

Regulatory Analysis Form		This space for use by IRRC
(1) Agency Department of Environmental Protection		
(2) I.D. Number (Governor's Office Use) 7-395		IRRC Number: 2532 JUL 27 PM 3:17 INDEPENDENT REGULATORY HEALTH COMMISSION RECEIVED
(3) Short Title Administration of the Storage Tank and Spill Prevention Program		
(4) PA Code Cite 25 Pa. Code Chapter 245	(5) Agency Contacts & Telephone Numbers Primary Contact: Michele Tate, 783-8727 Secondary Contact: Kelly Heffner, 783-8727	
(6) Type of Rulemaking (Check One) <input type="checkbox"/> Proposed Rulemaking <input checked="" type="checkbox"/> Final Order Adopting Regulation <input type="checkbox"/> Final Order, Proposed Rulemaking Omitted		(7) Is a 120-Day Emergency Certification Attached? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes: By the Attorney General <input type="checkbox"/> Yes: By the Governor
(8) Briefly explain the regulation in clear and nontechnical language. <p>The final rulemaking represents both comprehensive and minor editorial changes to the Department's existing regulations in Chapter 245. These changes include new and revised definitional terms, new comprehensive tank registration provisions, re-regulation of certain large aboveground heating oil tanks, and additional training and certification qualifications for tank installers, inspectors and their companies. Several changes are also included for storage tank permitting and technical requirements. These include simplified permit applications, withdrawal of operating permits and delayed inspections for temporarily closed tanks, phase-in provisions for newly regulated tanks, additional leak detection provisions, increased inspection frequencies with more emphasis on correcting deficiencies, and requirements for new and replacement underground storage tank systems to have total secondary containment (double-wall) systems.</p>		
(9) State the statutory authority for the regulation and any relevant state or federal court decisions. <p>The final rulemaking is being made under the authority of section 106 of the Storage Tank and Spill Prevention Act (Tank Act) (35 P.S. § 6021.106), which authorize the Board to adopt rules and regulations governing aboveground and underground storage tanks to accomplish the purposes and carry out the provisions of the Tank Act; sections 107(d) and 108 of the Tank Act (35 P.S. §§ 6021.107(d) and 6021.108), which authorize the Department to establish a certification program by regulation for installers and inspectors of storage tanks; section 301(a) and (d) of the Tank Act (35 P.S. § 6021.301(a) and (d)), which requires the Department to establish a regulatory program for aboveground storage tanks and a simplified program for small aboveground storage tanks; sections 301(b) and 501(b) of the Tank Act (35 P.S. §§ 6021.301(b) and 6021.501(b)), which authorized the Department to establish classes and categories of tanks by regulation; sections 302(a) and 303(a) of the Tank Act (35 P.S. §§ 6021.302(a) and 6021.303(a)), which authorize the Department to establish registration and fee requirements for aboveground storage tanks; section 501(a) of the Tank Act (35 P.S. § 6021.501(a)), which requires the Department to establish a regulatory program for underground storage tanks; sections 502(a) and 503(a) of the Tank Act (35 P.S. §§ 6021.502(a) and 6021.503(a)), which authorize the Department to establish registration and fee requirements for underground storage tanks; section 701(a) and (b) of the Tank Act (35 P.S. § 6021.701(a) and (b)), which authorizes the Board to establish regulations necessary for maintaining financial responsibility and methods of coverage; 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.</p>		

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(10) Is the regulation mandated by any federal or state law or court order, or federal regulation? If yes, cite the specific law, case or regulation, and any deadlines for action.

As noted in (9) above, the Tank Act directs the Department and the Board to adopt regulations concerning aboveground and underground storage tanks, including tank installation, modification and removal, registration, permitting, monitoring, corrective action and installer/inspector certification provisions. No Tank Act deadlines are pending. However, the Federal Energy Policy Act of 2005 (Energy Act), has a February 8, 2007 deadline for implementing total secondary containment requirements for new and replacement underground storage tank (UST) systems and August 8, 2007 deadline for 3-year inspection cycles, which are addressed in this final rulemaking.

There are companion federal regulations relating to USTs at 40 CFR Part 280. The Part 280 regulations contain definitional terms, administrative and technical components that are codified in the Department's current storage tank regulations at Chapter 245. The Department currently has State Program Approval (SPA) from EPA to implement and administer the UST program in Pennsylvania. The federal storage tank regulations governing state program approval are codified at 40 CFR Part 281. The Department will update the SPA application after the rulemaking is adopted as final, if required by EPA, which may be influenced by Energy Act requirements.

(11) Explain the compelling public interest that justifies the regulation. What is the problem it addresses?

Releases of regulated substances have occurred from thousands of storage tanks in the Commonwealth. These releases have resulted in substantial quantities of regulated substances entering the environment, including contamination of numerous public and private water supplies. More effective release detection and better operational maintenance of storage tanks are still needed. The citizens of the Commonwealth are entitled to clean drinking water and an environment free of contamination from storage tanks. While the number of releases has declined and the severity of the extent of contamination has lessened over recent years, this regulation should result in a further decline in the number of releases and increased protection of the public and the environment.

(12) State the public health, safety, environmental or general welfare risks associated with non-regulation.

As noted in (11) above, and reflected by the mandates of the Tank Act, releases from regulated storage tanks pose a substantial risk to public health, safety and the environment. Substandard release detection and operational practices may not improve significantly without regulatory changes. Also, as noted in (9) above, the Tank Act requires the Department and the Board to adopt rules and regulations to accomplish the purposes and carry out the provisions of the Tank Act and Commonwealth Administrative Code.

(13) Describe who will benefit from the regulation. (Quantify the benefits as completely as possible and approximate the number of people who will benefit.)

There are approximately 25,450 underground storage tanks (UST) and 17,325 aboveground storage tanks (AST) registered with the Department and regulated under the Tank Act. The provisions of this rulemaking and the existing regulation should help to prevent many releases from these storage tanks and to identify, and correct violations or potential problems with these storage tanks throughout the Commonwealth. Approximately 360 companies, employing nearly 830 installers and inspectors should benefit from the changes in the certification program provisions. The Department believes that the citizens of the Commonwealth will benefit from fewer releases of regulated substances to the environment and better protection of water resources, through improved containment structures, better release detection, and more frequent inspections of storage tanks that should identify operational violations and potential problems that will be abated or resolved more quickly as a result of the more frequent inspections and other provisions in the final rulemaking.

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(14) Describe who will be adversely affected by the regulation. (Quantify the adverse effect as completely as possible and approximate the number of people who will be adversely affected.)

There are nearly 7,900 owners of regulated storage tanks in the Commonwealth. Approximately 5,000 of these own or operate USTs. These owners will be affected by the increased inspection frequency for USTs and about 60 to 70 UST owners who install new or replace existing UST systems annually will be affected by requirements to install only total secondary contained (double-wall) UST systems and line-leak detectors with automatic pump shutoff devices. The utility industry and other owners of ASTs greater than 30,000 gallons, storing heating oil for consumptive use on the premises, will become re-regulated and will be required to comply with AST technical standards over a period of 3-5 years. Certified companies will be held to the same compliance standards that apply to their certified employees (third-party installers and inspectors).

(15) List the persons, groups or entities that will be required to comply with the regulation. (Approximate the number of people who will be required to comply.)

As noted in (13) and (14) above, there are approximately 7,900 storage tank owners, 830 certified installers and inspectors, and 360 certified companies that will be required to comply with the regulation. At the current time, there are over 42,700 regulated storage tanks registered with the Department. Owners and operators of regulated storage tanks include a diverse range of persons such as: convenience store and retail service station owners, heating oil distributors, commercial businesses, refineries, petro-chemical manufacturers, distributors and users, federal, state and local government entities, volunteer fire companies, hospitals, emergency medical services organizations, and individuals who use regulated storage tanks. Many of these owners belong to organizations appointed to the Storage Tank Advisory Committee (STAC). The Department estimates that a small number of owners of newly regulated substance tanks and re-regulated large ASTs containing heating oil used on the premises will also be affected. Several of these heating oil tank owners are members of the Electric Power Generator Association.

(16) Describe the communications with and input from the public in the development and drafting of the regulation. List the persons and/or groups who were involved, if applicable.

The Department worked closely with advisory subcommittees, as well as the STAC, during development of the rulemaking. The Department also met with several organizations, associations and groups, such as the Electric Power Generator Association, the National Association of State Aboveground Storage Tank Programs (NASAP) and the Tank Installers of Pennsylvania (TIP). STAC, which was established by section 105 of the Tank 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 by section 105, STAC has been given the opportunity to review and comment on this rulemaking. STAC participated in the development and review of the proposals during meetings on February 5, 2002, June 4, 2002, June 3, 2003, December 9, 2003 and December 7, 2004. STAC was presented an analysis of comments submitted by 21 commentators during the public comment and Independent Regulatory Review Commission comment periods at the STAC meeting on September 19, 2006. Several changes were made in the rulemaking, pursuant to commentator's recommendations or concerns. At the December 12, 2006 meeting, STAC reviewed the final rulemaking. On February 20, 2007, the STAC voted unanimously to approve Chapter 245 as written. However, some members of the STAC believe that EPA may provide additional flexibility to the states to carry out the provisions of the Federal Energy Policy Act of 2005 given the fact that Congress has provided no additional funding to the states to carry out the mandates. The concern is the impact that this flexibility will have on this rulemaking. The chairperson subsequently prepared a written report to the Board on the final rulemaking. A list of STAC members may be obtained from the agency contacts noted in (5), above.

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(17) 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.

UST owners could incur a 15 to 30 percent increased cost associated with total secondary (double-wall) containment requirements for new or replacement UST systems that may be installed after the rulemaking is adopted as final. Additionally, more frequent UST facility operations inspections (every 3 years as opposed to every 5 or 10 years) will be incurred at an approximate cost of \$350 per facility inspection. Some UST owners may also incur a one time cost of \$500 or more for line-leak detectors on new and replacement UST systems that automatically shut-off the pump when triggered by a piping release. The Department believes that the number and the significance of releases of regulated substances to the environment will decline as a result of the rulemaking. However, we cannot quantify the associated savings to UST owners.

(18) Provide a specific estimate of the costs and/or savings to local governments associated with compliance, including any legal, accounting or consulting procedures which may be required.

To the extent that local governments are tank owners, they are subject to the costs associated with total secondary containment and line-leak detectors for any new or replacement UST systems that may be installed, and costs associated with more frequent UST facility inspections noted in the answer to (17), above. There has also been a trend with local governments, when replacing existing USTs, to convert to small ASTs where practicable, usually at some cost savings and greater ease of operations.

The Department does not anticipate any increased costs or savings to local governments in their governmental capacity. However, local governments should notice fewer or less severe releases of regulated substances.

(19) Provide a specific estimate of the costs and/or savings to state government associated with the implementation of the regulation, including any legal, accounting or consulting procedures which may be required.

State government entities that are tank owners could incur increased costs associated with total secondary containment and line-leak detector requirements if they install new or replacement UST systems and when they contract for more frequent UST facility operations inspections as noted in the answer to (17), above. However, several state government entities have already instituted more frequent inspections through informal agreement with the Department or on a case specific basis where facility compliance may be in question. There has also been a trend, when replacing existing government owned USTs, to convert to small ASTs where practicable, usually at some cost savings and greater ease of operations.

The Department does not anticipate any additional costs or savings to the Commonwealth in its governmental capacity during the implementation and administration of these regulatory amendments. It is believed that implementation of these provisions can be handled by existing storage tank program staff. Therefore, no increase or decrease in Storage Tank Program staff complement is being suggested as a result of this rulemaking.

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

	Current FY Year	FY +1 Year	FY +2 Year	FY +3 Year	FY +4 Year	FY +5 Year
SAVINGS:	\$	\$	\$	\$	\$	\$
Regulated Community						
Local Government						
State Government						
Total Savings	NA	NA	NA	NA	NA	NA
COSTS:						
Regulated Community		\$125,000	\$125,000	\$125,000	\$125,000	\$125,000
Local Government						
State Government						
Total Costs	0	\$125,000	\$125,000	\$125,000	\$125,000	\$125,000
REVENUE LOSSES:						
Regulated Community						
Local Government						
State Government						
Total Revenue Losses	NA	NA	NA	NA	NA	NA

(20a) Explain how the cost estimates listed above were derived.

In (20) above, dollar amounts are in the thousands and relate to tank registration fees for aboveground consumptive use (heating oil) tanks greater than 30,000 gallons in capacity. This is a previously exempted class of tanks that will be re-regulated by this rulemaking. In addition, tanks containing certain non-petroleum oils, biodiesel, synthetic fluids, and pure ethanol intended for use with motor fuel will be regulated and subject to registration fees.

There will also be approximately 15 to 30 percent increased cost associated with the installation of any new or replacement UST systems with total secondary (double-wall) containment under the regulatory changes to UST technical requirements. It is very difficult to accurately project or quantify annual cost increases for these UST installs because of the various size/capacity, types and combinations of tank systems, and materials that may be used to meet these requirements. Current Department records indicate about 150 USTs are installed each year. Each UST installed will also incur approximately \$500 in costs for a line-leak detector with automatic pump shutoff device on piping to the product dispenser(s).

More frequent UST facility inspections will be required every 3 years under the rulemaking at an average cost of approximately \$350. The current regulation requires UST inspections every 5 years for most USTs or every 10 years for UST systems with total secondary containment.

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(20b) Provide the past three-year expenditure history for programs affected by the regulation.

Program	FY 03/04	FY 04/05	FY 05/06	Current FY
Storage Tank Fund – General Operations (210-20073)	\$8,914,000	\$8,386,000	\$7,932,000	\$7,473,000

NOTE: The figures for FY 03/04, 04/05 and 05/06 are actual expenditures. The figure for the current FY is budgeted. These are Department expenditures to administer all aspects of the storage tank program, which includes state Storage Tank Fund money, federal Underground Storage Tank and Leaking Underground Storage Tank Trust Fund grant money, and Underground Storage Tank Indemnification Fund money beginning with FY 05/06.

(21) Using the cost-benefit information provided above, explain how the benefits of the regulation outweigh the adverse effects and costs.

Problems with current leak detection equipment and methodology, poor operator maintenance, and continuing releases of regulated substances from single-wall UST systems continue to occur. Implementation of program changes to UST technical requirements are necessary to protect the citizens of the Commonwealth from the adverse impacts that have and may continue to occur as a result of leaking storage tanks. Also, the Energy Act mandates total secondary containment and 3-year inspection frequencies for USTs. The citizens of the Commonwealth are entitled to clean drinking water and an environment free from contamination.

(22) Describe the nonregulatory alternatives considered and the costs associated with those alternatives. Provide the reasons for their dismissal.

As noted in (9) and (13) above, the Storage Tank Act requires the Department and the Board to develop and implement regulations governing administration of the storage tank program. Specific UST system regulations are also administered under agreement with EPA, with the assistance of Federal grants and through State Program Approval (SPA), as noted in (10) above. The Department has attempted to build flexibility into these proposed regulations by relying on existing industry standards or practices wherever practicable and by providing variance provisions for new technologies and alternative methods to satisfy technical requirements.

(23) Describe alternative regulatory schemes considered and the costs associated with those schemes. Provide the reasons for their dismissal.

Since this is an existing regulation, the primary alternative was to do nothing and leave the current regulation unchanged in the Pennsylvania Code. The Department did not believe that this was a viable alternative since, during the operation of the current regulations, the regulated community and the Department experienced shortcomings in implementation of the regulations and releases of regulated substances continue to occur. Also, the Energy Act mandates certain regulatory changes for USTs. For the most part, the Department has established technical requirements for storage tanks in previous rulemakings and this rulemaking establishes requirements that set performance standards and rely on accepted industry codes and practices to meet those standards.

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(24) 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 regulation.

The UST facility inspection frequencies at § 245.411 of the rulemaking are not reflected in federal UST requirements at 40 CFR Part 280, but reflect minimum inspection frequencies recommended in the U.S. General Accounting Office (GAO) report to Congress in May 2001 and required in the Energy Act. UST third-party inspection goals are also addressed in our Federal Grant Agreement with EPA. The Tank Act also mandates a certified inspection program established by regulation for UST facilities. The requirements for total secondary (double-wall) containment systems at § 245.421 for new or replacement UST installs are more stringent than federal requirements at 40 CFR 280.20, which allows for single-wall petroleum UST systems. However, the Energy Act contains provisions for total secondary containment for petroleum UST systems. Also, releases continue to occur from USTs and federal studies show that double-wall systems fail less often and help to retain and identify releases before they enter the environment. The requirements at §§ 245.421 and 245.445 for line-leak detectors that shut-off the pump when triggered by a release of product in distribution piping are more stringent than federal requirements at 40 CFR 280.44, which allows alternate methods. The Department has found that the alternate line-leak detector methods often fail to prevent significant releases of regulated substances from distribution piping that have contaminated hundreds of ground water sources throughout the Commonwealth. The citizens of the Commonwealth deserve state-of-the art UST systems that better protect their drinking water resources and the environment.

(25) How does the regulation compare with those of other states? Will the regulation put Pennsylvania at a competitive disadvantage with other states?

It is not an easy task to compare one state storage tank program to another. Each state has a different approach: universe of storage tanks that are regulated, program focus, approach as to which agency(ies) regulate the storage tanks, methodology for funding and administration of the program, and need for program staff. However, in terms of this rulemaking, it is believed that tank owners in the Commonwealth will not be put at a competitive disadvantage with other states. All other states must comply with federal UST regulations and recent Energy Act requirements or lose federal UST Grant Funding. Many other states have AST requirements with some similarities to the Commonwealth's requirements. Most other states are experiencing UST compliance problems and many are now attempting to revise or have already revised technical requirements to enhance compliance, reduce releases of regulated substances and meet Energy Act requirements. Nearly all other states are attempting to inspect UST facilities more frequently to identify operational problems more quickly and resolve them.

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

This rulemaking is intended to amend existing provisions of 25 Pa.Code Chapter 245. It is not intended to affect any other existing regulations of the Department or any other state agencies.

(27) Will any public hearings or informational meetings be scheduled? Please provide the dates, times, and locations, if available.

No public hearings were conducted. Informational sessions on regulatory changes will be offered for the regulated community and various associations or groups at dates to be determined.

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(28) Will the regulation change existing reporting, record keeping, or other paperwork requirements? Describe the changes and attach copies of forms or reports which will be required as a result of implementation, if available.

