0	$0
Periodic testing and inspection of overfill prevention equipment, spill prevention equipment, and containment sumps[5]	$240—$788	$0	216 facilities	$128,012	$0
Eliminate ball float valves when overfill prevention equipment is replaced	$0	$1,038	2 UST systems	$0	$2,076
Operability tests for release detection	$595	$0	216 facilities	$128,520	$0
Remove release detection deferral for emergency generator USTs	$0	$16,875	98 UST systems	$0	$1,653,750
	$835—$1,383			$256,532	$1,655,826

[1] Per UST facility.
[2] Per UST system. One-time costs do not apply to all UST systems.
[3] For all UST facilities.
[4] For all UST systems. One-time costs do not apply to all UST systems.
[5] The lower range of the annualized operation and maintenance costs is for facilities that do not have containment sumps used for interstitial monitoring of piping.

The table below summarizes all increased costs of the final-form AST regulatory requirements:

	Annualized Operation and Maintenance Costs	*One-Time Costs*	*Number of Potentially Affected Systems*	*Total Annualized Operation and Maintenance Costs*	*Total One-Time Costs*
Increased inspection frequency for vaulted ASTs	$416	$0	3 AST systems	$1,248	$0
Increased inspection frequency for small ASTs	$98	$0	88 AST systems	$8,624	$0
		$0		$9,872	$0

A substantial portion of the beneficial impacts associated with this final-form rulemaking are avoided cleanup costs as a result of preventing releases and reducing the severity of releases from USTs.

While not able to be quantified, a decrease in release frequency and severity is expected to result in a reduction of costs because groundwater contamination incidents and vapor intrusion remediation costs could be avoided. Any decrease in release frequency achieved by this final-form rulemaking will

benefit the public and the environment by protecting soil and water resources, and reducing costs associated with necessary corrective action.

This final-form rulemaking does not require legal, accounting or consulting procedures for implementation of the regulation.

(22) For each of the groups and entities identified in items (19)-(21) above, submit a statement of legal, accounting or consulting procedures and additional reporting, recordkeeping or other paperwork, including copies of forms or reports, which will be required for implementation of the regulation and an explanation of measures which have been taken to minimize these requirements.

This final-form rulemaking does not require legal, accounting or consulting procedures for implementation of the regulation. This final-form rulemaking includes the following new notification, reporting and other paperwork requirements:

- Certified installers and inspectors will need to report regulated substance observed in a containment structure or facility within 48 hours on a form provided by the Department.
- Certified installers and inspectors will need to report failed tests of UST spill prevention equipment, containment sumps, and overfill prevention equipment within 48 hours on a form provided by the Department. A copy of the test results will also need to be provided to the Department with the notification report.
- If a suspected release investigation fails to determine whether a release of a regulated substance has occurred, owners and operators will need to report the suspected release within 15 days of the indication of a suspected release on a form provided by the Department.
- If a suspected release investigation confirms that a release has not occurred, and removal of the regulated substance cannot be accomplished within 24 hours, owners and operators will need to immediately notify the Department by telephone or electronic mail.
- Responsible parties will need to notify the Department by telephone or electronic mail as soon as practicable, but no later than 24 hours after the initiation of interim remedial actions in response to a release.
- Responsible parties will need to notify the Department, by telephone or electronic mail, within 24 hours of providing an alternate source of water to the owner of an affected or diminished water supply in response to a release.
- Responsible parties will need to notify the Department by telephone or electronic mail as soon as practicable, but no later than 24 hours after the initiation of site characterization activities in response to a release.
- The Department will need to publish an acknowledgment of receipt of the remedial action plan and notice of its final action on the plan in the *Pennsylvania Bulletin*.
- The Department will need to publish an acknowledgment of receipt of the remedial action completion report and notice of its final action on the report in the *Pennsylvania Bulletin*.
- Owners and operators will need to notify the Department of the proposed installation of specific UST system components such as the piping system and dispenser, and not just when a tank or tank system is being installed, on a form provided by the Department.
- Certified installers and inspectors will need to document tests or evaluations of UST spill prevention and overfill prevention equipment, containment sumps, and release detection equipment on a form provided by the Department. Owners and operators will need to maintain test or evaluation results onsite at the storage tank facility or at a readily available alternative site and shall provide the forms to the Department upon request.

- Surveys of UST cathodic protection systems will need to be documented on a form provided by the Department and shall be provided to the Department upon request.
- Upon Department request, owners and operators will need to submit, on a form provided by the Department, information verifying that all system components are compatible with the proposed substance to be stored, prior to storing the substance in the UST.
- Owners and operators will need to maintain documentation showing that their UST systems are continuously participating in the USTIF.
- Owners and operators will need to maintain documentation of the last test of UST spill prevention equipment and containment sumps used for interstitial monitoring of piping and evaluation of overfill prevention equipment.
- For containment sumps used for interstitial monitoring of piping and spill prevention equipment not required to be tested, UST owners and operators will need to maintain documentation showing that the equipment is double-walled and the integrity of both walls is periodically monitored.
- UST owners and operators will need to maintain records of walkthrough inspections for the past 12 months.
- Owners will need to ensure that Class A, Class B and Class C operators are identified on a form provided by the Department prior to placing the UST system into use.
- Owners and operators of AST facilities with an aggregate aboveground storage capacity greater than 21,000 gallons will need to maintain a written or electronic log. Each log entry will need to identify the name of the individual performing tank handling and inspection activities, the individual's signature or equivalent verification of presence onsite, the company name, the date of work, start and end times, and a brief description of work performed, including tank identification.
- In addition to routine monthly inspections, AST owners and operators will need to maintain 72-hour maintenance inspections for the previous12 months.
- AST owners and operators will need to maintain documentation of investigations of suspected releases.
- AST owners and operators will need to maintain the results of testing from the last two cathodic protection surveys and the results of the last three impressed current cathodic protection system checks for each 60-day period.
- Should a high-level alarm with a manned operator shutdown procedure be used, owners and operators of ASTs will need to document the shutdown procedure and provide it to the Department upon request.
- When an overfill alarm or prevention device or monitoring gauge is used, owners and operators of ASTs will need to document the shutdown procedure.

Aside from the requirements to notify the Department by telephone or electronic mail, the Department is providing the regulated community with a significant number of forms to facilitate compliance with the final-form notification and reporting requirements. In addition, one form is being deleted.

(22a) Are forms required for implementation of the regulation?

As identified in the response to (22) above, new forms are required for implementation of this final-form regulation. In addition, existing forms have been revised to implement this final-form rulemaking. One form is being deleted. All new and revised forms, and the deleted form, are identified in the response to (22b) below.

(22b) If forms are required for implementation of the regulation, **attach copies of the forms here.** If your agency uses electronic forms, provide links to each form or a detailed description of the information required to be reported. **Failure to attach forms, provide links, or provide a detailed description of the information to be reported will constitute a faulty delivery of the regulation.**

The attached new forms are as follows:

- Underground Storage Tank Groundwater/Vapor Monitoring System Functionality Testing Form
- Underground Storage Tank Sensor Functionality Testing Form
- Underground Storage Tank Automatic Line Leak Detector Functionality Testing Form
- Underground Storage Tank Pressure/Vacuum Monitoring Functionality Testing Form
- Underground Storage Tank Spill Prevention Equipment/Containment Sump Integrity Testing Form
- Underground Storage Tank Automatic Tank Gauge Functionality Testing Form
- Underground Storage Tank Overfill Prevention Evaluation Form
- Aboveground Storage Tank Lining Inspection Summary and Instructions

The attached revised forms are as follows:

- Underground Storage Tank Facility Operations Inspection Report Form Instructions (2630-FM-BECB0501)
- Underground Storage Tank Facility Operations Inspection (2630-FM-BECB0501a)
- Underground Storage Tank System Installation/Closure Notification Form (2630-FM-BECB0127)
- Planning for Permanent Closure Checklist - Underground Storage Tank Systems (2630-FM-BECB0126)
- Underground Storage Tank Modification Report (2630-FM-BECB0575)
- Underground Storage Tank System Closure Report Form (2630-FM-BECB0159)
- Aboveground Storage Tank Integrity/Installation Inspection Summary and Instructions (2630-FM-BECB0150)
- Aboveground Storage Tank System Closure Report Form (2630-FM-BECB0514)
- Planning for Permanent Closure Checklist - Aboveground Storage Tank Systems (2630-FM-BECB0512)
- Aboveground Storage Tank System Closure Notification Form (2630-FM-BECB0513)
- Notification of Release/Notification of Contamination (2620-FM-BECB0082)
- Storage Tanks Registration/Permitting Application Form and Instructions (2630-PM-BECB0514)
- Storage Tank Installer/Inspector Certification Application Form and Instructions (2630-PM-BECB0506)
- Storage Tank Training Course Approval Application and Instructions (2630-PM-BECB0402)
- Storage Tank Site-Specific Installation Permit Application Instructions (2630-PM-BECB0002)
- Initial Qualifications – Storage Tank Installer and Inspector Certification (2630-PM-BECB0506b)
- Renewal Qualifications – Storage Tank Installer and Inspector Certification (2630-PM-BECB0506b2)

- Instructions – Storage Tank Installer and Inspector Certification – Attachment A (2630-PM-BECB0506c)

The following form has been deleted and is being incorporated into the Aboveground Storage Tank Integrity/Installation Inspection Summary (2630-FM-BECB0150):

- Aboveground Storage Tank Installation Inspection Summary (2630-FM-BECB0602).

(23) In the table below, provide an estimate of the fiscal savings and costs associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.

Costs assume an effective date of January 1, 2019, for this final-form rulemaking, no increase/decrease in the number of storage tank facilities/systems subject to regulation, replacement of ball float valves at the rate of 20 percent of UST systems per year, and all owners of emergency generator USTs will add an ATG as the form of release detection. Since local governments and state government own and operate regulated ASTs and USTs, the costs associated with each are a subset of the costs to the regulated community. Therefore, the costs to the regulated community and total costs are inclusive of the costs to local governments and state government.

It is important to note that the amendments to Chapter 245 must be no less stringent than the Federal requirements for USTs for the Department to re-apply for State Program Approval. If Chapter 245 is not revised, Pennsylvania would lose State Program Approval and EPA would then implement the UST program in the Commonwealth. Therefore, the increased costs for UST facilities would occur even if Chapter 245 were not revised, due to EPA's July 15, 2015 Final Rule for USTs at 40 CFR Part 280.

	Current FY 2018/19	**FY +1 2019/20**	**FY +2 2020/21**	**FY +3 2021/22**	**FY +4 2022/23**	**FY +5 2023/24**
SAVINGS:	**$**	**$**	**$**	**$**	**$**	**$**
Regulated Community	0	Unable to monetize	Unable to monetize	Unable to monetize	Unable to monetize	Unable to monetize
Local Government	0	Unable to monetize	Unable to monetize	Unable to monetize	Unable to monetize	Unable to monetize
State Government	0	Unable to monetize	Unable to monetize	Unable to monetize	Unable to monetize	Unable to monetize
Total Savings	0	Unable to monetize	Unable to monetize	Unable to monetize	Unable to monetize	Unable to monetize
COSTS:	**$**	**$**	**$**	**$**	**$**	**$**
Regulated Community	0	3,083,789	18,197,928	8,907,083	8,914,363	9,245,407
Local Government	0	116,983	1,544,561	498,519	498,727	513,280
State Government	0	165,464	1,809,447	257,571	258,195	262,507
Total Costs	0	3,083,789	18,197,928	8,907,083	8,914,363	9,245,407

REVENUE LOSSES:	$	$	$	$	$	$
Regulated Community	0	0	0	0	0	0
Local Government	0	0	0	0	0	0
State Government	0	0	0	0	0	0
Total Revenue Losses	0	0	0	0	0	0

(23a) Provide the past three-year expenditure history for programs affected by the regulation.