The rulemaking contains comprehensive storage tank registration provisions that are representative of long standing Department policy and requirements currently addressed in the technical provisions of the existing regulations and in the Tank Act, and are now being codified in new § 245.41. The rulemaking also clarifies existing operational and maintenance record keeping requirements for UST systems and adds several record keeping requirements at existing § 245.435. These do not necessarily represent new requirements for UST owners or operators, but rather reflect current federal requirements that are addressed throughout federal UST provisions at 40 CFR Part 280 (see §§ 280.11, 280.20, 280.21, 280.22, 280.30, 280.31, 280.33, 280.34, 280.40, 280.42, 280.45, 280.50 and 280.74). These changes also reflect manufacturer's recommendations, as well as standard industry practices. Record keeping requirements should not pose a significant additional burden on tank owners or operators and are necessary to confirm compliance with current federal and Commonwealth storage tank regulations.

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

N/A

(30) What is the anticipated effective date of the regulation; the date by which compliance with the regulation will be required; and the date by which any required permits, licenses or other approvals must be obtained?

The regulation will be effective upon publication in the *Pennsylvania Bulletin* as final-form rulemaking. It is anticipated that this will occur in the Summer of 2007. Owners of tanks that become newly regulated due to regulatory changes will have 60 days to register the tanks with the Department after final-form adoption and are provided with specific phase-in periods from 3 years to 5 years for most technical requirements. Owners of currently regulated existing tanks have phase-in periods for meeting most technical changes that range from 1 year to 5 years depending upon the significance of the regulatory changes. The installer and inspector qualifications and certification application or renewal requirements contain phase-in provisions from 1 to 3 years after final form adoption.

(31) Provide the schedule for continual review of the regulation.

This regulation will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation effectively fulfills the goals for which it was intended.

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Copy below is hereby approved as to form and legality.
Attorney General

By: _____
(Deputy Attorney General)

DATE OF APPROVAL _____

Check if applicable
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promulgated by:

**DEPARTMENT OF ENVIRONMENTAL
PROTECTION
ENVIRONMENTAL QUALITY BOARD**

(AGENCY)

DOCUMENT/FISCAL NOTE NO. 7-395

DATE OF ADOPTION June 19, 2007

BY *Kathleen A. McGinty*

TITLE **KATHLEEN A MCGINTY
CHAIRPERSON**

EXECUTIVE OFFICER CHAIRMAN OR SECRETARY

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BY *Andrew C. Clark*

DATE OF APPROVAL JUL 16 2007

(Deputy General Counsel)
(Chief Counsel - Independent Agency)
(~~Strike inapplicable title~~)

Check if applicable. No Attorney General Approval
or objection within 30 days after submission.

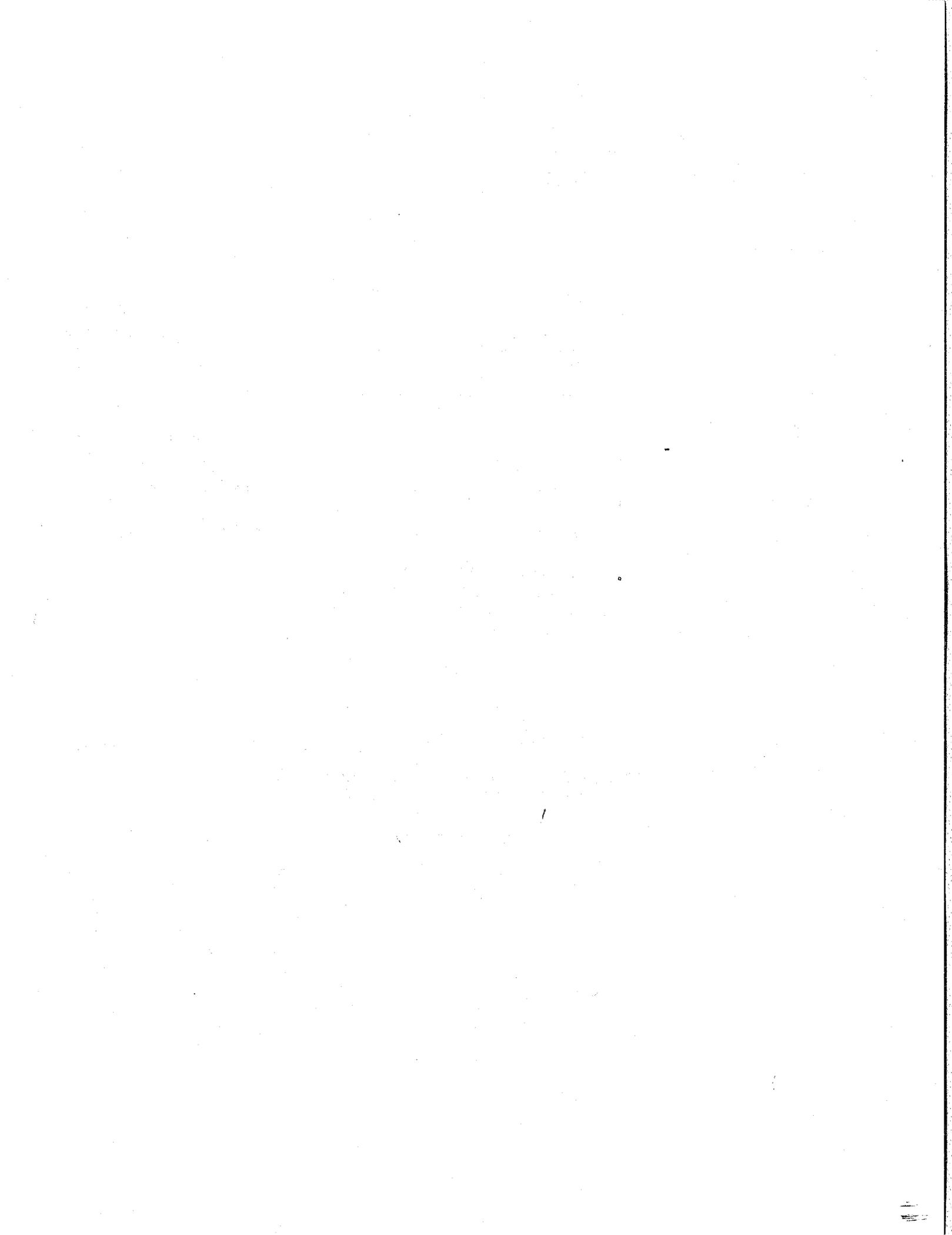
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NOTICE OF FINAL RULEMAKING

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
ENVIRONMENTAL QUALITY BOARD**

Storage Tank Program Amendment

25 Pa. Code, Chapter 245



Notice of Final Rulemaking
Department of Environmental Protection
Environmental Quality Board
25 Pa. Code Ch. 245
Administration of the Storage Tank and Spill Prevention Act

Order

The Environmental Quality Board (Board) by this order amends 25 Pa. Code, Chapter 245 (relating to administration of the Storage Tank and Spill Prevention Act).

This order was adopted by the Board at its meeting of June 19, 2007.

A. Effective Date

These amendments will go into effect upon publication in the *Pennsylvania Bulletin* as final rulemaking.

B. Contact Persons

For further information, contact Charles M. Swokel, Chief, Division of Storage Tanks, P.O. Box 8763, Rachel Carson State Office Building, Harrisburg, PA 17105-8763, (717-772-5806); or Kurt Klapkowski, Assistant Counsel, Bureau of Regulatory Counsel, P.O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. Persons with a disability may use the AT&T Relay Service by calling (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This proposal is available electronically through the Department's website (<http://www.dep.state.pa.us>).

C. Statutory Authority

This rulemaking is being made under the authority of section 106 of the Storage Tank and Spill Prevention Act (Storage Tank Act) (35 P.S. § 6021.106), which authorizes the Board to adopt rules and regulations governing aboveground and underground storage tanks to accomplish the purposes and carry out the provisions of the Storage Tank Act; sections 107(d) and 108 of the Storage Tank Act (35 P.S. §§ 6021.107(d) and 6021.108), which authorize the Department to establish a certification program by regulation for installers and inspectors of storage tanks; section 301(a) and (d) of the Storage Tank Act (35 P.S. § 6021.301(a) and (d)), which requires the Department to establish a regulatory program for aboveground storage tanks and a simplified program for small aboveground storage tanks; sections 301(b) and 501(b) of the Storage Tank Act (35 P.S. §§ 6021.301(b) and 6021.501(b)), which authorize the Department to establish classes and categories of tanks by regulation; sections 302(a) and 303(a) of the Storage Tank Act (35 P.S. §§ 6021.302(a) and 6021.303(a)), which authorize the Department to establish registration and fee requirements for aboveground storage tanks; section 501(a) of the Storage Tank Act (35 P.S. § 6021.501(a)), which requires the Department to establish a regulatory program for underground storage tanks; sections 502(a) and 503(a) of the Storage Tank Act (35 P.S. §§ 6021.502(a) and 6021.503(a)), which authorize the Department to establish registration and fee requirements for underground storage tanks; section 701(a) and (b) of the Storage Tank Act (35 P.S. § 6021.701(a) and (b)), which authorizes the Board to establish regulations necessary for maintaining financial responsibility and methods of coverage; 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.

D. Background of the Amendments

The Board established the initial rulemaking governing administration of the storage tank and spill prevention program with its final-form publication of Chapter 245, Subchapter A and Subchapter B (relating to certification program for installers and inspectors of storage tanks and storage tank facilities), which was published at 21 Pa.B. 4345 (September 21, 1991). In that initial rulemaking, Federal requirements in 40 CFR Part 280 (relating to technical standards and corrective action requirements for owners and operators of underground storage tanks (UST)) were adopted by reference in Subchapter A. Later, in August 1993, the Board established comprehensive corrective action process regulations when it adopted Subchapter D, which the Board last amended at 31 Pa.B. 6615 (December 1, 2001). With the exception of Subchapter D, these regulations have been in use without any significant changes since amendments to Subchapters A, C, E, F and G became final in 1997 (27 Pa.B. 5341, October 11, 1997) and since the last substantial amendments of Subchapter B were published at 26 Pa.B. 4735 (September 28, 1996). Through the operation of these regulations over the past several years, the Department has identified many changes that are necessary to provide clarity, improvements in storage tank operations and administrative processes, and to protect public health, safety and the environment.

The amendments to Subchapter A add three new definitional terms, change several existing terms and delete one term that is no longer needed. The amendments provide needed clarifications on regulated tank systems and regulated substances. This includes the re-regulation of previously regulated and subsequently exempted large aboveground storage tanks (ASTs) storing heating oil that is consumed on the premises. These tanks pose the same risk as other large ASTs and were unintentionally exempted when definitional terms from the UST requirements in 40 CFR Part 280 were previously codified in the Commonwealth's current regulations. The Department wants to correct this and re-regulate these large aboveground heating oil tanks. The regulated substance changes include the addition of several nonpetroleum oils, biodiesel, synthetic fluids, and ethanol in its pure form, all substances that should be properly managed in regulated storage tank systems. The final-form rulemaking adds clarity to existing tank handling and tightness testing provisions in Subchapter A, as well as recordkeeping, reporting requirements and appropriate release detection references. The final-form rulemaking also adds comprehensive storage tank registration provisions and references the statutory registration fees in Subchapter A. The registration procedures are representative of longstanding Department policy on storage tank registration.

The amendments to Subchapter B include changes to tank installer, inspector and company certification provisions. These amendments pertain to qualifications, training, testing, education and renewal of certification. They place increased emphasis on training and standards of performance and reduce the number of qualifying activities required to obtain certification. Certified entities have expressed significant interest in moving from current qualifications that are based more on activities to more training qualifications, as activities in the field have declined over the years. The amendments are needed to help ensure that adequate numbers of qualified installers and inspectors are certified and available to perform tank handling and inspection activities in this Commonwealth. Certified companies already incur technical and safety training costs for their certified employees and should be able to use that training to meet most of the amended certification requirements. Also, the Department provides administrative training and seminars at minimal or no cost.

This final-form rulemaking changes permitting provisions in Subchapter C (relating to permitting of underground and aboveground storage tank systems and facilities), by adding clarity, simplifying certain site specific installation permit (SSIP) requirements and addressing when construction design criteria or engineering specifications may be required with permit applications. The amendments should reduce paperwork and administrative processes for many SSIP applicants and combines the operating permit application and tank registration application process. Construction design criteria and engineering

specifications are a necessary part of tank construction. The Department currently reviews this information for permits that require specific plans to mitigate certain conditions at the site. The amendments are needed to further clarify this requirement and does not place a new burden or cost on the tank owner or SSIP applicant.

The final-form rulemaking also amends technical standards for UST systems in Subchapter E (relating to technical standards for underground storage tanks). The most significant changes in Subchapter E involve requirements for totally contained double-wall UST systems when new or replacement UST systems are installed, changes in monitoring for releases, the need for line leak detectors that automatically shut down the system when triggered and increases in UST inspection frequencies. These final-form amendments are more restrictive than Federal requirements in 40 CFR Part 280 that allow single-wall UST systems and additional or alternative monitoring methods for leak detection. Secondly contained UST systems and increased UST inspection frequencies are however, addressed in the UST compliance provisions of the Federal Energy Policy Act of 2005. The final-form rulemaking also clarifies recordkeeping requirements and addresses additional recordkeeping requirements that are necessary to support operational compliance with both the Commonwealth's regulations and Federal requirements in 40 CFR Part 280, but which are not clearly stated in the current regulations. The final-form rulemaking also contains provisions that preclude future UST internal lining, and requires removal of UST systems with failed linings. These amendments are necessary due to continuing problems with releases of regulated substances to the environment, particularly from single-wall USTs, from failed lined USTs and piping systems, and due to failure of many owners or operators to properly perform leak detection or to maintain operational records. The Department is concerned about the continuing releases and the inadequacy of storage tank leak detection and current operations. The final-form rulemaking also provides a phase-in period of temporary exclusions from certain technical requirements or equipment upgrades needed for existing tanks that become regulated due to the addition of new regulated substances in § 245.1 (relating to definitions). Amendments to UST variance provisions will allow for additional variances and promote the development and implementation of new technologies.

The final-form rulemaking amends technical standards for AST systems and facilities in Subchapter F (relating to technical standards for aboveground storage tanks and facilities) and requirements for small AST systems in Subchapter G (relating to simplified program for small aboveground storage tanks). The final-form rulemaking provides a phase-in period of temporary exclusions from certain technical requirements and inspection schedules needed for existing tanks that become regulated due to the definitional changes and addition of new regulated substances in § 245.1. The final-form rulemaking also contains additional information on AST system design requirements, engineering specifications and inspection or testing criteria. This should be helpful in determining when tanks are properly constructed, modified and maintained, and how best to determine suitability for service or to resolve tank system deficiencies noted during construction or inspection. Amendments to AST variance provisions will allow for additional variances and encourage the development and implementation of new technologies.

Lastly, the final-form amendments to Subchapter H (relating to financial responsibility requirements for owners and operators of underground storage tanks and facilities) clarify the financial responsibility requirements established in the Storage Tank Act for appropriate methods of meeting the UST indemnification fund deductible coverage and would correct other minor errors in Subchapter H.

The Department worked closely with informal technical workgroups and advisory subcommittees, as well as the Storage Tank Advisory Committee (STAC), during development of this final-form rulemaking. The Department also met with several organizations, associations and groups, such as the Electric Power Generator Association, the National Association of State Aboveground Storage Tank Programs and the

Tank Installers of Pennsylvania, a State association. The STAC, which was established by section 105 of the Storage Tank 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 by section 105 of the Storage Tank Act, the STAC has been given the opportunity to review and comment on this final-form rulemaking. At meetings on February 5, 2002, June 4, 2002, June 3, 2003, December 9, 2003, and December 7, 2004, the STAC reviewed and discussed the proposed rulemaking. At its September 19, 2006 meeting, the Department presented the STAC with a draft Comment Document and discussed final-form rulemaking concepts. The STAC reviewed and discussed the final-form rulemaking at its meetings on December 12, 2006 and February 20, 2007. A Financial Responsibility and Certification Subcommittee meeting was held on February 9, 2007.

At the February 20, 2007, meeting, the STAC voted unanimously to approve Chapter 245 as written. However, some members of the STAC believe that EPA may provide additional flexibility to the states to carry out the provisions of the Federal Energy Policy Act of 2005 given the fact that Congress has provided no additional funding to the states to carry out the mandates. The concern is the impact that this flexibility will have on this rulemaking. The chairperson subsequently prepared a written report on the final-form rulemaking for presentation to the Board. A listing of STAC members and minutes of STAC meetings are available on the PA Power Port at www.state.pa.us (PA Keyword: DEP Storage Tanks) and may also be obtained from Charles M. Swokel, whose contact information appears in Section B of this preamble.

E. Summary of Changes to and Comments and Responses on the Proposed Rulemaking

During a 60-day public comment period, the Board received comments from 21 commentators, including the Independent Regulatory Review Commission (IRRC). Based on the comments received, several changes have been made to the text of the proposed regulatory amendment described above.

General

A major development in the regulation of underground storage tanks in the United States was the passage of the Federal Underground Storage Tank Compliance Act as part of the Energy Policy Act (Energy Policy Act) in August 2005. This legislation represented the first major amendments to the federal UST program since its initial adoption in 1984. Several commentators recommended that the Department and the Board delay this rulemaking until the United States Environmental Protection Agency (EPA) issues all prescribed and final guidelines to implement the UST compliance provisions of the Energy Policy Act. The Board shares the commentators' concerns that the UST program in Pennsylvania be no less stringent than the Federal requirements.

The Board does not agree, however, with delaying this rulemaking until EPA issues final guidelines under the Energy Policy Act. First, the process that led to this final-form rulemaking began in 2002, based on the Department's experience in administering the Storage Tank Act, as well as the U.S. General Accounting Office's 2001 report reviewing the national UST program. The Board believes it is in Pennsylvania's best interest to have an UST program that addresses the specific issues facing the Commonwealth, while meeting the letter and spirit of the Storage Tank Act. Second, the Energy Policy Act is fairly clear on its face, and the Board feels that the final-form rulemaking addresses almost every issue raised in that legislation. It is the Board's belief that EPA will have no problem approving Pennsylvania's UST program as meeting the requirements of 40 CFR Part 281 after the rulemaking is in effect, even in light of the federal statutory changes. Third, the Energy Policy Act only addresses USTs, and so does not affect significant areas addressed in the rulemaking – ASTs, certification, permitting and registration, to name several. Fourth, some Energy Policy Act grant guidelines are not required to be in place as final until August 2007. This is not

simply a “short-term delay,” and allowing Pennsylvania’s rulemaking process to be held hostage to EPA’s schedules does not seem appropriate. Finally, it might make some sense to wait if EPA was actually proposing to amend the UST regulations at 40 CFR Parts 280 and 281, but instead EPA is only issuing “grant guidelines.” These are only policy documents, and only impact federal funding of the state UST programs, rather than binding the regulated community. This means that EPA should have flexibility and discretion to approve continued and expanded funding for Pennsylvania, even where the exact program requirements are not identical (compare, e.g., 40 CFR 280.50 (relating to reporting of suspected releases) with 25 Pa.Code §§ 245.304 (relating to investigation of suspected releases) and 245.305 (relating to reporting releases)).