The figures below represent the expenditures from the Storage Tank Fund only. Program expenditures from the Federal Leaking Underground Storage Tank (LUST) Trust Fund Prevention and Cleanup grants and from the USTIF are not included.

Program	FY -3 (2015/16)	FY -2 (2016/17)	FY -1 (2017/18)	Current FY (2018/19)
Storage Tank and Spill Prevention	$ 9,026,000	$ 8,588,000	$ 7,907,000	$ 9,156,000

(24) For any regulation that may have an adverse impact on small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012), provide an economic impact statement that includes the following:

a) An identification and estimate of the number of small businesses subject to the regulation.

One or more of these amendments will affect approximately 7,000 storage tank owners, 7,650 UST facilities, and 17,700 AST systems throughout the Commonwealth. Section 3 of the Regulatory Review Act defines "small business" in accordance with the size standards described by the United States Small Business Administration's Small Business Size Regulations under 13 CFR Chapter 1, Part 121. A review of the regulations under 13 CFR Chapter 1, Part 121 provides a standard for determining what constitutes a small business for each North American Industry Classification System (NAICS) industry. These standards are based on number of employees or annual receipts. For the storage tank facilities regulated under the act, the Department has very little information pertaining to the NAICS for those facilities in the Department's Environmental Facility Application Compliance Tracking System (eFACTS) database.

In the Regulatory Impact Analysis to support the Federal UST final rulemaking, EPA estimated that motor fuel retailers represent approximately 80 percent of the 577,981 conventional UST systems in operation nationwide (https://www.epa.gov/sites/production/files/2015-07/documents/regs2015-ria.pdf (page 2-2)). Further, EPA estimated that there are approximately 79,700 firms operating roughly 148,000 facilities in the U.S. retail motor fuel sales sector. Based on the Small Business Administration's annual revenue thresholds for NAICS 447110 (Gasoline Stations with Convenience Stores, $29.5 million) and 447190 (Other Gasoline Stations, $15 million), approximately 77,400 or 97 percent of these firms meet the Small Business Administration's definition of small entity. The remaining 20 percent of conventional UST systems consist of emergency generator tanks, tanks used for storing and dispensing fuel in commercial settings, hospitals, manufacturing, transportation, communications and utilities, and agriculture. EPA did not evaluate these firms in terms of meeting or not meeting the definition of small business.

Data developed for an air quality rulemaking of the Department supports EPA's findings. On April 7, 2018, the Department published a final rulemaking developed by the Bureau of Air Quality to make the low Reid vapor pressure (RVP) gasoline requirements of 25 Pa. Code Chapter 126, Subchapter C (relating to gasoline volatility requirements), as codified in §§ 126.301—126.303 (relating to compliant fuel requirements; recordkeeping and reporting; and compliance and test methods) no longer applicable upon EPA approval of an air quality State Implementation Plan showing noninterference with air quality standards. (See 48 Pa.B. 1932). The low RVP (7.8 pounds per square inch or less) gasoline requirement applies in the Pittsburgh-Beaver Valley Area between May 1 and September 15 of each year. The seven-county Pittsburgh-Beaver Valley Area includes Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland Counties. The Department requested that the Pennsylvania Small Business Development Center's (SBDC) Environmental Management Assistance Program (EMAP) provide a list of businesses, including annual sales, for NAICS codes 447110 and 447190 for the Pittsburgh-Beaver Valley Area. The SBDC EMAP provided the Department with a list of 501 businesses for the requested NAICS codes. Of the 501 businesses, 385 were determined to be a small business. Of the remaining 116 businesses, there was no sales data available.