One commentator suggested that the final-form rulemaking should contain a six (6) month “phase-in period” from the time the regulations are adopted to the time when they are effective to allow time for affected parties to set up policies and procedures to comply with the new regulations. The Board does not agree that a “regulation-wide” phase-in period should be provided. Where phase-in periods are appropriate, they are narrowly focused and included as a part of the rulemaking in the specific area where they are needed (see, e.g., sections 245.403(c) and 245.505). Also, the Board believes that the long development period noted above, combined with the ongoing regulatory review process, should suffice to give the regulated community adequate notice of the requirements of the rulemaking to allow for planning and design.

Subchapter A

“Consumptive use”

A commentator suggested that the “re-regulation” of large heating oil ASTs should be deleted from the final-form rulemaking because although these ASTs do pose risks, they are already regulated under 40 CFR 112.8(c) (relating to Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities); Bulk storage containers). In addition, the commentator was concerned that the 30,000-gallon capacity for inclusion in the definition of consumptive use was arbitrary and suggested a change to only include ASTs of 50,000 gallons or less capacity.

The Board agrees with the commentator that this class of ASTs poses risks and should be regulated. Further, we believe that regulation of these ASTs is consistent with the original intent behind the Storage Tank Act, and they should therefore be regulated under that Act. That is true regardless of the existence of a federal program that also regulates these tanks; the Pennsylvania regulatory program contains many items missing from the federal Oil Pollution Act. A critical argument in favor of independent Storage Tank Act regulation from the Board’s perspective is the ability to respond to releases from such tanks under the Storage Tank Act authority, rather than waiting for federal action that may not be forthcoming.

As for the size cutoff, the Board does not agree that the proposed definition is “arbitrary and capricious.” The “30,000 gallons capacity” cutoff is valid because that size AST is generally the largest size AST that is routinely manufactured, as that term is used in section 245.1 (see, e.g., definition of “aboveground manufactured metallic storage tank”). Thus, most ASTs regulated by this amendment will require some level of fabrication and assembly at the tank facility. “Field-constructed” tanks are safe and effective when properly installed, but such proper installation requires specialized expertise to accomplish and so it is particularly important to regulate those ASTs with over 30,000 gallons capacity. For these reasons, the definition is retained unchanged in the final-form rulemaking.

“Regulated substance”

The Board received several comments about the proposed expansion in the definition of "regulated substance," and the final-form version of this definition reflects several changes from the proposed rulemaking. The primary focus of these comments was on the addition of substances included on a list maintained by the Department of Labor and Industry at 34 Pa.Code Chapter 323 (relating to hazardous substance list) (Chapter 323 list). Concerns expressed included the breadth of the Chapter 323 list, the focus of that list on worker safety rather than environmental concerns, the obscurity and age of the Chapter 323 list and the fact that the list is outside of the jurisdiction of the Department and the Board.

After further review of the Chapter 323 hazardous substances list, the Board removed this proposed amendment from the final-form rulemaking. The number of substances on the Labor and Industry list, but not already on the CERCLA list, is fairly limited. Further, at this time, the Board does not have specific information concerning the number or size of storage tanks containing those limited substances. Therefore, this amendment has been removed from the final-form rulemaking.

The IRRC expressed a concern that the definition contained several "substantive" provisions. Specifically, the IRRC was concerned that each of the subsections includes provisions that specify when a substance would be regulated or not regulated. The Board does not agree with the IRRC that the proposed changes are substantive in nature and maintains that the changes are definitional in that they define in which class of "regulated substance" certain compounds will be included (i.e., either hazardous substances or petroleum).

The final-form rulemaking has been amended to reflect treating newly regulated substances in (i)(C)(I) (non-petroleum oils) and (II) (pure ethanol) the same as petroleum in (i)(B) of the definition of "regulated substance." The actual substantive requirements are found later in Chapter 245, where the definitional distinction directs regulated entities to the proper requirements for their tank (see, e.g., section 245.443 (relating to requirements for hazardous substance underground storage tank systems)). The General Assembly already addressed conditional differences between petroleum and hazardous substances in the definition of "regulated substance" in section 103 of the Storage Tank Act (35 P.S. § 6021.103).

The last change to this definition in the final-form rulemaking replaces the "Compounds for use as additives in gasoline" category in (i)(C)(II) with ethanol in its pure, unblended state. Most ethanol is denatured with more than a de minimis amount of petroleum when intended for use as fuel, and would therefore be regulated as "petroleum" under (i)(B). This amendment limits this definition and addresses the concern raised by the IRRC, above.

§ 245.41. Tank registration requirements.

Several commentators noted that because all USTs and ASTs put into temporary closure will no longer be in operating status, this section should be amended to address Department withdrawal of the out-of-service tank's operating permit. The Board agrees, and this section has been amended in the final-form rulemaking to include routine withdrawal of the operating permit when a tank is reported in temporary closure or temporary out-of-service status.

One commentator was concerned that the requirements in subsection (f)(4) could cause excessive or frequent notification to the Department. The commentator requested that notification requirements should not apply when minor changes in tank product storage occur. For example, products such as kerosene and diesel fuel are very similar in composition and storage tanks are often switched back and forth between these products depending on inventories and supply demands. The commentator suggested that notification of changes in substances stored should only apply when there is a significant change, such as a change from a petroleum product to a hazardous substance, and not when a change is only in the type of petroleum product (e.g., from

diesel to kerosene). The Board recognizes that some operations change substances frequently because of business practices and included the ability to address this issue in the final-form rulemaking. The substance in a tank is important, however, as the substance stored determines technical regulatory requirements and Underground Storage Tank Indemnification Fund billing.

§ 245.43. Failure to pay registration fee.

The IRRC raised several enforcement-related issues concerning this section of the proposed rulemaking. First, the IRRC was concerned about the Board's authority to include the language in proposed subsection (a) stating that an owner who fails to pay the registration fee shall be subject to "Commonwealth policy and guidelines" for collection of delinquent debts due the Commonwealth. To a large degree, this language is included here merely to put the regulated community on notice of the consequences of failure to pay this fee (see, e.g., 25 Pa. Code § 245.212(b)); therefore, the "shall" in this section has been changed to "may". The Board notes, however, that there is a Management Directive, 310.10, relating to Collection, Requests for Compromise, and Write-Off of Delinquent Claims, that directly establishes an applicable process. The Department's Storage Tank Program follows Management Directive 310.10 when collecting delinquent registration fees, along with exercising other enforcement options (e.g., civil penalties, administrative orders, withholding or revoking permits, etc.). In addition, any enforcement policy of the Department undergoes public notice and comment, along with review by the Storage Tank Advisory Committee, and is available from the Department directly or on the DEP website. Therefore, the language is retained in the final-form rulemaking.

The IRRC noted that subsection (b) states that failure to pay the registration fee could result in Departmental action against the storage tank owner and the operator. Sections 245.42(a) and (b), relating to tank registration fees, state that registration fees are to be paid by tank owners. Therefore, the IRRC requested that the reference to tank operators be deleted from this subsection. The Board acknowledges that the Storage Tank Act places the responsibility to pay annual registration fees on the owner of the aboveground (35 P.S. § 6021.303(a)) or underground (35 P.S. § 6021.503(a)) storage tank. Those same subsections contain language that states:

It shall be unlawful for any owner or operator to operate or use, in any way, any [aboveground or underground] storage tank that has not been currently registered as required by this section.

Therefore, although the obligation to register the regulated storage tank rests with the tank owner, operation of a regulated storage tank that is not properly registered is also a violation of the Storage Tank Act. The intention of this section was to put the operator on notice of this requirement, and of the potential liability for operating a regulated storage tank for which annual registration fees have not been paid. The proposed language is retained in the final-form rulemaking.

Finally, the IRRC was concerned about the language in subsection (c) stating that the Department may withhold an operating permit for a tank if the owner has a delinquent registration debt for any regulated storage tank. The IRRC questioned what circumstances would lead the Department to withhold a permit. Failure to pay required registration fees is a violation of either section 303(a) (aboveground) or 503(a) (underground) of the Storage Tank Act. Section 1301 of the Storage Tank Act establishes the criteria upon which the Department may withhold or revoke a permit under the Act. (35 P.S. § 6021.1301). The Department is bound by and follows the requirements of section 1301 when making decisions concerning the withholding or revoking of operating permits for storage tanks.

Subchapter B

§ 245.110. Certification of installers.

The Underground Storage Tank Indemnification Fund (USTIF) raised a concern about the proposal to eliminate separate categories for aboveground and underground installers. The USTIF was concerned that the change would make it difficult to properly and accurately bill fees for the Tank Installers Indemnification Program (TIIP), particularly with regard to new companies or companies that previously had only worked on ASTs but now want to work on USTs as well. The final-form rulemaking retains the existing, separate categories for underground and aboveground tank installers in the final-form rulemaking.

§ 245.114. Renewal and amendment of certification.

Several commentators noted that in subsection (c), for the certification category AMNX, the proposed requirement of twelve (12) installations or major modifications needed for renewal of certification is excessive. Very few non-metallic ASTs are installed or modified today. This requirement should be changed to six (6) installations or major modifications. The Board acknowledges the commentators' concern. The number of activities for renewal should be equal to the number of activities required for initial certification. Proposed activity requirements have been adjusted for all categories in the final-form rulemaking. For the AMNX category, the Board has changed the activity requirement from 12 to 9 activities in the final-form rulemaking.

The Board received several comments concerning the transition proposed in this section concerning renewal from qualifications based on activities to qualifications based on training. Specifically, commentators were concerned that more detail was needed in the regulations on what specific training meets these requirements. Among the suggestions for amendments was a requirement for a minimum annual continuing education for certified installers and inspectors, or at least establishing a minimum number of hours of training for each category. Clarifying language concerning the difference between technical training requirements for initial and renewal of certification and course expectations has been added to the final-form rulemaking, but no minimum number of hours of training requirements are established. The Board believes that flexibility will be needed to require training when appropriate. In some instances this might require more than the suggested minimum requirements, and for specific certification categories less training might be acceptable. Because the training courses are category-specific and approved by the Department, based on course outline and content, there is no need or desire to assign credit hours for a course or require a specific number of training hours for renewal. Course content is the important factor, not the time spent in training.

Subchapter C

§ 245.203. General requirements for permits.

§ 245.222. Application requirements.

A commentator noted that because all USTs and ASTs put into temporary closure will no longer be in operating status, these sections should be amended to address Department withdrawal of the out-of-service tank's operating permit. These sections are amended in the final-form rulemaking to include routine withdrawal of the operating permit when a tank is reported in temporary closure or temporary out-of-service status. This revision correlates with changes in the final-form rulemaking to section 245.41.

§ 245.231. Scope.

Two commentators requested that the proposed rulemaking be amended to create an exemption from the requirement to obtain an SSIP in the situation where a new large AST replaces an existing tank at the same location. Although the final-form rulemaking does not contain such an exemption, it does reduce the required submissions for an AST being constructed on the footprint of a previous AST.

Subchapter E

§ 245.405. Codes and standards.

One commentator raised a concern over the proposed language stating that “[r]egulatory requirements prevail over codes and standards whenever there is a conflict.” The commentator suggested that the Department should list those conflicts either directly in the regulations or in some publicly accessible manner. Given the detailed nature of the industry standards and codes applicable to the storage of regulated substances in USTs, it would be administratively difficult to list every instance of conflict. This would also be a shifting target, as generally industry codes and standards are updated or amended more frequently than the Chapter 245 regulations. In many instances, the conflict is in the nature of a mandatory command in the regulations (“owner shall do X”), versus a discretionary option in a code or standard (“owner may do X”), or a firm deadline for an action established in the regulations versus an open-ended code or standard. Given the highly fact-specific nature of these issues, the Board has retained the proposed language in the final-form rulemaking, and recommends contacting the Storage Tank Program to determine whether or not a conflict truly exists.

The IRRC raised three concerns about this section. The first concern targeted the use of the indefinite phrase “when appropriate” in this section. The Board acknowledges IRRC’s concern. The final-form rulemaking has been amended to simply delete the phrase “when appropriate” or to replace it with “when approved by the Department.”

Second, IRRC questioned the inclusion of the phrase “will not automatically be required to be upgraded to meet the new standards.” The IRRC felt that use of the term “automatically” implies that the facilities or storage tank systems may have to be updated in the future, and suggested that the final-form regulation should include specific details on when the upgrades will be required. The rationale behind this language is to indicate that the industry standard in effect at the time the activity is done is the industry standard that should be followed. It may be appropriate in certain circumstances (e.g., when there is an imminent threat to public safety) to require tank owners to meet an updated industry standard. Meeting the new requirement could involve a specific facility or it could be an industry-wide change. It is nearly impossible to anticipate every instance in which such upgrades might be necessary. If the Department were to require such upgrades, however, it would do so only via notice to the affected tank owner(s). To clarify this, the Board added language to the final-form rulemaking indicating that existing tanks will not be required to automatically upgrade to a new standard, unless the revised standard or the Department specifies that upgrade is required.

Finally, IRRC was concerned with the language in subsection (d) states: “Regulatory requirements prevail over codes and standards whenever there is a conflict.” The IRRC commented that this provision is not needed because regulations have the full force and effect of law and already prevail over codes and standards, but that if the Board decided to retain this provision, similar language should also be added to sections 245.504 and 245.604. The Board does not agree with the commentator regarding the necessity of this language. After all, the industry standards are incorporated by reference into the regulations in this section. Absent this language, it is at least arguable that the industry standard would prevail over the conflicting regulatory requirement. To the extent that the commentator suggests adding similar language to other sections, the Board agrees and has made the recommended changes to the final-form rulemaking.

§ 245.411. Inspection frequency.

Several commentators commended the Department for proposing to require operator training when related violations are documented through an inspection, but noted that the proposed rulemaking does not appear to meet the requirements for routine operator training contained in the Federal Energy Policy Act of 2005. The Board agrees with the commentators that the rulemaking only addresses owner and operator training in the context of verification of violations. The Federal Energy Policy Act of 2005 does contain requirements for additional training for owners and operators whose storage tank systems are determined to be out of compliance. The final-form rulemaking does not, however, address the Energy Policy Act requirements concerning routine operator training. The Energy Policy Act does not require EPA to develop guidelines for this requirement until August 2007 (42 U.S.C. § 6991i(a)(1)), and EPA has not released draft grant guidelines on this issue for public comment to date. Further, Pennsylvania and other states are not required to have routine operator training requirements in place until August 2009 (42 U.S.C. § 6991i(b)). The final-form rulemaking retains subsection (d), however, to address owner and operator training after verification of violations.

In response to several comments, this section of the final-form rulemaking is also amended to include a phase-in period for routine inspections of tanks that have current inspection due dates greater than 3 years at the time of final adoption of the rulemaking. This phase-in period is consistent with the August 8, 2010, deadline that EPA has established for meeting the 3-year inspection frequency requirements in the Federal Energy Policy Act.

Finally, in response to a comment from IRRC, the final-form rulemaking has been amended to include examples of the type of training that could be used. Because the Department will typically require the training as part of the enforcement follow-up after the verification of facility violations, the specific course necessary will be addressed at that time. The final-form rulemaking is also amended to note that the tank owner or operator shall incur the cost of the training.

§ 245.421. Performance standards for underground tank systems.

Several commentators raised concerns about the proposed amendments to this section as they related to options granted to the states to comply with the Energy Policy Act. Primarily, these commentators were concerned that the requirement for total secondary containment of all new and replacement USTs is more stringent than the secondary containment requirement included in the Federal Energy Policy Act of 2005, which is limited to USTs located near navigable waters or drinking sources, and that this requirement would cost Pennsylvania UST owners a great deal of additional money for little environmental benefit.

The Board agrees that the total secondary containment regulation is new and is more stringent than the secondary containment option included in the Federal Energy Policy Act. The Pennsylvania UST program will require total secondary containment for new and replacement UST systems throughout the Commonwealth while the federal program would require total secondary containment only if the tank system "is within 1,000 feet of any existing community water system or any potable drinking water well." 42 U.S.C. § 6991b(i)(1). Further, the Department has acknowledged in the past and continues to acknowledge that the UST system equipment costs are increased with the total secondary containment requirement. Even so, the Board believes that the approach outlined in the final-form rulemaking is in the best interest of the regulated community, the public, the environment and the Department.

First and foremost, requiring total secondary containment for new and replacement UST systems (double walled tanks and piping with sumps at tank and piping junctions, and under dispensers) will provide the maximum protection against releases of regulated substances. Federal study indicates total secondarily-contained systems have fewer failures or releases of regulated substances than single-walled UST systems. Fewer releases, and less severe releases, means less exposure to the public and environment to those regulated substances, and fewer resources needing to be devoted to corrective action. All interested parties currently incur those costs – the Department (both in terms of oversight of responsible party corrective action and direct state-lead corrective action), the Underground Storage Tank Indemnification Fund (USTIF), the regulated community and the public. The public may be impacted directly, for example, where a homeowner’s drinking water well is impacted, or indirectly, through the imposition of the “per gallon throughput” USTIF fee paid on each gallon of gasoline sold in the Commonwealth.

Second, since 1998, Department records show approximately 60% of tanks and 80% of piping systems installed in Pennsylvania have been double-walled. Thus, we do not expect a major impact on industry practices from this decision. The regulated community already appears to realize the benefits of installing protective systems. The installer community already recommends installation of these systems, and notes that there is only very minimal increased installation cost associated with a total secondary containment UST system.

In addition to the benefits of a statewide “total secondary containment” option, there are several reasons why the Board does not believe that the Energy Policy Act’s “1,000 foot” limitation makes sense. First, the Board notes that the Storage Tank Act contains a presumption of liability in section 1311

for all damages, contamination or pollution within 2,500 feet of the perimeter of the site of a storage tank containing or which contained a regulated substance of the type, which caused the damage, contamination or pollution.

(35 P.S. § 6021.1311(a)) At a minimum, then, the “total secondary containment” option in Pennsylvania should extend to 2,500 feet.

We also note that the federal “total secondary containment” option only extends protection to “existing community water systems” and “existing potable drinking water wells.” The Board agrees that protecting those items is crucial, but protecting those items alone is not enough. Other items are also deserving of protection, but not covered by the Energy Policy Act, might include:

- planned locations for new community water systems or new potable drinking water wells;
- the entire extent of aquifers used to provide drinking water (the Energy Policy Act requirements are unclear as to whether or not the aquifer is protected, or only the well itself);
- wells providing water for “agricultural purposes,” as that phrase is defined in 25 Pa.Code § 250.1 (relating to definitions);
- buildings with subsurface features that might be impacted by vapors from a release;
- “waters of the Commonwealth,” as that phrase is defined in section 1 of the Clean Streams Law (35 P.S. § 691.1); and,

– other water supplies (“water supply” is defined in section 245.1 as “[e]xisting, designated or planned sources of water or facilities or systems for the supply of water for human consumption or for agricultural, commercial, industrial or other legitimate use, protected by the applicable water supply provisions of § 93.3 (relating to protected water uses)”).

By requiring total secondary containment for all new and replacement UST systems, the rulemaking protects these other items to the same extent the Federal Energy Policy Act protects certain water supplies.

The Board further notes that extending the total secondary containment requirement statewide avoids a significant administrative burden. This burden consists of the effort required to determine whether or not a new or replacement UST system falls within the Energy Policy Act’s limits, where such information can even be determined with any accuracy. Whether or not that burden is borne by the Department or the regulated community, it may swallow up any cost savings associated with the installation of a “lower quality” single-walled UST system. It should also be noted that there would be a delay in installation due to the necessity of conducting this review and making this determination that is avoided by the Department’s preferred statewide approach. This delay could also include any litigation before the EHB (including third-party appeals) over the Department’s decision that a particular UST system is or is not within 1,000 feet of a protected feature.

Finally, we note that there is the possibility of decreases in USTIF fees in the future as the UST system population in Pennsylvania is replaced by the more protective total secondary containment systems.

For all of these reasons, the Board believes that the approach outlined in the final-form rulemaking is in the best interest of the regulated community, the public, the environment and the Department, and so that approach is retained in the final-form rulemaking.

A second concern raised by a commentator regarding the proposed amendments to this section is directed to the option offered by the Energy Policy Act for states to protect groundwater through a combination of UST installer certification, and the maintenance of financial responsibility by UST installers along with manufacturers of USTs and piping systems.

In supporting the “financial responsibility and certification” option for protecting groundwater over the “total secondary containment” option, the commentator appears to overlook a critical, and from our perspective, insurmountable obstacle to implementing that option. That obstacle is the requirement that:

A person who manufactures an underground storage tank or piping for an underground storage tank system . . . is required to maintain evidence of financial responsibility under section 9003(d) in order to provide for the costs of corrective actions directly related to releases caused by improper manufacture . . .

42 U.S.C.A § 6991b(i)(2)(A). As a preliminary matter, it appears that the General Assembly might need to amend the Storage Tank Act to allow the Department to require, through regulations, such “manufacturer financial responsibility.” Even if such a requirement was authorized, however, it is difficult to see how such a requirement could be implemented at the state level. Most manufacturers are located outside of the Commonwealth’s jurisdiction, with their products coming into Pennsylvania through interstate commerce. Such commerce is traditionally a federal concern, and there are limits on the states’ ability to regulate such commerce. If that hurdle were not high enough, the Department will be hard-pressed to pursue enforcement actions or cost recovery against manufacturers located outside of the Commonwealth. Finally, an informal

survey of other state's agencies implementing the UST program revealed that the overwhelming majority of other states are meeting the Energy Policy Act requirement through the secondary containment option.

Addressing the commentator's second concern, the Board acknowledges the additional requirements placed on the Commonwealth by the Energy Policy Act. The most implementable alternative, from an administrative perspective, is to meet the groundwater protection requirements by having all new and replacement UST systems be installed with total secondary containment. This avoids the need to implement a new manufacturer financial responsibility program, and avoids the burdens of attempting to determine whether a new or replacement UST is located in an area protected under the EPA grant guidelines.

The proposed amendment to section 245.421(b)(2) required upgrading of all piping associated with a UST system to satisfy secondary containment standards whenever more than 30% of the system piping is going to be replaced. Several commentators expressed concern that this requirement was too stringent, and the final-form rulemaking has been amended to reflect the requirement that replacement of all piping that routinely contains and conveys regulated substances from the tank with secondarily-contained piping must occur only when more than 50% of this piping is replaced.

Several commentators went further, and suggested that replacement of piping with identical materials should not trigger the upgrade requirement, regardless of the percentage of piping replaced (up to and including 100%). The Board does not agree and believes that this would be in conflict with the Energy Policy Act (*see*, Final Secondary Containment Grant Guidelines, issued by EPA on November 15, 2006, pages 4-5). Piping associated with USTs is a significant source of contamination in the Commonwealth. When piping replacement is over the 50% threshold, such replacement must meet the new UST system standards, i.e., total secondary containment piping, rather than simply replacing old piping with equipment that is less protective than total secondary containment.

In response to comments, this section of the final-form rulemaking has been amended to clarify that the double walled piping requirement applies only to piping that routinely contains a regulated substance, which does not include vapor recovery, vent or fill piping.

Finally, subsection (a) is amended in the final-form rulemaking to designate those that can certify the system installation, when it must be certified and what documentation must be provided to the Department. These additions are consistent with tanks initially installed for storing regulated substance and for reuse of removed tanks.

§ 245.422. Upgrading of existing underground storage tank systems.

A major concern raised with the proposed amendments to this section concerned the requirement that release detection equipment be upgraded for systems using interstitial monitoring or electronic line leak detection from an alarm to an automatic shut-off device. The Board acknowledges the commentator's concerns about a potentially major upgrade program. The final-form rulemaking has been amended to require upgraded release detection and line leak detectors only for new and replacement UST systems. Questions about line leak detectors and concerns that they should only apply to pressurized piping systems have been addressed and clarified in section 245.445 of the final form rulemaking.

In response to comments, the final-form rulemaking paragraph on interior lining explicitly references API RP 1631 and National Leak Prevention Association (NLPA) Standard 631 "Entry, Cleaning, Interior Inspection, Repair and Lining of Underground Storage Tanks."

§ 245.432. Operation and maintenance including corrosion protection.

The final-form rulemaking has been amended to indicate that no amount of water is desirable in gasoline containing ethanol. The proper management of water is a good beginning to this task, especially in gasoline tanks containing ethanol additives.

The IRRC raised a concern that under subsection (f), excess water in petroleum tanks must be disposed in accordance with "applicable State and Federal requirements," suggesting that the final-form regulation should reference the applicable requirements. The Board notes that this language is included in Chapter 245 to put tank owners, operators and certified individuals on notice that requirements outside of the Storage Tank Act may apply to the management of excess water removed from a petroleum UST. The proper management of excess water removed from petroleum USTs is determined on a case-by-case basis depending on the particular characteristics of the contaminated water and the end use of the material. Therefore, tank owners, operators and certified individuals faced with the question of proper handling should contact the Department's Waste Management Program in the regional office where the facility is located for detailed assistance. The final-form rulemaking has been amended to show examples of state and federal requirements.

§ 245.435. Reporting and recordkeeping.

One commentator raised a concern about the availability of records for existing facilities when a change in ownership occurs. Short of excavating the system, appropriate records are the only method of establishing what cannot be seen. Failure to maintain records, either through an ownership change or other circumstances should not be an excuse. Current state regulations and federal requirements in 40 CFR 280.20(b)(3)(ii) require the retention of these records for the operating life of the piping system. In deference to the commentator's concern, subsection (b)(2)(ii) has been amended in the final-form rulemaking to indicate that some similar form of information that demonstrates compliance with sections 245.421(b)(2)(ii)(B), 422(b)(2) and 422(c)(2) may be acceptable.

The final-form rulemaking has also been amended to require owners and operators to only maintain the most recent or last tightness test records of containment sumps and dispenser pans as listed in subsection (b)(3)(viii) of the final-form rulemaking.

§ 245.441. General requirements for underground storage tank systems.

A reference to the interstitial section of the subchapter has been added to the final-form rulemaking to clarify that interstitial monitoring is the method to use to monitor the interstice and a future date to meet this requirement has also been added.

§ 245.444. Methods of release detection for tanks.

Several commentators raised concerns regarding the need for a professional geologist for certain methods of release detection. The Board acknowledges that the language in the proposed rulemaking may have been too limiting, yet we are concerned that professionals with proper experience and credentials perform work associated with regulated storage tanks. For those reasons, this requirement is deleted in the final-form rulemaking. In its place, the final-form rulemaking contains a broad requirement similar to that already found in the corrective action process regulations at section 245.314 (relating to professional seals). If an activity consists of a practice regulated by the Engineer, Land Surveyor and Geologists Registration Law, then a properly licensed individual must perform the activity or provide a seal on a report submitted to the

Department. The Department of State administers that statute and retains authority over its implementation. However, sections 501(a)(2) and (7) of the Storage Tank Act (35 P.S. § 6021.501(a)(2) and (7)) require the Department to develop and implement a regulatory program concerning leak detection systems and the proper installation of USTs. Because the laws of the Commonwealth require that properly qualified individuals carry out certain tasks relating to storage tanks, the final-form rulemaking reflects those requirements.

In response to a comment, the final-form rulemaking has been amended to remove the requirement for the tank to be filled to the overfill set point when using an automatic tank gauge (ATG) to perform a tank tightness test. The requirement for certification of an ATG in paragraph (4) applies only to an ATG installed prior to December 22, 1990, as established in federal requirements at 40 CFR Part 280, which were not certified by the ATG manufacturer to perform product monitoring that can detect a 0.2 gallon per hour leak rate (not a tank tightness test). The final-form rulemaking has been amended to clarify this issue.

§ 245.445. Methods of release detection for piping.

In response to concerns raised by a commentator regarding replacing automatic line leak detectors (aLLD) on an existing system with a leak detector that shuts off the flow of product when triggered, the final-form rulemaking is amended to require only the upgrade of an existing line leak detector to an aLLD that shuts off the flow of product, when the entire piping system to the dispenser or the entire release detection system is replaced. Subsection (1) of the final-form rulemaking explicitly allows for other line leak detection devices besides electronic line leak detectors to meet aLLD requirements.

§ 245.451. Temporary closure (out-of-service).

In response to comments, several changes have been made to this section of the final-form rulemaking. First, the final-form rulemaking has been amended to reflect the waiver of inspections and withdrawal or withholding of operating permits when tanks are placed in temporary closure or out-of-service status. Second, the final-form rulemaking has been amended to require that a temporary out-of-service UST be emptied within 30 days or prior to reporting the UST change in operating status to the Department, whichever occurs first, unless notified otherwise by the Department. The final-form rulemaking also establishes a timeframe and conditions for long-term retention of an UST in temporary out-of-service status.

§ 245.453. Assessing the site at closure or change-in-service.

A commentator expressed a concern that subsection (a) appeared to incorporate a guidance document by reference. This was not the Board's intent. The final-form rulemaking has been amended to clarify that the standard of performance established by this section is for the tank owner/operator to "measure for the presence of a release where contamination is most likely to be present at the underground storage tank site" upon closure of the UST. If a tank owner/operator chooses to follow the Department's technical guidance document, then the owner will have met the standard of performance. Alternatively, the tank owner/operator may choose not to follow the guidance document, but instead use another process for proper site assessment that equally protects the public and the environment and that meets all regulatory and statutory requirements.

Subchapter F

§ 245.523. Aboveground storage tanks in vaults.

The IRRC raised a concern about the proposed amendments to this sections, specifically that paragraph (11) requires certain underground piping distribution systems to "be appropriately monitored," which is an

indefinite term. The final-form rulemaking has been amended to clarify that the underground piping must be monitored as required in paragraph (7) and monitoring records retained for 12 months as required under sections 245.516 or 245.615.

§ 245.541. Overfill prevention requirements.

Several commentators raised concerns about the proposed amendment to subsection (e), arguing for allowing for the use of a visual gauge, in lieu of a high-level alarm, if the large AST also has a manned operator shutdown procedure. The installation of high-level alarms will require emptying and cleaning of the large ASTs prior to working on them. That is an expensive and potentially dangerous proposition, and is not justified prior to the next scheduled removal from service (i.e., an out-of-service inspection). The Board acknowledges the commentators' concerns. The current regulatory requirements for installation of high-level alarm when a large AST is taken out-of-service have been in place since October 11, 1997 and the Board believes these requirements are appropriate. No additional deadlines are necessary for these tanks. However, ASTs that do not routinely undergo out-of-service inspections may still need to address overfill prevention. Therefore, the final-form rulemaking has been amended to reflect overfill protection requirements consistent with national industry standards, such as API 2350, NFPA 30 or PEI RP 200 for saddle-mounted ASTs and ASTs that are not routinely required to conduct out-of-service inspections.

§ 245.542. Containment requirements for aboveground storage tank systems.

Several commentators raised concerns over the proposed language, which appeared to mandate the use of Department guidance documents to comply with the requirements to verify permeability of emergency containment structures. The final-form rulemaking is amended to clarify that the standard of performance established by this section is "verification by a professional engineer that the emergency containment structure, coupled with the tank monitoring program and response plan is capable of detecting and recovering a release and is designed to prevent contamination of the waters of this Commonwealth." If a tank owner chooses to follow the procedures in the technical guidance document, then the owner will have met the standard of performance. Alternatively, the tank owner/operator may choose not to follow the guidance document, but instead use another verification process that equally protects the public and the environment and that meets all regulatory and statutory requirements. In addition, examples of industry standards on test methods for determining permeability (such as various ASTM methods and engineering standards listed in API Publication 351) have been added to this section of the final-form rulemaking.

§ 245.543. Leak detection requirements.

Two commentators requested clarification on the issue of the timing of testing ASTs for tightness. The current requirement for testing the AST is applicable to both in-service and out-of-service inspections. However, the Board believes that changes in subsection 245.553(c) reflecting nondestructive examinations that must be performed during an out-of-service inspection now adequately satisfy evaluation of the tank bottom during the out-of-service inspection. Therefore, the final-form rulemaking has been amended to only require a separate leak test during the in-service inspection for tanks not having secondary containment (double bottoms), tank lining or corrosion protection.

Another commentator noted that API Publication 334, A Guide to Leak Detection for Aboveground Storage Tanks, describes methods for detecting leaks, which is not necessarily the same thing as "tightness testing," which the proposed rulemaking was intended to address. In response, the final-form rulemaking has been amended to require a leak test, rather than testing for tightness. This is consistent with the testing terminology in API Publication 334. Further, specific leak test methods that will satisfy this requirement have been added to this section of the final-form rulemaking.

The IRRC raised several questions with regard to subsection (d). The final-form rulemaking has been amended and the requirement for certification clarified. The final-form rulemaking also addresses the test methods that may be used to satisfy the testing requirement and that a third-party inspector or an industry technician experienced in the test method and certified under American Society for Nondestructive Testing (ASNT) standards recognized by the test equipment manufacturer must perform the test. The STAC recommended that the tests to be performed by a third-party expert and not an employee of the tank owner and the leak tests be conducted as part of the inspection process. Typically, industry leak testing experts other than employees of the tank owner perform such highly technical work on ASTs, and the Board believes that this approach is appropriate.

§ 245.561. Permanent closure or change-in-service.

Several commentators noted that the proposed rulemaking language appeared to mandate the use of Department guidance documents to comply with the requirements to properly close large AST systems. This was not the Board's intent. The final-form rulemaking has been amended to clarify that the standard of performance established by this section is for the tank owner/operator to "complete a site assessment to measure for the presence of any release from the storage tank system" upon closure of the AST. If a tank owner/operator chooses to follow the Department's technical guidance document, then the owner will have met the standard of performance. Alternatively, the tank owner/operator may choose not to follow the guidance document, but instead use another process for proper site assessment that equally protects the public and the environment and that meets all regulatory and statutory requirements.

§ 245.562. Temporary removal-from-service.

In response to several comments, this section of the final-form rulemaking has been amended to allow routine scheduled service inspections to be delayed on tanks that are in temporary closure or out-of-service status. The delayed inspections must be performed, submitted to the Department and deficiencies remedied prior to placing regulated substance back into the tanks and returning them to operational service.

Several commentators suggested that the requirement in subsection (f) that temporary out-of-service large ASTs to be closed within five years be replaced with unlimited temporary closure combined with in-service and out-of-service inspections. The Board does not believe that an unlimited temporary out-of-service period is appropriate for all large ASTs. However, the final-form rulemaking amends the variance provisions in section 245.503, which may be used to allow for extending the temporary out-of-service timeframe where ASTs may need to be retained further for anticipated or potential future operational use.

Subchapter G

§ 245.612. Performance and design standards.

One commentator requested clarification in subsections (d) and (e) regarding the intention of the Board to have any one (1) of the listed controls meet the need for additional spill and overflow protection on double-walled small ASTs. The measures addressed for double-walled small aboveground storage tanks are required by EPA to meet Oil Program requirements in 40 CFR 112.7 and are also reflected in NFPA 30, and PEI Recommended Practice 200 (PEI RP 200) for installation of manufactured aboveground storage tanks. PEI RP 200 provides detailed diagrams with instructions on when specific valves, cutoffs and controls should be used. To help clarify when each of the listed controls are needed, the final-form rulemaking has been amended to include specific reference to PEI RP 200 and NFPA 30. The 3-year delay for tanks

containing newly regulated substances and heating oil consumed on the premises has been addressed in the final-form rulemaking in section 245.605.

§ 245.614. Requirements for closure.

Similar to sections 245.453 and 245.562, a commentator suggested that this section should be amended to waive service inspections for small ASTs in temporary closure status, or when permits are withheld or withdrawn. Instead, the Department should require inspection of such tanks prior to permitting, or changing the tank status from non-operating back to operating. The Board acknowledges the commentator's concerns, and the final-form rulemaking has been amended to allow routine scheduled service inspections to be delayed on tanks that are in temporary closure or removal from service status. The delayed inspections must be performed, submitted to the Department and deficiencies remedied prior to placing regulated substance back into the tanks and returning them to operational service.

Subchapter H

§ 245.704. General requirements.

One commentator requested clarification whether the Board will require submission of individual deductible coverage mechanisms for approval, or if the Board is proposing to deem the listed methods as approved by rule. The Board is not requiring routine submission of individual deductible coverage mechanisms for approval. Rather, the changes are intended only to address the mechanisms an owner may use to meet coverage requirements. The final-form rulemaking has been amended to further clarify this point.

F. Benefits, Costs and Compliance

Benefits

Subchapter A: The changes and additions to definitional terms will provide clearer interpretations of current and amended regulations and will help to ensure that several substances not previously addressed are regulated and treated like other similar (currently regulated) substances to protect public health, safety and the environment. These changes include newly developed fuels or alternatives such as biodiesel, synthetic fuels and ethanol. The re-regulation of many large ASTs holding heating oil will help to ensure that these tanks are operated, inspected and eventually upgraded to meet the same protective standards that other currently regulated oil tanks must meet.

The new registration provisions will provide tank owners and the Department a much needed and comprehensive publication of tank registration requirements. These requirements are currently only available through several publications such as fact sheets, program guidance and registration form instructions, and are fractionalized in several sections of the current technical and permitting rules and interim requirements in the Storage Tank Act.

Subchapter B: The changes to the installer and inspector certification provisions will provide much more flexibility for new certification candidates and renewal applicants. The increased reliance on continued training will help to ensure that certified individuals stay current with changes in industry practices, and take advantage of available recognized industry training. Changes to the company certification provisions will help to ensure that companies are held to the same standards the certified individuals are held to and provides incentive for certified companies to continue investing in training

for their certified employees. The changes to standards of performance provisions will help to ensure the quality, proper verification and reporting of work by installers and inspectors.