The Department had the SBDC EMAP provide a list of businesses, including annual sales and number of employees, for additional NAICS codes 424710 (Bulk gasoline stations; Gasoline, bulk stations and terminals), 424720 (Gasoline merchant wholesalers (except bulk stations, terminals)), and 493190 (Bulk petroleum storage) for the seven-county area. The annual revenue and employee thresholds for NAICS codes 424710, 424720 and 493190 are 200 employees, 200 employees, and $27.5 million, respectively. The SBDC EMAP provided a list of 179 businesses, 171 of which were determined to be a small business. Of the remaining eight businesses, one was determined not to be a small business and seven had no available sales data. It is believed that some businesses identified in this additional NAICS code retrieval have ASTs as well.

While this data is only representative of the seven-county Pittsburgh-Beaver Valley area, and considering the EPA analysis, the Department is of the opinion that a very high percentage of the UST and AST facilities subject to this final-form rulemaking are small businesses.
Department-certified storage tank installers, inspectors and companies will also be required to comply with this final-form rulemaking. There are nearly 875 certified individuals and approximately 350 certified companies. It is believed that all certified companies are small businesses.

b) The projected reporting, recordkeeping and other administrative costs required for compliance with the proposed regulation, including the type of professional skills necessary for preparation of the report or record.

While this rulemaking adds notification, reporting and recordkeeping requirements, some of the notification is simply verbal or electronic. Where information is required to be documented, the Department is providing a significant number of forms to facilitate compliance. Most of the forms will be completed by Department-certified installers and inspectors who will be instructed by Department staff on how to complete them. Department-certified installers and inspectors often request standardized forms from the Department so that they are fully aware of what the Department expects to be reported pertaining to a specific requirement. Having standardized forms, completed by certified installers and inspectors, should limit the time and expense required to fill them out.

With regard to verbal or electronic notification requirements, a responsible party will need to notify the Department either verbally or electronically (such as by telephone or email) upon initiation of an

interim remedial action, within 24 hours of providing an alternate source of water to an affected water supply owner, and within 24 hours of initiation of site characterization activities in response to a release of a regulated substance from a storage tank. (See §§ 245.306(e), 245.307(e) and 245.309(c)(24)). The first corrective action report required to be submitted in writing by the responsible party is the site characterization report, required under § 245.310. It is to be submitted to the Department after the responsible party takes an interim remedial action, provides an alternate source of water (if necessary) and completes site characterization activities. Therefore, it is important for the Department to know in a timely manner that these required corrective actions are taking place. Interim remedial actions, when conducted properly and promptly, limit the extent and severity of contamination, thereby limiting the amount of site characterization that needs to be performed and further remedial action that needs to be conducted. The result is protection of the public and the environment, and a reduction in the cost of corrective action to storage tank owners and operators.

In addition, if a suspected release investigation confirms that a spill has occurred that does not qualify as a "release," and removal of the regulated substance cannot be accomplished within 24 hours, the owner or operator will need to notify the Department immediately by telephone or e-mail. An example is a spill of a hazardous substance to an aboveground surface in an amount less than the reportable released quantity.

The Department anticipates that costs associated with these additional verbal or electronic notification requirements should be minimal because the owner, operator or consultant is typically communicating with the Department at this point and informing the Department when actions that have been proposed are initiated.