Subchapter C: The changes to permitting provisions will help simplify the site-specific installation permit process for many applicants, while ensuring that appropriate design criteria and engineering considerations are used to mitigate specific conditions that pose potential problems at some tank sites. The changes will also clarify that the tank registration process and single application also serve as the operating permit application. Routine withdrawal of operating permits for tanks that are empty and reported to the Department in temporary closure or removal-from-service status will allow tank owners and operators to delay scheduled inspections and thus defer related inspection costs.

Subchapter E: The changes to UST technical requirements will help to reduce the number and significance of releases from UST systems. The changes will help to ensure that best practices and state-of-the-art storage tank systems and ancillary equipment are used, while encouraging new technologies and providing more flexibility through variance provisions. The temporary exclusions for newly regulated tanks will provide owners additional time to plan for and to meet all of the UST technical requirements. The use of totally contained (double-wall) tank systems for new or replacement systems and phase-in of specific release detection methods will significantly aid in preventing future releases and will help to identify and capture leaks before they enter the environment. Fewer and less serious releases should help lower USTIF fees in years to come. More frequent inspections will help to ensure that operational and compliance problems are identified and resolved more quickly, which should also reduce the frequency and severity of releases. Recordkeeping changes will help tank owners to substantiate compliance with Commonwealth requirements and current federal UST requirements, which are not as clear as they should be.

Subchapters F and G: The changes to the AST technical requirements will add clarity, needed references and increase the reliance on appropriate industry practices and publications to achieve the standards set forth in the regulations. AST owners and operators will save considerably with costs associated with in-service and out-of-service inspections, which are delayed or waived for existing tanks placed in temporary removal-from-service status. The additional information on AST system design requirements, engineering specifications and inspection or testing criteria should be helpful in determining when tanks are properly constructed, modified and maintained, and how best to determine suitability for service or to resolve tank system deficiencies noted during construction or inspection. The references to program guidance documents will lead persons to proven technical processes and procedures that will help them to comply with the regulatory requirements, similar to the current guidance reference in Subchapter E.

Compliance Cost

Subchapter E: The cost of the average UST facility third-party operations inspection is approximately \$350 per inspection. UST owners or operators will incur this cost every three years under this rulemaking, rather than every five years or ten years under the current inspection frequencies. The cost of total secondary containment (double-wall) UST systems is approximately 15 to 30 percent greater than the cost of single-wall UST systems. Costs will vary depending on the types of tank systems and materials used (fiberglass, steel or composite tank wall and hard or flexible piping). These costs are only incurred when new or replacement systems are installed. Approximately 150 UST systems were installed annually during the past four years. Department records indicate that 60 percent of the UST systems and approximately 80 percent of piping systems installed since 1998 already meet the double-wall requirement. Costs for testing containment sumps for tightness could range from \$50 to \$100. The

cost of upgrading a line leak detector that only slows product flow or sounds an alarm, to a line leak detector with an automatic pump shut-off device ranges from \$100 to \$500 depending on availability of electric service and circuitry in the current system. This cost is only incurred when installing new or replacement tank, piping or release detection systems.

Generally, certified companies and tank owners should not incur significant new costs for certified individual training requirements, technical requirements to perform tests on ancillary equipment or to follow industry standards or applicable engineering practices when operating, modifying, installing or inspecting storage tank systems. These are costs that should already be incurred and industry practices that should be currently adhered to. These requirements are reinforced in several areas throughout the final-form rulemaking, but they are not new to the industry. Finally, the Department does not anticipate that it will need any new staff resources or incur significant expenditures as a result of the adoption of the final-form rulemaking.

Compliance Assistance Plan

At this time, it is not anticipated that the Commonwealth will provide sources of financial assistance to aid in compliance with this final-form rulemaking.

As for technical and educational assistance, the Department currently operates a fairly extensive program of outreach activities designed to assist owners and operators of storage tanks as well as individuals. This program includes a series of fact sheets that focus on single issues in the storage tank program (for example, Leak Detection: Meeting the Requirements); periodic seminars and conferences focusing on storage tank technical and administrative issues; training sessions presented by regional and central office training teams on a variety of issues; many guidance documents addressing technical and policy issues; and a great deal of information available on the Department's web site. The Department will revise and update applicable fact sheets, guidance documents, forms and publications to reflect changes necessary as a result of adoption of the final-form rulemaking.

The Department expects these efforts to continue and to intensify after adoption of this final-form rulemaking and as phase-in deadlines approach. The Department will also communicate directly with individuals, companies, associations, organizations and groups to assist in the understanding and implementation of the rulemaking.

Paperwork Requirements

Generally, there are very few new paperwork requirements established by this rulemaking. The paperwork requirements addressed with the new registration provisions in Subchapter A follow current processes established by policy and ongoing routine procedures under the Storage Tank Act. By further clarifying in Subchapter C that the new storage tank registration provisions and application form will also serve as the tank operating permit application form, the final-form rulemaking avoids two separate applications. Additionally, the amendments to the site-specific installation permit process in Subchapter C for replacement tanks, tanks located on the footprint of previous tanks and new small ASTs at facilities with an aggregate capacity greater than 21,000 gallons, include a shortened application and less paperwork.

The amendments to the certification regulations in Subchapter B attempt to recognize current and ongoing industry training in certification qualifications for all installer and inspector certification categories. Most certified companies already maintain records on their employees training and will

welcome recognition of the training for certification. The amendments also shorten the timeframe for submission of applications for approval of training providers and will allow the Department to recognize industry training without the submission of an application. For example, the Department will readily recognize training provided by equipment manufacturers and national associations or organizations such as the American Petroleum Institute, the Steel Tank Institute and the Petroleum Equipment Institute.

The UST provisions in Subchapter E contain some new recordkeeping requirements and further clarification of current requirements. However, most of these changes are necessary to demonstrate operational compliance with current regulations and federal requirements at 40 CFR, Part 280, and represent national association and manufacturer's recommendations for installation or operation of UST systems and ancillary equipment.

Finally, there are provisions in Subchapters C, F and G that indicate the Department may request or require the tank owner to submit documentation of construction design criteria and engineering specifications for review. The provisions are addressed in the context of mitigating certain conditions at the storage tank site or correcting inspection findings or deficiencies on AST systems. Tank owners should already be consulting with tank manufacturers, certified companies and design engineers on these issues. The Department anticipates its use of these provisions will be very limited.

G. Pollution Prevention

Generally speaking, the term "pollution prevention" refers to the minimization of waste generated in a commercial process by altering that process. The storage tank program has a slightly different approach. The goal is to keep regulated substances from being released in the first instance. The programs set out in this rulemaking package and in the current regulations are designed to halt the release and spread of regulated substances from storage tanks located in this Commonwealth. They create a program similar to the cradle-to-grave process with the goal of making sure that the storage tank is installed, maintained, operated, closed and removed in a manner that will minimize the likelihood of a release occurring. If a release does occur, these amendments and regulations that currently exist in Chapter 245 are designed to detect the release quickly, contain it if possible, and make sure that corrective action is carried out expeditiously, minimizing exposure to the public and the environment.

In this final rulemaking, the Department is attempting to reach or improve upon these goals through a combination of performance standards, with built-in flexibility (including the possibility of a variance) as to how the regulated community achieves the goals, and reliance on industry standards, and trained industry professionals. By taking this approach, the Department hopes to reduce pollution, lower the number of corrective actions that must eventually be performed, decrease the amounts of contaminated soil and groundwater that must be dealt with, and do so in a manner that is flexible, reasonable and cost effective.

H. Sunset Review

This regulation will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation effectively fulfills the goals for which it was intended.

I. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on April 7, 2006, the Department submitted a copy of the notice of proposed rulemaking, published at 36 Pa.B. 1851, April 22, 2006, to

the Independent Regulatory Review Commission (IRRC) and the Chairpersons of the House and Senate Environmental Resources and Energy Committees for review and comment.

Under section 5(c) of the Regulatory Review Act, IRRC and the Committees were provided with copies of the comments received during the public comment period, as well as other documents when requested. In preparing the final-form rulemaking, the Department has considered all comments from IRRC, the House and Senate Committees and the public.

Under section 5.1(d) of the Regulatory Review Act (71 P.S. § 745.5a(d)), on (blank) , this final-form rulemaking was deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on (blank) and approved the final-form rulemaking.

J. Findings of the Board

The Board finds that:

- (1) Public notice of proposed rulemaking was given under sections 201 and 202 of the act of July 31, 1968, P.L. 769, No. 240) (45 P.S. §§ 1201 and 1202) and regulations promulgated thereunder at *1 Pennsylvania Code* §§ 7.1 and 7.2.
- (2) A public comment period was provided as required by law, and all comments were considered.
- (3) These regulations do not enlarge the purpose of the proposal published at *36 Pennsylvania Bulletin* 1851 (April 22, 2006).
- (4) These regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this order.

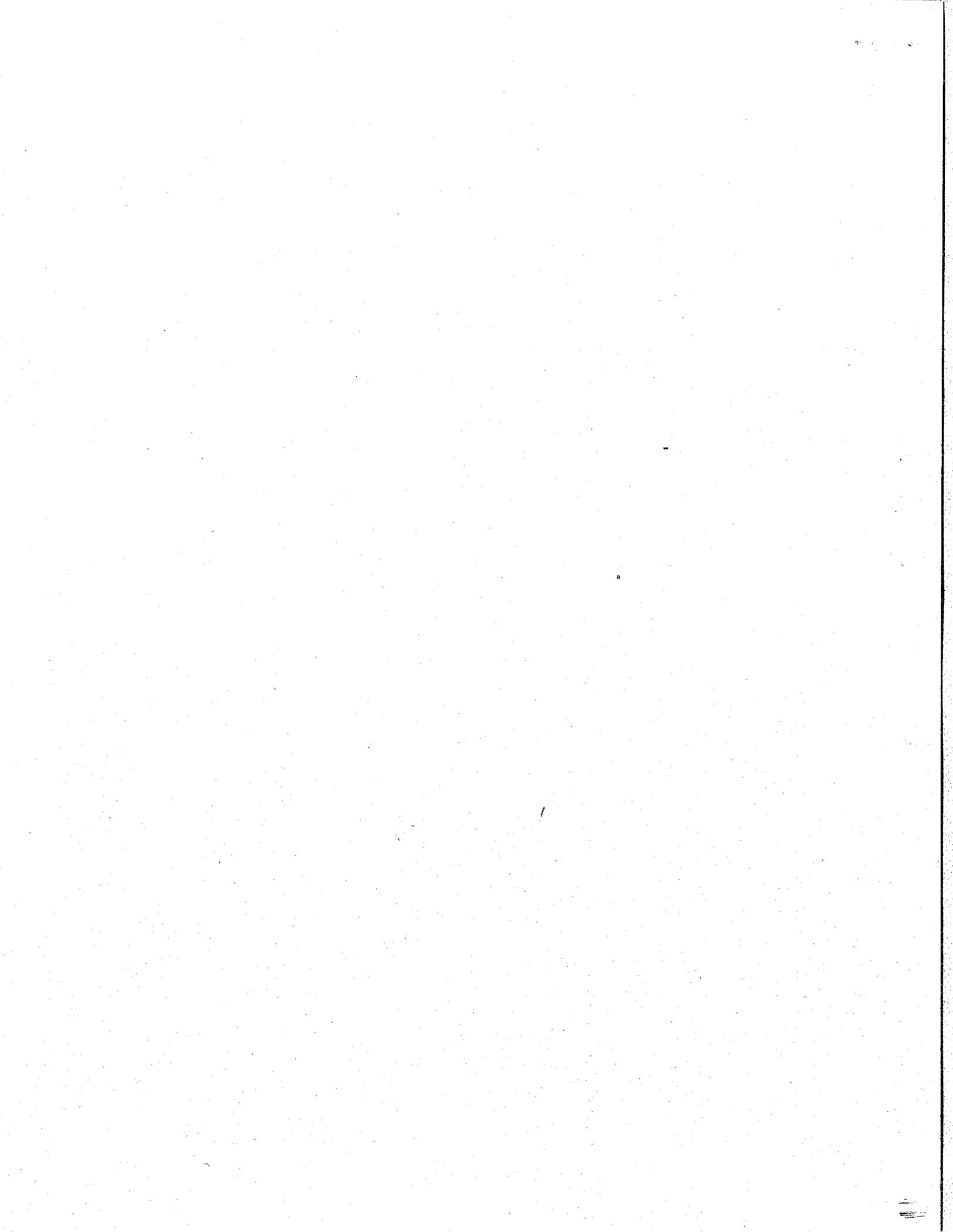
L. Order of the Board

The Board, acting under the authorizing statutes, orders that:

- (a) The regulations of the Department of Environmental Protection, *25 Pennsylvania Code*, Chapter 245, is amended by amending Chapter 245, to read as set forth in Annex A, with ellipses referring to the existing text of the regulations.
- (b) The Chairman of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for review and approval as to legality and form, as required by law.
- (c) The Chairman shall submit this order and Annex A to the Independent Regulatory Review Commission and the Senate and House Environmental Resources and Energy Committees as required by the Regulatory Review Act.
- (d) The Chairman of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau, as required by law.
- (e) This order shall take effect immediately.

BY:

KATHLEEN A. MCGINTY
Chairperson
Environmental Quality Board



Comment/Response Document

FINAL RULEMAKING

CHAPTER 245

**ADMINISTRATION OF THE STORAGE TANK AND
SPILL PREVENTION PROGRAM**

Re: Proposed Rulemaking: Storage Tank Program Amendment Proposed Regulation - (7-395)

This is a list of corporations, organizations and interested individuals from whom the Environmental Quality Board has received comments regarding the above referenced regulation.

ID	Name and Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
1.	Lysa J. Holland The Pennsylvania State University University Park, PA	16802			
2.	John M. Arnold, Chairman Petroleum Products Inc. Harrisburg, PA	17105			
3.	Dell M. Cromie, President Glassmere Fuel Service, Inc. Tarentum, PA	15084			
4.	W. Darko Puz PENRECO Karns City, PA	16041	X		
5.	Edward S. Kubinsky, Jr. Crompco Corporation Plymouth Meeting, PA	19462			
6.	Mark Onesky Exton, PA	19341			
7.	Gregory E. Dubas, President Pine Run Construction Doylestown, PA	18901			
8.	Pamela F. Faggert, VP and CEO Dominion Glen Allen, VA	23060			
9.	Joe Caldwell Caldwell Systems Longmont, CO	80501			
10.	Walter E. Rimmer, Executive Director Tank Installers of Pennsylvania State Association Dover, PA	17315	X		
11.	Preston M. Beckman, Special Funds Counsel Insurance Department Capitol Associates Building Harrisburg, PA	17102			
12.	Rolf W. Hanson Associated Petroleum Industries of Pennsylvania Harrisburg, PA	17108			
13.	John D. Wanner, CAE, Exec. Dir. Pennsylvania Society of Professional Engineers Harrisburg, PA	17102			
14.	Stephen L. Sherk American Refining Group, Inc Bradford, PA	16701			
15.	Frank Skomorucha Reliant Energy Birdsboro, PA	19508			
16.	Sharon Roth PA Chamber of Business and Industry				

Re: Proposed Rulemaking: Storage Tank Program Amendment Proposed Regulation - (7-395)

ID	Name and Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
17.	Pam Witmer, President Pennsylvania Chemical Industry Council Harrisburg, PA	17101			
18.	John V. Kulik, Exec. Vice Pres. PPMCSA				
19.	Karen Reese FirstEnergy Corp. Akron, OH	44308			X
20.	Jennifer Celeste Sunoco, Inc. Philadelphia, PA	19103-7583	X		
21.	Independent Regulatory Review Commission Harrisburg, PA	17101			

COMMENT AND RESPONSE DOCUMENT

General Comments

1. **Comment:** I support the proposed regulation changes to Chapter 245. These regulations are in general more protective of the environment and as such, are needed. (1)

Response: The Department acknowledges and appreciates the commentator's support for the proposed rulemaking.

2. **Comment:** We support the DEP's objective to offer clarity to the administration of the storage tank and spill prevention program. In particular, we support: 1) the new tank registration provisions in Subchapter A, 2) changes to the general certification requirements in Subchapter B, and 3) the requirements for total secondary containment for underground storage tanks (USTs) in Subchapter E. (10)

Response: The Department acknowledges and appreciates the commentator's support for the proposed rulemaking.

3. **Comment:** The proposed regulatory changes have been written with the intent to have a positive impact in Pennsylvania. In order to properly assess these changes and allow for public input (primarily from the Storage Tank Advisory Committee (STAC)), the Department should provide the STAC and Environmental Quality Board with a written report within six or seven years of the promulgation of these regulations. The report should quantify how these amendments – specifically, the increased frequency of UST inspections, the expanded definition of “regulated substances” and the correction to re-regulate large aboveground storage tanks (ASTs) storing heating oil for consumption on the premises where stored – meet that basic goal. (15)

Response: The Department regularly discusses issues concerning program effectiveness with the STAC and will continue to do so in the future. In addition, we provide regular reports to the United States Environmental Protection Agency Region III (EPA), in accordance with our grant agreements and program authorization approval. These discussions will continue, and the specific items listed in the comment will certainly be a part of that ongoing dialogue.

4. **Comment:** The Department and the regulated community would be best served by delaying this rulemaking until all prescribed and final guidelines are issued by the EPA to implement the provisions of the Federal Energy Policy Act of 2005. This would avoid an interim and potentially conflicting rulemaking and should only result in a short-term delay. (12)

Response: The Department appreciates the commentator's concerns that Pennsylvania's UST program be no less stringent than EPA's in light of the passage of the Energy Policy Act of 2005. We do not agree with delaying this rulemaking until EPA issues final guidelines under the Energy Policy Act, however. First, the process that led to this rulemaking began in 2002, based on the Department's experience in administering the Storage Tank and Spill Prevention Act (Storage Tank Act), as well as the U.S. General Accounting Office's 2001 report reviewing the national UST program. We believe it is in Pennsylvania's best interest to have a storage tank program that addresses the specific

COMMENT AND RESPONSE DOCUMENT

issues facing the Commonwealth, while meeting the letter and spirit of the Storage Tank Act.

Second, the Energy Policy Act is fairly clear on its face and we feel that the final-form rulemaking addresses almost every issue raised in that legislation. It is our belief that EPA will have no problem approving Pennsylvania's UST program as meeting the requirements of 40 CFR Part 281 after the rulemaking is in effect, even in light of the federal statutory changes. Third, the Energy Policy Act only addresses USTs, and so does not affect significant areas addressed in the rulemaking – ASTs, certification, permitting and registration, to name several. Fourth, some Energy Policy Act grant guidelines are not required to be in place as final until August 2007, and EPA has missed important deadlines before the Energy Policy Act. This is not simply a "short-term delay", and allowing Pennsylvania's rulemaking process to be held hostage to EPA's schedules does not seem appropriate. Finally, it might make some sense to wait if EPA was actually proposing to amend the UST regulations at 40 CFR Parts 280 and 281, but instead EPA is only issuing "grant guidelines." These are only policy documents, and only impact federal funding of the state UST programs, rather than binding the regulated community. This means that EPA should have flexibility and discretion to approve continued and expanded funding for Pennsylvania, even where the exact program requirements are not identical (compare, e.g., 40 CFR 280.50 (relating to reporting of suspected releases) and 25 Pa.Code §§ 245.304 (relating to investigation of suspected releases) and 245.305 (relating to reporting releases)).

5. **Comment:** The passage of federal legislation last year significantly changed the requirements of states in regard to UST regulation. This development has led us to respectfully ask that implementation of new state UST regulations be delayed until further guidance is received from the EPA. At that point, a more complete picture will emerge in terms of how to construct the state program going forward. (18)

Response: The Department does not agree with the commentator that the rulemaking should be delayed until further guidance is received from the EPA. See response to Comment 4.

6. **Comment:** The Department should consider providing a period of six (6) months from the time the regulations are adopted to the time when they are effective to allow time for affected parties to set up policies and procedures to comply with the new regulations. These regulations, as proposed, require significant changes to standards for new equipment that is currently being designed and installed. A six-month phase-in will allow for changes in design and equipment without holding up current capital improvement projects. (20)

Response: The Department does not agree that a regulation-wide phase-in period should be provided. Where phase-in periods are appropriate, they are narrowly focused and included as a part of the rulemaking in the specific area where they are needed (see, e.g., sections 245.403(c) and 245.505). Also, the Department believes that the long development period noted above, combined with the ongoing regulatory review process, should suffice to give the regulated community adequate notice of the requirements of the rulemaking to allow for planning and design.

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7. **Comment:** Several sections of this proposed rulemaking add a phrase identical or similar to the following, "...unless otherwise agreed upon by the Department." This language appears in the following sections:

- | | | | |
|---|----------------|---|-----------------|
| o | § 245.41(b) | o | § 245.411(b)(2) |
| o | § 245.41(d) | o | § 245.421(a)(2) |
| o | § 245.41(e) | o | § 245.451(h) |
| o | § 245.41(f)(4) | o | § 245.561(3) |
| o | § 245.111(g) | | |

This is non-regulatory language that should be deleted from the final-form rulemaking. In the alternative, language could be inserted that explains the process that the Department will follow and the criteria the Department will use to allow at exemption. (21)

Response: The Department acknowledges the commentator's concerns and has eliminated the language where it was unnecessary. In sections where the language is retained, the Department added explanatory language to clarify when a requirement may be waived or altered through Department agreement.

8. **Comment:** The phrase, "include, but not limited to" appears as new text in the following sections of the proposed rulemaking:

- | | | | |
|---|--------------|---|--------------------|
| o | § 245.41(f) | o | § 245.435(b)(1)(i) |
| o | § 245.43(b) | o | § 245.612(d) |
| o | § 245.432(c) | o | § 245.616(c) |

The phrase "but not limited to" is unnecessary and should be deleted. (21)

Response: The Department has deleted "but not limited to," with the understanding that in each case the list is intended to be inclusive rather than exclusive, and that items of a similar nature are also indicated, even if not explicitly listed (see, e.g., sections 245.108 and 245.109.)

9. **Comment:** Phrases such as "engineering practices, "engineering specification" and "engineering criteria" are included in the following sections:

- | | | | |
|---|-----------------|---|--------------|
| o | § 245.234(a)(3) | o | § 245.552(a) |
| o | § 245.522(a) | o | § 245.552(e) |
| o | § 245.522(d) | o | § 245.553(a) |
| o | § 245.522(f) | o | § 245.553(f) |
| o | § 245.524(d) | o | § 245.616(a) |

Those phrases are vague and would be difficult for the regulated community to know exactly what is expected of them. It would also be difficult for the Department to enforce provisions that include this language. These phrases should be defined or replaced with terms that are more definitive. (21)

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Response: The Department believes that these engineering phrases are well understood by the regulated community and necessary to apply many of the Nationally recognized industry standards, typically ACI, API, ANSI, PEI and NACE. Engineering specifications, practices and design criteria are commonly used for AST construction and modification projects. References have been added in the inspection provisions to indicate the technical standards sections where there may be applicable engineering requirements that should be considered during inspection of the tank system.

10. **Comment:** The phrases “scientific or statistical method and procedure” and “scientific or statistical procedure,” used in sections 245.543(d) and 245.553(c) respectively, are vague and would be difficult for the regulated community to know exactly what is expected of them. It would also be difficult for the Department to enforce provisions that include this language. Those phrases should be defined or deleted. (21)

Response: These sections of the final-form rulemaking have been amended to address specific testing methods and procedures with references to the National industry standards that apply to these nondestructive testing and examination activities conducted during inspection of the tank systems.

§ 245.1. Definitions.

“Aboveground storage tank” and “Underground storage tank”

11. **Comment:** The phrase “used, will be used” is being added to the existing definition of “aboveground storage tank” and the phrase “were used or will be used” is being added to the definition of “underground storage tank.” The statutory definition of “aboveground storage tank” only references a tank “which is or was used,” and the statutory definition of “underground storage tank” only references tanks “which are used.” The EQB should explain its statutory authority to regulate tanks that are not yet in use. In the alternative, the proposed language should be deleted from the Final-form regulation. (21)

Response: While acknowledging the commentator’s concerns, the Department does not agree with the conclusions of the commentator and will retain the proposed rulemaking language in the final-form rulemaking. The proposed rulemaking language properly captures the intent of the Storage Tank Act to regulate tanks from the beginning of installation through proper closure, including site assessment and corrective action, if necessary.

If the commentator’s reading of the Storage Tank Act were correct, then certain requirements of the Act would be rendered mere surplusage. First, under this reading, no tank would ever be regulated until a regulated substance was actually added to the tank (i.e., “used to contain an accumulation of regulated substances”). Examples of specific provisions of the Storage Tank Act that would be rendered invalid under such a reading include section 108, which established an interim program for installers of storage tanks; sections 301(c)(2) and 501(c)(2), which state that storage tanks shall only be installed by a certified installer; section 302(b), which established interim AST installation standards; section 301(a)(8), which required the Department to develop a regulatory program establishing “minimum standards for the construction, testing, corrosion protection,

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operation, release prevention and repair and reuse of aboveground storage tanks,” and section 501(a)(7), which required the Department to develop a regulatory program to include “standards for installation of new underground storage tanks, including minimum standards for the construction, testing, corrosion protection, operation, release prevention and repair and reuse of underground storage tanks.”

In addition, adding the phrase “were used” to the definition of “underground storage tank” is appropriate because the obligations of a tank owner and operator do not end merely because the tank no longer contains an accumulation of regulated substances. For example, section 501(a) requires the Department to develop and implement a regulatory program that requires the following, all of which likely occur *after* all regulated substances are removed from a tank:

(5) Corrective actions by owners, operators, landowners and occupiers, or other responsible parties, on an emergency basis if necessary, in response to a release from an underground storage tank.

(6) Requirements for closure of tanks by owners and operators to prevent future releases of regulated substances into the environment.

* * * * *

(8) Standards and procedures for . . . removal of tanks and intended and completed closure of an underground storage tank.

(9) Methods and procedures for the removal of underground storage tanks from service by the owner or operator.

* * * * *

(13) Minimization of the amount of soil and subsurface material affected by a release of a regulated substance by segregating the unaffected soil and subsurface material during removal of an underground storage tank from the material affected by a release of a regulated substance.

Section 501(c)(2) of the Storage Tank Act provides that USTs shall only be removed by a certified installer, another activity that takes place only after all regulated substances are removed from the UST. Section 502(c) is even more explicit concerning regulation of USTs that “were used” to contain an accumulation of regulated substances, stating:

(c) Discontinued use.--Upon abandonment or discontinuance of the use or active operation of an underground storage tank, the owner and operator shall remove the tank and its contents or shall seal the tank, and restore the area in a manner that prevents any future release, and shall remedy any adverse impacts from any prior release in a manner deemed satisfactory to the department.

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The definition of "owner" in section 103 of the Storage Tank Act also supports the additional language in the definition of "underground storage tank." That definition includes:

(3) In the case of an underground storage tank, the owner of an underground storage tank holding regulated substances on or after November 8, 1984, and the owner of an underground storage tank *at the time all regulated substances were removed* when removal occurred prior to November 8, 1984.

(emphasis added).

The Department does not believe that it was the Legislature's intent to invalidate these portions of the program through these definitions, and the additional language merely clarifies the Department's understanding of the proper scope of the Storage Tank Act.

"Air Pollution Control Act"

12. **Comment:** The title of the act referenced is incorrect. The correct reference is the "Uniform Interstate Air Pollution Agreements Act." (21)

Response: The title referenced in the proposed rulemaking is correct; the citation was incorrect due to a typographical error. The citation has been corrected in the final-form rulemaking.

"Consumptive use"

13. **Comment:** We agree that very large ASTs storing heating oil for consumption on the premises pose a substantial risk and should be regulated. However, these tanks are currently regulated under 40 CFR 112.8(c) (relating to Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities); Bulk storage containers). The proposed amendment to the definition of consumptive use to exclude tanks over 30,000 gallons adds no additional benefit and is unnecessary to adequately protect human health and the environment. Therefore, the proposed change in the definition should be deleted to avoid dual regulation. In addition, the 30,000-gallon capacity for inclusion in the definition of consumptive use is arbitrary and capricious. If the proposed change to the definition is not deleted it should at a minimum be revised to include ASTs of 50,000 gallons or less capacity. (19)

Response: The Department agrees with the commentator that this class of ASTs poses risks and should be regulated. Further, we believe that regulation of these ASTs is consistent with the original intent behind the Storage Tank Act, and they should therefore be regulated under that Act. That is true regardless of the existence of a federal program that also regulates these tanks; the Pennsylvania regulatory program contains many items missing from the federal Oil Pollution Act. A critical argument in favor of independent Storage Tank Act regulation from the Department's perspective is the ability to respond to releases from such tanks under the Storage Tank Act authority, rather than waiting for federal action that may not be forthcoming.

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As for the size cutoff, the Department does not agree that the proposed definition is "arbitrary and capricious." The "30,000 gallons capacity" cutoff is valid because that size AST is generally the largest size AST possible to be manufactured, as that term is used in section 245.1 (see, e.g., definition of "aboveground manufactured metallic storage tank"). Thus, any AST regulated by this amendment will require some level of fabrication and assembly at the tank facility. "Field-constructed" tanks are safe and effective when properly installed, but such proper installation requires specialized expertise to accomplish and so it is particularly important to regulate those ASTs with over 30,000 gallons capacity.

"Pipeline facilities (including gathering lines)"

14. **Comment:** The proposed change should not be adopted as written. It appears to move the regulations beyond the authority established in the Storage Tank Act. This change appears to regulate ASTs regulated under the Hazardous Liquids Pipeline Safety Act under the Storage Tank Act as well. Such tanks are specifically excluded by the Storage Tank Act. (15)

Response: The Department believes that this change merely codifies the existing program, at both the federal and state levels, concerning ASTs used for both pipeline and other purposes. Minor changes were made to the final-form rulemaking to help further clarify this definitional term.

15. **Comment:** The amended definition is one sentence that contains over 125 words. It includes a list of equipment that may be regulated and a list of equipment that is not regulated. To improve clarity, we suggest that the definition be broken into subsections. (21)

Response: The Department acknowledges the commentator's concerns and has amended the definition for clarity in the final-form rulemaking.

"Regulated substance"

16. **Comment:** The proposal expands the definition of "regulated substance" in several ways, including in paragraph (i)(C)(III) by adding substances included on a list maintained by the Department of Labor and Industry at 34 Pa. Code Chapter 323 (relating to hazardous substance list). This proposal is too broad and steps should be taken to ensure that the regulated community and the public know which specific substances are included in the definition. Additional substances added to the definition of "regulated substance" under this paragraph should be selected individually and specifically listed in the definition, or at least shown in the same way the nonpetroleum oils proposals are shown. (10, 16, 17, 19, 20)

Response: After further review of the Chapter 323 hazardous substances list, the Department removed this proposed amendment from the final-form rulemaking. The number of substances on the Labor and Industry list, but not already on the CERCLA list, is fairly limited. Further, at this time, the Department does not have specific information concerning the number or size of storage tanks containing those limited substances. Therefore, this amendment has been removed from the final-form rulemaking.

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17. **Comment:** Several commentators expressed concerns regarding the incorporation by reference of the Chapter 323 list of environmental hazards for process reasons. Chapter 323 is not intended as a method of regulating materials found in storage tanks. It was drafted as a method for facilities to inform employees about hazardous substances found at the workplace. By adopting this list by reference, DEP is effectively removing the ability to make any additions or subtractions. The only way this list could be changed was through a regulatory change initiated by the Department of Labor and Industry, and considering that the function of this list is not for environmental purposes, DEP's concerns will not be considered highest priority when it is amended. In addition, the relative obscurity and age of this list will prove to be difficult for tank owners to find. The reference to 34 PA Code Chapter 323 should therefore be removed and any list of newly regulated substances published in full in the regulations to make the reporting requirements more transparent and to make the list amendable by DEP. This code is outside the Department's jurisdiction, and future amendments can be made to Chapter 323 without going through the environmental review and comment process. (15, 17, 21) By incorporating the substances on the Chapter 323 list that are defined as "environmental hazards," the EQB would effectively relinquish control over this portion of the regulation to the detriment of both the EQB and the regulated community. Pursuant to Act 275 of 1970, Section 1920-A of the Administrative Code of 1929, 71 P.S. § 510-20, the EQB was established to formulate, adopt and promulgate rules and regulations necessary for the proper work of the Department. Chapter 323, however, is promulgated by the Department of Labor and Industry, which may modify the list without EQB consent. Therefore, the regulated substances under Chapter 323 should be directly listed in Chapter 245, rather than incorporated by reference to ensure continued and active oversight by the EQB. (16)

Response: See response to Comment 16. The Department does not agree that incorporating by reference regulations outside the control of the EQB is somehow illegitimate or illegal under the Commonwealth's laws governing incorporation by reference. For example, in this very definition the list of hazardous substances maintained by EPA under CERCLA is incorporated by reference ((i)(A)); section 245.2 incorporates by reference 40 CFR Part 280, Subpart I (relating to lender liability); several sections reference standards established by the U.S. Occupational Safety and Health Administration (OSHA); in several places the regulations reference the requirements of the Engineer, Land Surveyor and Geologist Registration Law; and applicable industry codes and standards, as well as manufacturer's specifications, are incorporated by reference throughout subchapters E, F, and G. Any or all of those requirements could change without action by the EQB, and the Department does not believe that the EQB is effectively relinquishing control over these portions of the regulation "to the detriment of both the EQB and the regulated community."

Incorporation by reference is a critical tool for many of the complex and detailed programs administered by the Department. The test for proper incorporation by reference is whether or not the particular information incorporated will be useful in meeting the goals and requirements of the program in question. If an incorporated standard or document does prove problematic, the straightforward solution is to amend the incorporating regulation to delete that reference.

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18. **Comment:** The one-pound release reporting requirement contained in (i)(C)(III) appears arbitrary and will be needlessly expensive. Please explain the technical justification for this requirement or provide a cost/benefit analysis. (16, 20, 21) The 1-pound reportable quantity is both arbitrary and unmanageable. This requirement under the definition of regulated substance in Section 245.1 regulates many chemicals that are readily found around the typical home. By assigning a minimum requirement, DEP is effectively regulating all containers of driveway sealant, linseed oil and vinegar with quantities over one pound. This definition should be reconsidered to a much larger quantity that would be more commonly held by facilities that employ storage tanks. (17)

Response: See response to Comment 16. Although this provision is deleted from the final-form rulemaking, the Department notes that the one-pound reporting requirement matches the "default" requirements under section 102(b) of CERCLA (42 U.S.C.A. § 9602(b)). Further, this is a "release reporting" requirement, not a regulatory threshold – no containers under 110 gallons capacity (USTs) or 250 gallons capacity (ASTs) are regulated under the Storage Tank Act.

19. **Comment:** If the EQB finds technical or scientific justification to add the environmental hazard substances on the Chapter 323 list to the definition, only storage of such substances in USTs or large ASTs should be regulated (16, 20). If the EQB chooses to keep the substances listed as environmental hazards in Chapter 323 in this definition, then it should also keep the temporary exclusion and phase-in period for any newly-regulated tanks provided for in sections 245.403, 245.505 and 245.605. (16)

Response: See response to Comment 16.

20. **Comment:** Regulated substances should only include materials that are liquids at standard conditions of temperature and pressure (60 degrees F and 14.7 pounds per square inch absolute). The term "gaseous" substances in the regulated substance definitions "(i)(A)" and "(i)(C)(III)" should be deleted from the definition since these types of materials are not stored in typical atmospheric storage tanks but are stored in pressurized vessels or tanks. (20)

Response: The program currently regulates a number of gaseous hazardous substances, which are stored in low-pressure storage tanks that do not qualify as pressure vessels. In addition, under the Storage Tank Act the "standard temperature and pressure" concept is only a factor for petroleum substances and does not apply to hazardous substances.

21. **Comment:** Subsections (i)(C)(I), (II) and (III) of the definition include substantive provisions. Specifically, each of the subsections includes provisions that specify when a substance would be regulated or not regulated. Since substantive provisions in a definition are not enforceable, they should be deleted from the definitions and moved to more appropriate sections in the body of the regulation. (21)

Response: The Department does not agree with the commentator that the proposed changes are substantive in nature – rather, they are definitional in that they define in which class of "regulated substance" certain compounds will be included (i.e., either hazardous substances or petroleum). The final-form rulemaking has been amended to reflect treating

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newly regulated substances in (i)(C)(I) (non-petroleum oils) and (II) (pure ethanol) the same as petroleum in (i)(B) of the definition of "regulated substance." The actual substantive requirements are found later in Chapter 245, where the definitional distinction directs regulated entities to the proper requirements for their tank (see, e.g., section 245.443 (relating to requirements for hazardous substance underground storage tank systems)). The General Assembly already addressed conditional differences between petroleum and hazardous substances in the definition of "regulated substance" in section 103 of the Storage Tank Act (35 P.S. § 6021.103).

§ 245.31. Underground storage tank tightness testing requirements.