The vast majority of the reporting requirements will be handled by Department-certified installers and inspectors, as well as by consultants. The Department is providing the necessary forms to facilitate compliance with the various requirements. Department-certified installers and inspectors, as well as consultants, welcome these forms and will be instructed by Department staff as to how to complete them. The vast majority of reporting forms associated with this final-form rulemaking are existing forms that have undergone minor revisions. Completion of these revised forms will result in no additional cost to the regulated community. The few new forms that have been developed are testing and evaluation forms that are necessary to record the results of the new periodic UST testing requirements established in § 245.437 to meet the Federal requirements of ensuring that installed equipment for release detection and prevention is operating properly. The Department contacted five Department-certified companies from various regions of the Commonwealth to provide cost estimates for the various testing requirements. The Department requested the companies to provide cost estimates to include mobilization fees, paperwork fees, labor costs and any necessary waste disposal costs. Therefore, the costs presented in the Section G of the Preamble and Item 19 of the Regulatory Analysis Form to this final-form rulemaking for the new UST testing requirements are inclusive of the reporting requirements.

With regard to the new recordkeeping requirements, the vast majority of the documentation that owners and operators will need to maintain is necessary to comply with the new Federal UST requirements. However, in general, the records are important because review of storage tank system records is necessary for Department-certified inspectors to determine compliance with regulatory requirements. Department-certified inspectors are required to periodically inspect ASTs and UST facilities, under §§ 245.411, 245.551-554, and 245.616. Record review is an integral part of the inspection. Without the records, inspectors would not be able to determine regulatory compliance. In fact, the absence of required records means that a storage tank system is in noncompliance with

regulatory requirements. A storage tank system that is noncompliant is at risk for releases which may impact the public and the environment. While the Department cannot quantify the costs associated with the maintenance of additional records, any costs should be minimal.

c) A statement of probable effect on impacted small businesses.

The annualized increased operation and maintenance costs to conduct walkthrough inspections, inspect overfill prevention equipment, test spill prevention equipment and containment sumps, and test release detection equipment per UST facility is estimated to range from $835-$1,383. The total annualized increased costs for these inspections and tests at all UST facilities is estimated to be $8,213,477. These costs are based on the UST owner, operator, or other employee of the UST owner conducting the walkthrough inspections.

The Department is committed to providing UST owners with proper guidance on how to conduct and document such inspections. Given the small increased per-facility costs of the regulation to conduct these UST inspections and tests, closures or changes in market structure represent an unlikely response to the regulation.

The total one-time costs to replace all ball float valves with alternate overfill prevention equipment and to add release detection to those emergency generator USTs that were previously deferred is estimated to be $13,641,003. This equates to an average cost of $1,038 per UST system to replace a ball float valve with alternate overfill prevention equipment and an average cost of $16,875 per UST system to add release detection to an emergency generator UST. These one-time costs apply to a limited number of UST systems. Currently, less than 15% of all UST systems have ball float valves for overfill prevention and less than 3% of all UST systems are emergency generator USTs. Owners of emergency generator UST systems will be afforded 1 year to 2 years under this final-form rulemaking to make an informed decision to either add the necessary release detection, close the UST system, or close the UST system and install a new AST.

The annualized increased cost to an AST owner of a vaulted AST for an in-service inspection is estimated to be $416. The annualized increased cost to an AST owner of a small AST for an in-service inspection is estimated to be $98. Given the small increased per-facility costs of the regulation to conduct these AST inspections, closures or changes in market structure represent an unlikely response to the regulation.

d) A description of any less intrusive or less costly alternative methods of achieving the purpose of the proposed regulation.

There is no less intrusive or less costly alternative method of achieving the purpose of the final-form rulemaking. In fact, the EPA relaxed its regulations in its July 15, 2015 Final Rule compared to the regulations it had proposed. When EPA proposed its UST regulations in November 2011, there were a number of provisions that generally consisted of more or stricter requirements than those in the July 15, 2015 Final Rule. These provisions are more fully discussed in the response to Question 26 in this Regulatory Analysis Form. One example is that EPA proposed that testing of spill prevention equipment and containment sumps, and inspection of overfill prevention equipment, would be conducted annually. EPA's July 15, 2015 Final Rule requires these tests and inspections to be performed every 3 years. Elements of the July 15, 2015 Final Rule must be incorporated in Chapter 245 to maintain State Program Approval.