22. **Comment:** The requirement in subsection (e) to provide written tightness test results to the owner within 20 days is too stringent. Twenty days is not enough time to turn a report around and have it in the hands of the UST owner, given the process such a report must go through (quality control, invoicing and submittal). Instead, a 30-day submittal would be in order. There is no harm to the public if this change was made, as the UTT tester must notify the Department within 24 hours if the tightness test result is a failure. (5, 21)

Response: The Department does not agree that the 20-day report requirement is too stringent. The 20-day written report to tank owner requirement is similar to the current reporting requirement for SIR tank release detection requirement, which the Department coordinated with EPA and compared with other states' reporting requirements.

§ 245.41. Tank registration requirements.

23. **Comment:** Since all USTs and ASTs put into temporary closure will no longer be in operating status, this section should be amended to address Department withdrawal of the out-of-service tank's operating permit. (2, 10)

Response: The Department agrees, and this section has been amended in the final-form rulemaking to include routine withdrawal of the operating permit when a tank is reported in temporary closure or temporary out-of-service status.

24. **Comment:** The requirements in subsection (f)(4) should specifically exclude routine switching of petroleum products that are very similar in composition but have different specific product names. For example, products such as kerosene and diesel fuels are very similar products and storage tanks can be switched back and forth between these products depending on inventories and supply demands. Without the specific exclusion, the requirements for notification are too restrictive and will cause excessive and frequent notification requirements for minor changes in tank products. Notification of changes in substances stored should only apply when there is a significant change, such as a change from a petroleum product to a hazardous substance, and not when a change is only in the type of petroleum product (e.g., from diesel to kerosene). (20)

Response: The Department recognizes that some operations change substances frequently because of business practices and included the ability to address this issue in the final-form rulemaking. The substance in a tank is important, however, as the substance stored

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determines technical regulatory requirements and Underground Storage Tank Indemnification Fund billing.

25. **Comment:** Subsection (b) requires tank owners to register storage tanks with the Department "except as specifically excluded by Department policy or this chapter," (Emphasis added.) A Department policy does not have the full force and effect of law. Therefore, Departmental policy cannot exclude a tank that regulations require to be registered. The language noted above should be deleted and the specific exclusions should be included in the final-form regulation. (21)

Response: The Department acknowledges that generally Department policy does not have the full force and effect of law. In the exception that proves the rule, however, it appears that the General Assembly did grant the Department the power referenced in the comment in sections 303 and 503 of the Storage Tank Act (35 P.S. §§ 6021.303 and 6021.503):

Section 303. Registration.

(a) Registration requirements.--Every owner of an aboveground storage tank, *except as specifically excluded by policy or regulation of the department*, shall register each aboveground storage tank by completing and submitting the form provided by the department and by paying the yearly registration fee prescribed by the department for each aboveground storage tank. It shall be unlawful for any owner or operator to operate or use, in any way, any aboveground storage tank that has not been currently registered as required by this section.

* * * * *

Section 503. Registration.

(a) Requirements.--Every owner of an underground storage tank, *except as specifically excluded by policy or regulation of the department*, shall register with the department each underground storage tank by completing and submitting the form provided by the department and by paying the registration fee prescribed by the department for each underground storage tank within three months of the effective date of this act. Volunteer fire companies and volunteer emergency medical services organizations which own underground storage tanks shall register each underground storage tank with the department but shall not be required to pay the registration fee. It shall be unlawful for any owner or operator to operate or use, in any way, any underground storage tank that has not been registered as required by this section.

(emphasis added). Therefore, the definition is not changed in the final-form rulemaking.

§ 245.42. Tank registration fees.

26. **Comment:** Since all USTs and ASTs put into temporary closure will no longer be in operating status, this section should be amended to address Department withdrawal of the out-of-service tank's operating permit. (2)

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Response: Only permanent closure or change in service to unregulated use affects the tank registration fee. Section 245.41 has been amended in the final-form rulemaking to include routine withdrawal of the operating permit when a tank is reported in temporary closure or temporary out-of-service status. See response to Comment 23.

§ 245.43. Failure to pay registration fee.

27. **Comment:** Subsection (a) states that an owner who fails to pay the registration fee shall be subject to "Commonwealth policy and guidelines" for collection of delinquent debts due the Commonwealth. We have two questions. What is the EQB's statutory authority for enforcing policies and guidelines as regulations? Where can the regulated community find these guidelines and policies? If the EQB does not have the statutory authority, the pertinent provisions of the policies and guidelines should be included in the final-form rulemaking. (21)

Response: To a large degree, this language is included here merely to put the regulated community on notice of the consequences of failure to pay this fee (see, e.g., 25 Pa.Code § 245.212(b)); therefore, the "shall" in this section has been changed to "may". The Department notes, however, that there is a Management Directive, 310.10, relating to Collection, Requests for Compromise, and Write-Off of Delinquent Claims, that directly establishes an applicable process. In some cases, Pennsylvania appellate courts have held that Management Directives are binding on state employees in a similar manner to regulations' binding effect on the regulated community. See, e.g., Cutler v. State Civil Service Commission (Office of Administration), 2006 Pa.Comm. LEXIS 500; Mirarchi v. Commonwealth, Department of Corrections, 811 A.2d 1096 (Pa.Comm. 2002). The Department's Storage Tank Program follows Management Directive 310.10 when collecting delinquent registration fees, along with exercising other enforcement options (e.g., civil penalties, administrative orders, withholding or revoking permits, etc.). In addition, any enforcement policy of the Department undergoes public notice and comment, along with review by the Storage Tank Advisory Committee, and is available from the Department directly or on the DEP Web Site.

28. **Comment:** Subsection (b) states that failure to pay the registration fee could result in Departmental action against the storage tank *owner and the operator*. Sections 245.42 (a) and (b), relating to tank registration fees, state that registration fees are to be paid by tank owners. Therefore, the reference to tank operators should be deleted from this subsection. (21)

Response: The Department acknowledges that the Storage Tank Act places the responsibility to pay annual registration fees on the owner of the aboveground (35 P.S. § 6021.303(a)) or underground (35 P.S. § 6021.503(a)) storage tank. Those same subsections contain language that states:

It shall be unlawful for any owner or operator to operate or use, in any way, any [aboveground or underground] storage tank that has not been currently registered as required by this section.

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Therefore, although the obligation to register the regulated storage tank rests with the tank owner, operation of a regulated storage tank that is not properly registered is also a violation of the Storage Tank Act. The intention of this section was to put the operator on notice of this requirement, and of the potential liability for operating a regulated storage tank for which annual registration fees have not been paid.

29. **Comment:** Subsection (c) states that the Department may withhold an operating permit for a tank if the owner has a delinquent registration debt for any regulated storage tank. Under what circumstances would the Department withhold a permit? (21)

Response: Failure to pay required registration fees is a violation of either section 303(a) (aboveground) or 503(a) (underground) of the Storage Tank Act. Section 1301 of the Storage Tank Act establishes the criteria upon which the Department may withhold or revoke a permit under the Act. (35 P.S. § 6021.1301).

§ 245.110. Certification of installers.

30. **Comment:** If the proposed amendment to section 245.110 is approved, the data received by the Underground Storage Tank Indemnification Fund (USTIF) from the Department will not differentiate between USTs and ASTs. This will make it very difficult, if not impossible, to properly and accurately bill fees for the Tank Installers Indemnification Program (TIIP), particularly with regard to new companies or companies that previously had only worked on ASTs but now want to work on USTs as well. This may adversely impact TIIP because it will not be able to properly and accurately bill the UST installer community. (11)

Response: The Department acknowledges the commentator's concerns and has retained the existing, separate categories for underground and aboveground tank installers in the final-form rulemaking.

31. **Comment:** Subchapter B should be expanded to include a new category for AST installer certification. This new category would be known as AST-UL and allow for installations, minor modifications and removals of ASTs built to strict Underwriter's Laboratory (UL) standards. These UL tanks are built to store and dispense only combustible and flammable motor fuels and rarely reach a maximum capacity of 50,000 gallons capacity. Work on these ASTs is very different from work on field-constructed ASTs and was done mainly by UST installers prior to the passage of the Storage Tank Act. This change would help reflect that reality in the certification program. (10)

Response: The Department does not agree that a new certification category is needed. The current aboveground manufactured storage tank installation, modification and removal categories cover these activities. Individuals with underground tank handling certification categories may apply for aboveground categories without any aboveground storage tank activities. They become certified in aboveground categories on passing the appropriate aboveground examination module. The Department is reviewing the examination module required for the aboveground manufactured storage tank removal category and may create one examination module for aboveground and underground manufactured storage tank removal certification categories.

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32. **Comment:** There are several UST activities that should be covered under the UTT certification category. Currently many activities are only allowed to be performed by the UMX category and UTT-certified individuals are qualified to perform these tasks. Such tasks include replacing mechanical line leak detectors, replacing overfill ball float valves and droptubes, functionality testing of line leak detectors, replacement of packer o-rings and functional elements and motors on submersible transfer pumps, stage II vapor recovery testing activities, containment sump, UDC sump and spill bucket tightness testing activities, cathodic protection testing activities and replacement of any tank top components so long as excavation is not necessary for the replacement. (10)

Response: The Department considers tightness testing and tank handling as separate activities and created specific certification categories for each type of activity. Tank handling and tightness testing activities are defined in the regulation. Individuals certified in tightness testing can only modify the tank system as required by the testing method. If an individual performs tightness testing and tank handling activities, he/she must be certified in the appropriate categories based on the type of activity. Individuals may need multiple certification categories for a project.

The definition of a cathodic protection tester is in the regulation. The Department does not see the need to require individuals meeting this definition to be certified unless tank handling activity occurs.

The Department has a technical guidance on Modification and Maintenance Issues, revised October 2005. A properly certified individual must perform activities that are considered modifications. Maintenance activities do not need to be performed by a certified individual. The Storage Tank Program's Fact Sheet 2A, *Understanding the Certification Categories*, helps clarify which activities can be performed under the certification category.

§ 245.113. Certified inspector experience and qualifications.

33. **Comment:** In subsection (a), for the certified inspector categories of IUM and IAM, the certification requirement to demonstrate competence through completing twenty (20) activities should be retained. The proposed changes appear to require no activity experience for inspector certification. Significant field experience is necessary to guarantee inspector competence. (7, 10)

Response: The proposed regulation did not require activities for initial certification of inspectors because the applicant's experience and qualifications include certifications that require activities for issuance of the certifications. IUM certification will require DEP certification in the UMX category and IAM certification requires API or STI inspector certification or DEP-approved aboveground tank inspector certification, which require experience for issuance. Therefore, the proposed language is retained in the final-form rulemaking.

§ 245.114. Renewal and amendment of certification.

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34. **Comment:** In subsection (c), for the certification category AMNX, the proposed requirement of twelve (12) installations or major modifications needed for renewal of certification is excessive. Very few non-metallic ASTs are installed or modified today. This requirement should be changed to six (6) installations or major modifications. (7, 10)

Response: The Department acknowledges the commentator's concern. The number of activities for renewal should be equal to the number of activities required for initial certification. Proposed activity requirements have been adjusted for all categories in the final-form rulemaking. For the AMNX category, the Department has changed the activity requirement from 12 to 9 activities in the final-form rulemaking.

35. **Comment:** We support the transition proposed in this section concerning renewal from qualifications based on activities to qualifications based on training. We believe, however, that more detail is needed in the regulations on what specific training meets these requirements. We believe that there should be a requirement for annual continuing education for certified installers and inspectors. We recommend that the minimum annual education requirement be set at eight (8) hours per year, six (6) of which would come from training offered by the Tank Installers of Pennsylvania State Association. The remaining two (2) hours should be from industry manufacturers demonstrating new product procedures for correct installation and testing of new system components. All installers and inspectors should be held to the highest professional standards and continuing education will help accomplish this goal. (10)

Response: The Department acknowledges and appreciates the commentator's support for the movement to training when renewing installer certification. The Department has added specific information regarding the training requirements in the final-form rulemaking. See response to Comment 36. However, the Department does not support establishing a specific minimum annual continuing education requirement for installers in the final-form rulemaking. Instead, the Department believes that flexibility will be needed to require training when appropriate. In some instances this might require more than the suggested minimum requirements, and for specific certification categories less training might be acceptable.

36. **Comment:** Subsection (c) requires an applicant to meet "minimum training requirements or number of activities in the appropriate category for renewal of installer certification." The number of activities that need to be completed for renewal is specified, but the number of hours of training is not specified. The final-form regulation should include the number of hours of training needed for renewal. Similarly, subsection (d), relating to renewal of inspector certification, should include the required number of hours of training. (21)

Response: The proposed technical training for renewal of certification categories is intended to be category-specific. At a minimum, the technical training for renewal covers the technical and regulatory material related to the category and identified in the certification examination Candidate Guide and DEP Study Guides for the examinations. The technical training is not to include either the required safety training or the administrative training presented by the Storage Tank Program. An individual completing the technical training must demonstrate the same competency as an individual passing the category specific examination module. Because the training courses are category specific

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and approved by the Department, based on course outline and content, there is no need or desire to assign credit hours for a course or require a specific number of training hours for renewal. Course content is the important factor, not the time spent in training. Clarifying language concerning the difference between technical training requirements for initial and renewal of certification and course expectations has been added to section 245.142 in the final-form rulemaking.

37. **Comment:** Subsection (g)(2) requires an applicant for renewal to “document current safety training which is appropriate for the certification category.” We have two questions. First, how will an applicant know if the safety training is appropriate? Second, how much training is required? The final-form regulation should provide criteria for what is appropriate. (21)

Response: The Department does not develop the criteria for safety training. Safety training requirements are developed by other regulatory agencies, such as the federal OSHA, and industry organizations. Safety requirements for tank handling and inspection activities are specific to the conditions at the site during the activity, which may include multiple certification categories. Certified companies and individuals need to be aware of and follow these safety requirements. The Department is simply requesting the applicant to certify completion of a safety training program that is appropriate for the certification category in question. The final-form rulemaking is amended to clarify what information is required in the certification application.

§ 245.203. General requirements for permits.

38. **Comment:** Since all USTs and ASTs put into temporary closure will no longer be in operating status, this section should be amended to address Department withdrawal of the out-of-service tank’s operating permit. (2)

Response: The Department agrees and we have amended this section in the final-form rulemaking to include routine withdrawal of the operating permit when a tank is reported in temporary closure or temporary out-of-service status. This revision correlates with changes in the final-form rulemaking to section 245.41.

§ 245.222. Application requirements.

39. **Comment:** Since all USTs and ASTs put into temporary closure will no longer be in operating status, this section should be amended to address Department withdrawal of the out-of-service tank’s operating permit. (2)

Response: The Department agrees. The final-form rulemaking changes to sections 245.41 and 245.203 address this issue. See response to Comment 38.

§ 245.231. Scope.

40. **Comment:** An exemption from the site-specific installation permit requirements should be provided when a new large AST replaces an existing tank at the same location. The process should be streamlined since there are several reports required when an old AST is

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closed and a new AST is built in the same location – registration forms, closure reports, and the permit application for the new AST's site-specific installation permit (SSIP). These administrative burdens could be eliminated by simply recording/reporting the tank changes on the registration form. (14, 16)

Response: The replacement of an existing storage tank with a new tank is considered a tank closure and installation of a new tank. All statutory and regulatory requirements must be met for these activities. Although the registration form could probably be amended to cover all of the information required as part of an AST closure report (including proper site assessment for releases) and as part of the SSIP (including information about the site), the resulting form would be unwieldy, confusing and difficult to use. Rather than requiring all AST owners to adapt to such a change, the Department will retain the individual reports and forms specifically targeted at the other areas of the AST program. The final-form rulemaking does reduce the required submissions for an AST being constructed on the footprint of a previous AST. The submissions for replacing an AST on the same footprint are greatly reduced in the final-form rulemaking, and allow the Department to quickly address any issues that are discovered during the removal, permitting and installation processes.

§ 245.405. Codes and standards.

41. **Comment:** This new section lists industry standards and codes and requires UST systems to comply with applicable codes. It goes on to state “[r]egulatory requirements prevail over codes and standards whenever there is a conflict.” To be fair to the regulated community, the Department should list those conflicts either directly in the regulations or in some publicly accessible manner. (12)

Response: Given the detailed nature of the industry standards and codes applicable to the storage of regulated substances in USTs, it would be administratively difficult to list every instance of conflict. This would also be a shifting target, as generally industry codes and standards are updated or amended more frequently than the Chapter 245 regulations. In many instances, the conflict is in the nature of a mandatory command in the regulations (“owner *shall* do X”), versus a discretionary option in a code or standard (“owner *may* do X”), or a firm deadline for an action established in the regulations versus an open-ended code or standard. Given the highly fact-specific nature of these issues, the Department has retained the proposed language in the final-form rulemaking, and recommends contacting the Storage Tank Program to determine whether or not a conflict truly exists.

42. **Comment:** Subsection (a) lists 12 associations and their codes and standards that will be used in conjunction with manufacturers' specifications to comply with this subchapter. Subsection (b) states, in part, the following: “Other Nationally recognized associations and their codes and standards not referenced in this part may also be used to comply with this subchapter, when appropriate.” Pennsylvania Code and Bulletin *Style Manual* discourages the use of indefinite terms and phrases (section 616(b)(6)). “When appropriate” is such a phrase. The purpose of a regulation is to establish binding norms that are enforceable. The provision quoted above does not accomplish this and should be deleted and replaced with specific criteria for when other codes and standards are permissible. (21)

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Response: The Department acknowledges the commentator's concern. The final-form rulemaking has been amended to delete "when appropriate" from this subsection and add, "when approved by the Department."

43. **Comment:** Subsection (c) states that if codes, standards or specifications are updated, facilities or storage tank systems installed prior to the updates "will not automatically be required to be upgraded to meet the new standards." The inclusion of the term "automatically" implies that the facilities or storage tank systems may have to be updated in the future. The final-form regulation should include specific details on when the upgrades will be required. (21)

Response: The rationale behind this language is to indicate that the industry standard in effect at the time the activity is done is the industry standard that should be followed. It may be appropriate in certain circumstances (e.g., when there is an imminent threat to public safety) to require tank owners to meet an updated industry standard. Meeting the new requirement could involve a specific facility or it could be an industry-wide change. It is nearly impossible to anticipate every instance in which such upgrades might be necessary. If the Department were to require such upgrades, however, it would do so only via notice to the affected tank owner(s) and we assume that requiring such an upgrade would be considered an "action" of the Department reviewable by the Environmental Hearing Board under the Environmental Hearing Board Act (35 P.S. §§ 7511 – 7516). To clarify this, the Department added language to the final-form rulemaking indicating that existing tanks will not be required to automatically upgrade to a new standard, unless the revised standard or the Department specifies that upgrade is required.

44. **Comment:** The language contained in Subsections (b) and (c) can also be found in existing sections of Chapter 245. Those sections are section 245.504, relating to technical standards for aboveground storage tanks and section 245.604, relating to simplified program for small aboveground storage tanks. If the EQB amends section 245.405(b) and (c), we recommend that sections 245.504 and 245.604 also be amended. (21)

Response: The Department agrees with the commentator and has made the suggested changes to the final-form rulemaking.