(25) List any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, the elderly, small businesses, and farmers.

There are no such provisions in this final-form rulemaking. However, to determine the socioeconomic characteristics of communities potentially affected by the Federal UST regulation, EPA conducted a screening analysis in 2010 to examine whether a statistically significant disparity exists between socioeconomic characteristics of populations located near UST facilities and those that are not. The results indicated that minority and low-income populations are slightly more likely to be located near UST facilities. However, because of the incorporation of operation and maintenance requirements in the regulation, the number and size of releases will be reduced. Therefore, EPA concluded that the Federal UST regulation will not have any disproportionately high and adverse human health or environmental effects on minority or low-income communities, or on any community (https://www.epa.gov/sites/production/files/2015-07/documents/regs2015-ria.pdf (p. ES-14)).

(26) Include a description of any alternative regulatory provisions which have been considered and rejected and a statement that the least burdensome acceptable alternative has been selected.

As stated earlier, comprehensive Federal regulations for USTs exist at 40 CFR Part 280. These regulations were initially promulgated in 1988. EPA's July 15, 2015 Final Rule contained the first comprehensive revisions to 40 CFR Part 280. The primary purpose of the amendments in the July 15, 2015 Final Rule was to strengthen the UST requirements by increasing the emphasis on properly operating and maintaining equipment. Incorporation of these UST revisions into Chapter 245 is necessary for Pennsylvania to re-apply for State Program Approval from EPA and remain eligible for continued substantial Federal funding for the UST program.

When EPA proposed its UST regulations in November 2011, there were a number of provisions that were more burdensome than those EPA ultimately promulgated in its July 15, 2015 Final Rule. For one, EPA proposed that testing of spill prevention equipment and containment sumps, and inspection of overfill prevention equipment, would be conducted annually. EPA's July 15, 2015 Final Rule requires these tests and inspections to be performed every 3 years. EPA also proposed a 5-year phase out of groundwater and vapor monitoring for release detection. The July 15, 2015 Final Rule continues to allow these methods of release detection with a proper site assessment. In addition, the following provisions generally consisted of more or stricter requirements that what is in the final UST regulation: 30-day walkthrough inspections, operability tests for release detection equipment, removing the release detection deferral for emergency generator tanks, and demonstrating compatibility with alternative fuels. For example, the 30-day walkthrough inspections in the 2011 proposed UST regulation included a monthly check of containment sumps.

(27) In conducting a regulatory flexibility analysis, explain whether regulatory methods were considered that will minimize any adverse impact on small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012), including:

a) The establishment of less stringent compliance or reporting requirements for small businesses;
b) The establishment of less stringent schedules or deadlines for compliance or reporting requirements for small businesses;
c) The consolidation or simplification of compliance or reporting requirements for small businesses;

d) The establishment of performance standards for small businesses to replace design or operational standards required in the regulation; and
e) The exemption of small businesses from all or any part of the requirements contained in the regulation.

This final-form rulemaking applies to all owners of regulated storage tanks and all DEP-certified individuals and companies. Small businesses, small organizations and small governmental jurisdictions are not exempt from any provisions of the regulations. However, small entities were considered in developing this final-form rulemaking, which includes incorporation of the necessary Federal requirements to maintain State Program Approval. In the response to Question 26, above, the Department stated that the proposed Federal requirements were more stringent in a number of areas than the final requirements. In response to public comment and in consideration of small businesses, the final rulemaking resulted in less burdensome, yet protective, requirements.

While this final-form rulemaking adds notification, reporting and recordkeeping requirements, some of the notification is simply verbal or electronic. Where information is required to be documented, the Department is providing a significant number of forms to facilitate compliance with the various requirements. Most of the forms will be completed by Department-certified installers and inspectors who will be instructed by Department staff on how to complete them. Department-certified installers and inspectors often request standardized forms from the Department so that they are fully aware of what the Department expects to be reported pertaining to a specific requirement. Having standardized forms, completed by certified installers and inspectors, should limit the time and expense required to fill them out.

The Department is also phasing in the requirements to conduct walkthrough inspections, conduct spill prevention and containment sump testing, perform overfill prevention equipment evaluations, add release detection for existing emergency generator USTs, and inspect ASTs in underground vaults and small ASTs on a more frequent basis.

Lastly, this final-form rulemaking requires UST owners and operators to test containment sumps used for interstitial monitoring of piping and spill prevention equipment once every three years to ensure the equipment is liquid-tight. However, if the equipment is double walled, the integrity of both walls may be periodically monitored, in lieu of testing the equipment once every three years. Also, UST owners and operators must conduct walkthrough inspections of spill prevention and release detection equipment at a minimum of every 30 days. However, spill prevention equipment associated with UST systems receiving deliveries at intervals greater than every 30 days, may be checked prior to each delivery.

(28) If data is the basis for this regulation, please provide a description of the data, explain <u>in detail</u> how the data was obtained, and how it meets the acceptability standard for empirical, replicable and testable data that is supported by documentation, statistics, reports, studies or research. Please submit data or supporting materials with the regulatory package. If the material exceeds 50 pages, please provide it in a searchable electronic format or provide a list of citations and internet links that, where possible, can be accessed in a searchable format in lieu of the actual material. If other data was considered but not used, please explain why that data was determined not to be acceptable.

While the primary drivers of the development of this regulation included Department staff experience and identified needs for regulatory amendments, as well as the EPA July 15, 2015 Final Rule, the Department developed this rulemaking using several data sources, as follows:

Environmental Facility Application Compliance Tracking System (eFACTS) Database. Search for the number of regulated storage tank owners, storage tank facilities and storage tanks. Pennsylvania Department of Environmental Protection. Generated by Department Division of Storage Tanks staff.

Assessment Of The Potential Costs, Benefits, And Other Impacts Of The Final Revisions To EPA's Underground Storage Tank Regulations, April 2015
https://www.epa.gov/sites/production/files/2015-07/documents/regs2015-ria.pdf

Pennsylvania Underground Storage Tank Indemnification Fund, 2017 Annual Report
https://ustif.pa.gov/documents/10184/0/2017_PAUSTIF_Annual+Report_Final_2018-03-01.pdf/178c0ef5-8ef1-4931-b6fa-528014d9be38

25 Pa. Code Chapter 121 and Chapter 126, Subchapter C Final Rulemaking, Repeal of Gasoline Volatility Requirements, Regulatory Analysis Form
http://files.dep.state.pa.us/PublicParticipation/Public%20Participation%20Center/PubPartCenterPortalFiles/Environmental%20Quality%20Board/2017/December%2012/7-529_December%2012_EQB/05_Low%20RVP%20Repeal_Final_RAF.pdf

(29) Include a schedule for review of the regulation including:

A. The length of the public comment period: 30 days

B. The date or dates on which any public meetings or hearings will be held: None

C. The expected date of delivery of the final-form regulation: Quarter 3, 2018

D. The expected effective date of the final-form regulation: Quarter 4, 2018

E. The expected date by which compliance with the final-form regulation will be required: See Below*

F. The expected date by which required permits, licenses or other approvals must be obtained: N/A

* Owners of existing storage tank systems will be provided with adequate timeframes to adjust and comply with the new requirements. Owners of storage tank systems installed on or after the effective date of the final-form rulemaking shall comply with the requirements immediately.

(30) Describe the plan developed for evaluating the continuing effectiveness of the regulations after its implementation.

The Board is not establishing a sunset date for these regulations because they are needed for the Department to carry out its statutory authority. The Department will continue to closely monitor these regulations for their effectiveness and recommend updates to the Board as necessary.