45. **Comment:** Subsection (d) states: "Regulatory requirements prevail over codes and standards whenever there is a conflict." This provision is not needed because regulations have the full force and effect of law and already prevail over codes and standards. If the EQB decides to retain this provision, similar language should also be added to sections 245.504 and 245.604. (21)

Response: The Department does not agree with the commentator regarding the necessity of this language. After all, the industry standards are incorporated by reference into the regulations in this section. Absent this language, it is at least arguable that the industry standard would prevail over the conflicting regulatory requirement. To the extent that the commentator suggests adding similar language to other sections, the Department agrees and has made the recommended changes to the final-form rulemaking.

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§ 245.411. Inspection frequency.

46. **Comment:** The requirement proposed in subsection (d) to require operator training when related violations are documented through an inspection is a good one, but does not appear to meet the requirements for routine operator training contained in the Federal Energy Policy Act of 2005. The Department should add requirements meeting the Energy Policy Act training requirements to appropriate sections in Subchapter E. (2)

Response: The Department agrees with the commentator. The rulemaking only addresses owner and operator training in the context of verification of violations. The Federal Energy Policy Act of 2005 does contain requirements for additional training for owners and operators whose storage tank systems are determined to be out of compliance. The final-form rulemaking does not, however, address the Energy Policy Act requirements concerning *routine* operator training. The Energy Policy Act does not require EPA to develop guidelines for this requirement until August 2007 (42 U.S.C. § 6991i(a)(1)), and EPA has not released draft grant guidelines on this issue for public comment to date. Further, Pennsylvania and other states are not required to have routine operator training requirements in place until August 2009 (42 U.S.C. § 6991i(b)). The Department has retained subsection (d) in the final-form rulemaking, however, to address owner and operator training after verification of violations.

47. **Comment:** The proposal to require training for owners and operators is contingent upon UST program violations documented through inspections. The Federal Energy Policy Act of 2005 requires routine training of three classes of UST owners and operators and is not conditioned on the receipt of a notice of violation. The rulemaking should be amended to comply with the Federal Energy Policy Act requirement. (12)

Response: See response to Comment 46.

48. **Comment:** The tightening of inspection frequency is appropriate and consistent with the Federal Energy Policy Act of 2005. (12)

Response: The Department acknowledges and appreciates the commentator's support for the increased inspection frequency and recognition that it meets the Federal requirements.

49. **Comment:** It is very difficult to track a specific date for future inspection based on the date of UST installation or the last inspection relative to future inspections. It would be more appropriate to state that subsequent inspections be conducted within a three (3) year or thirty-six (36) month period rather than specifically, "commencing after the last inspection." (12)

Response: The Department does not agree with the commentator. It is not difficult to track past and future inspection dates. The tank owner, when submitting the storage tank registration/permitting form, provides the tank installation dates to the Department. Every inspection form received by the Department is logged with the date of inspection in the Department's database. The last inspection date and the next due inspection date are currently being tracked by the Department and printed on the annual registration certificate, which is provided to the owner and posted at the facility. Tank owners should know when

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the tanks at their facilities were last inspected and be able to determine from the regulations when the next inspection is due. The time interval between routine inspections may not exceed 3 years, except as noted in the response to Comment 50. In deference to the commentator, the final-form rulemaking has been amended to further clarify the 3-year routine inspection frequency.

50. **Comment:** A temporary exclusion for subsequent facility inspections should be added for currently regulated USTs. Under section 245.411, such tanks currently are allowed to go five or ten years between operations inspections. As a result, these USTs should not be required to be inspected for three years from the previous inspection, or three years from the effective date of these regulations, whichever is later. This will ensure that owners of currently regulated USTs that have not been inspected for more than three years prior to the effective date of the rulemaking will not be out of compliance on the date the rules are published. (15)

Response: The Department acknowledges the commentator's concerns. The final-form rulemaking has been amended to include a phase-in period for routine inspections of tanks that have current inspection due dates greater than 3 years at the time of final adoption of the rulemaking. This phase-in period is consistent with the August 8, 2010, deadline that EPA has established for meeting the 3-year inspection frequency requirements in the Federal Energy Policy Act.

51. **Comment:** While the delayed inspection program outlined in subsection (b)(2) makes sense for new construction, the delay is not appropriate for facilities that have a change in ownership or occupancy. If the facility changes ownership or occupancy, the inspection process should be allowed to take place prior to the first six (6) months of operations to coincide with initial ownership transfer inspections. (20)

Response: The Department requires the inspection of the facility 6 months after a change in ownership to confirm that the new owner is properly operating and maintaining the facility. This was clearly addressed in the "Summary of Regulatory Requirements" published with the proposed rulemaking. The final-form rulemaking does provide flexibility in that the Department may agree to another timeframe. The Department has been and remains flexible on the change of ownership inspection, when the facility owner changes, but facility operator remains the same.

52. **Comment:** Subsection (d) relates to additional inspections and mandatory training. A provision is being added that would allow the Department to require facility owners and operators to complete a release detection or operator maintenance training course when related violations are documented through an inspection. The Preamble explains that this provision is being added because owners and operators that have noncompliant inspections often express the need for training. The final-form regulation should provide details on when this mandatory training will be imposed, what the training will entail and who must pay for the training. (21)

Response: The Department acknowledges the commentator's concerns. The Department is reluctant to include an all-encompassing list of possible training programs because the training program required may be specific to that facility (e.g., training from the

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manufacturer on how to use the installed release detection system) or may not yet be developed. The Department anticipates a significant increase in available training nationally as the federal Energy Policy Act's routine training requirements become effective over the next two or three years. The final-form rulemaking has been amended to include examples of the type of training that could be used to satisfy this requirement. Because the Department will typically require the training as part of the enforcement follow-up after the verification of facility violations, the specific course necessary can be addressed at that time. The final-form rulemaking is also amended to note that the tank owner or operator shall incur the cost of the training.

§ 245.421. Performance standards for underground tank systems.

53. **Comment:** I am particularly pleased to see the requirement for automatic pump shutoff when a leak is detected by the line leak detectors that are required for pressurized piping systems. This should cause a significant reduction in releases. (1)

Response: The Department acknowledges and appreciates the commentator's support for the proposed rulemaking, and agrees that the amendments should result in fewer and less extensive releases.

54. **Comment:** The requirement for total secondary containment of all new and replacement USTs is more stringent than the secondary containment requirement included in the Federal Energy Policy Act of 2005, which is limited to USTs located near navigable waters or drinking sources. This will cost Pennsylvania UST owners a great deal of additional money for little environmental benefit. (3)

Response: See responses to Comments 4 and 5. The Department agrees that the total secondary containment regulation is new and is more stringent than the secondary containment option included in the federal Energy Policy Act. The Pennsylvania UST program will require total secondary containment for new and replacement UST systems throughout the Commonwealth while the federal program would require total secondary containment only if the tank system "is within 1,000 feet of any existing community water system or any potable drinking water well." 42 U.S.C. § 6991b(i)(1). Further, the Department has acknowledged in the past and continues to acknowledge that the UST system equipment costs are increased with the total secondary containment requirement. Even so, the Department believes that the approach outlined in the final-form rulemaking is in the best interest of the regulated community, the public, the environment and the Department.

First and foremost, requiring total secondary containment for new and replacement UST systems (double walled tanks and piping with sumps at tank risers and dispensers) will provide the maximum protection against releases of regulated substances. Federal study indicates total secondarily-contained systems have fewer failures or releases of regulated substances than single-walled UST systems. Fewer releases, and less severe releases, means less exposure to the public and environment to those regulated substances, and fewer resources needing to be devoted to corrective action. All interested parties currently incur those costs – the Department (both in terms of oversight of responsible party corrective action and direct state-lead corrective action), the Underground Storage Tank

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Indemnification Fund (USTIF), the regulated community and the public. The public may be impacted directly, for example, where a homeowner's drinking water well is impacted, or indirectly, through the imposition of the "per gallon throughput" USTIF fee paid on each gallon of gasoline sold in the Commonwealth.

Second, since 1998, our records show approximately 60% of tanks and 80% of piping installed in Pennsylvania have been double-walled. Thus, we do not expect a major impact on industry practices from this decision. The regulated community already appears to realize the benefits of installing protective systems. The installer community already recommends installation of these systems, and notes that there is no increased installation cost associated with a total secondary containment UST system.

In addition to the benefits of a statewide "total secondary containment" option, there are several reasons why the Department does not believe that the Energy Policy Act's "1,000 foot" limitation makes sense. First, we note that the Storage Tank Act contains a presumption of liability in section 1311 for all

damages, contamination or pollution within 2,500 feet of the perimeter of the site of a storage tank containing or which contained a regulated substance of the type which caused the damage, contamination or pollution.

35 P.S. § 6021.1311(a). At a minimum, then, the "total secondary containment" option in Pennsylvania should extend to 2,500 feet.

We also note that the federal "total secondary containment" option only extends protection to "existing community water systems" and "existing potable drinking water wells." The Department agrees that protecting those items is crucial, but protecting those items alone is not enough. Other items are also deserving of protection, but not covered by the Energy Policy Act, might include:

- planned locations for new community water systems or new potable drinking water wells;
- the entire extent of aquifers used to provide drinking water (the Energy Policy Act requirements are unclear as to whether or not the aquifer is protected, or only the well itself);
- wells providing water for "agricultural purposes," as that phrase is defined in 25 Pa.Code § 250.1 (relating to definitions);
- buildings with subsurface features that might be impacted by vapors from a release;
- "waters of the Commonwealth," as that phrase is defined in section 1 of the Clean Streams Law (35 P.S. § 691.1); and,
- other water supplies ("water supply" is defined in section 245.1 as "[e]xisting, designated or planned sources of water or facilities or systems for the supply of water for human consumption or for agricultural, commercial, industrial or other

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legitimate use, protected by the applicable water supply provisions of § 93.3 (relating to protected water uses)").

By requiring total secondary containment for all new and replacement UST systems, the rulemaking protects these other items to the same extent the federal Energy Policy Act protects certain water supplies.

The Department further notes that extending the total secondary containment requirement statewide avoids a significant administrative burden. This burden consists of the effort required to determine whether or not a new or replacement UST system falls within the Energy Policy Act's limits, where such information can even be determined with any accuracy. Whether or not that burden is borne by the Department or the regulated community, it may swallow up any cost savings associated with the installation of a "lower quality" single-walled UST system. It should also be noted that there would be a delay in installation due to the necessity of conducting this review and making this determination that is avoided by the Department's preferred statewide approach. This delay could also include any litigation before the EHB (including third-party appeals) over the Department's decision that a particular UST system is or is not within 1,000 feet of a protected feature.

Finally, we note that there is the possibility of decreases in USTIF fees in the future as the UST system population in Pennsylvania is replaced by the more protective total secondary containment systems.

For all of these reasons, the Department believes that the approach outlined in the final-form rulemaking is in the best interest of the regulated community, the public, the environment and the Department, and so that approach is retained in the final-form rulemaking.

55. **Comment:** The rulemaking should be delayed until US EPA develops final grant guidelines for complying with the federal Energy Policy Act. One provision of the federal law, for example, provides that installer certification - which Pennsylvania currently requires - would eliminate the need for double wall piping and tanks in upgrades and new construction. The state's proposed regulations do not permit this as an alternative, but, if in place, would establish both as requirements.

Another concern that should be taken into account is the cost to the Commonwealth to implement the new federal regulations on storage tanks. In our view, the expectation of the Department in terms of federal funding is an important factor that should be considered as alternatives are chosen in the final regulation. (18)

Response: See responses to Comments 4, 5 and 54.

In supporting the "financial responsibility and certification" option for protecting groundwater over the "total secondary containment" option, the commentator appears to overlook a critical, and from our perspective, insurmountable obstacle to implementing that option. That obstacle is the requirement that:

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A person who manufactures an underground storage tank or piping for an underground storage tank system . . . is required to maintain evidence of financial responsibility under section 9003(d) in order to provide for the costs of corrective actions directly related to releases caused by improper manufacture . . .

42 U.S.C.A § 6991b(i)(2)(A). As a preliminary matter, it appears that the General Assembly might need to amend the Storage Tank Act to allow the Department to require, through regulations, such "manufacturer financial responsibility." Even if such a requirement was authorized, however, it is difficult to see how such a requirement could be implemented at the state level. Most manufacturers are located outside of the Commonwealth's jurisdiction, with their products coming into Pennsylvania through interstate commerce. Such commerce is traditionally a federal concern, and there are limits on the states' ability to regulate such commerce. If that hurdle were not high enough, the Department will be hard-pressed to pursue enforcement actions or cost recovery against manufacturers located outside of the Commonwealth.

Finally, the Department notes that there is another problem with the financial responsibility approach. This approach also requires that installers of underground storage tank systems maintain financial responsibility in accordance with section 9003(d) of RCRA. In final grant guidelines issued on January 22, 2007, the EPA established that states must require coverage amounts of \$1 million per occurrence and \$2 million annual aggregate for installers to cover the costs of corrective action of a release from a regulated underground storage tank system due to improper installation.

Pennsylvania does currently have a financial responsibility program for underground tank installers. Under section 704(b.1)(3) of the Storage Tank Act (35 P.S. § 6021.704(b.1)(3)), however, the annual aggregate amount of coverage available for "installers who perform 100 or fewer installations or major modifications" is only \$1,500,000. Therefore, the Storage Tank Act would need to be amended to address this shortfall if the financial responsibility option were chosen.

Addressing the commentator's second concern, the Department acknowledges the additional requirements placed on the Commonwealth by the Energy Policy Act. The most implementable alternative, from an administrative perspective, is to meet the groundwater protection requirements by having all new and replacement UST systems be installed with total secondary containment. This avoids the need to implement a new manufacturer financial responsibility program, and avoids the burdens of attempting to determine whether a new or replacement UST is located in an area protected under the EPA grant guidelines.

The Department continues to urge the appropriation by Congress and the President of the additional Leaking Underground Storage Tank (LUST) Trust Fund money for the states and EPA authorized by the Energy Policy Act. To date, however, no additional funding appears to be forthcoming from that source. If such funding is forthcoming, however, the final-form rulemaking's requirements for total secondary containment for all new and replacement UST systems clearly meets the federal Energy Policy Act requirements, and would therefore qualify the Commonwealth for any LUST Trust Fund funding. See, Final Secondary Containment Grant Guidelines, issued by EPA on November 15, 2006, page 6.

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56. **Comment:** The proposed amendment to section 245.421(b)(2) would require upgrading of all piping associated with a UST system to satisfy secondary containment standards whenever more than 30% of the system piping is going to be replaced. In addition to total secondary containment, the regulations should also allow owners and operators the option of meeting the Energy Policy Act of 2005 requirements to protect groundwater through providing financial assurance as outlined in Section 1526 that Act (42 U.S.C. 6991b(i)). Proceeding consistent with the federal approach on this issue should be sufficiently protective of possible releases from existing UST piping, while at the same time allowing the regulated community flexibility in applying resources to comply with the full range of storage tank program requirements. (8, 16, 20, 21)

Response: See response to Comment 55. The final-form rulemaking has been amended to reflect the requirement that replacement of all piping that routinely contains and conveys regulated substances from the tank with secondarily-contained piping must occur only when more than 50% of this piping is replaced.

57. **Comment:** Testing sumps, UDCs and spill buckets at installation is a step in the right direction. Further measure should be required by the Department to verify the performance of this equipment, however. Specifically, the regulations should require testing these devices at periodic intervals, such as annually for spill buckets and a minimum of once every three years for UDCs and sumps used for interstitial monitoring of secondarily contained piping. These components do not have an unlimited lifetime and our experience (as well as studies conducted in other states) shows that these components fail over time and are a major source of releases and contamination at UST facilities. If such testing is required, it should be limited to companies and individuals holding UTT certification from the Department, given the many factors that can influence the testing of such devices (e.g., temperature, deflection, etc.). (5)

Response: Testing this equipment at installation and when repairs are performed is consistent with equipment manufacturer's recommendations and Federal UST requirements. UTT certification is not necessary. Periodic routine testing of this equipment goes beyond Federal testing requirements and could subject the Department to reimbursement for the costs of routine testing under section 507(a) of the Storage Tank Act (35 P.S. § 6021.507(a)). Also, during the routine 3-year facility operations inspection, the third-party inspector visually inspects this equipment. The Department believes that this is adequate.

58. **Comment:** If the Department chooses to require secondary containment to meet the requirements of the Energy Policy Act of 2005, then replacement of piping with identical materials should not trigger the upgrade requirement, regardless of the percentage of piping replaced (up to and including 100%). This would be more consistent with Federal requirements for authorized state UST programs. (8, 16, 20)

Response: The Department does not agree. See responses to Comments 56 and 59. Further, this would be in conflict with the Energy Policy Act. See, Final Secondary Containment Grant Guidelines, issued by EPA on November 15, 2006, pages 4-5. Piping associated with USTs is a significant source of contamination in the Commonwealth.

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When piping replacement is over the 50% threshold, such replacement must meet the new UST system standards, i.e., total secondary containment piping, rather than simply replacing old piping with less protective equipment.

59. **Comment:** If the EQB still feels a percentage of piping replacement is needed to require full upgrade of piping, the percentage should be increased to whenever more than 50% of the system piping is replaced. (20)

Response: The Department agrees with the commentator. See response to Comment 56.

60. **Comment:** It is not entirely clear whether or not the "liquid-tight containment sumps, manway riser sumps and dispenser pan sumps" required by this section must be double-walled. Also, we believe that by definition, vapor and vent piping as well as other equipment related to vapor recovery would not be included in the requirement for double-walled piping. Remote fills and associated piping should fall under the requirement for secondary containment, however. These points should be clarified in the final rulemaking. (12)

Response: The Department acknowledges the commentator's concerns. This section clearly only requires that the tank and piping be double walled. The sumps serve as the secondary wall for the piping and tank junctions or connections, which are typically, single walled connections. The final-form rulemaking has been amended to clarify this point and to indicate that the double walled piping requirement applies only to piping that routinely contains a regulated substance, which does not include vapor recovery, vent or fill piping.

61. **Comment:** The records retention requirements in subsection (b)(2)(iii)(B) should be amended. The records required are not always available for existing facilities when a change in ownership occurs. For existing tank systems, especially those acquired through an acquisition, some of the records requirements may not be obtainable and are not always provided during the acquisition. Examples of some records that may not be available or provided during a facility transfer are: tank design and construction documentation, proof that field-installed cathodic protection systems or impressed current systems were designed by a corrosion expert and proof that a certified installer installed the tank. It is suggested that these requirements only apply to new installations, or at a minimum, to existing systems installed after the effective date of the regulations. (20)

Response: The Department does not agree with the commentator. Many components of underground storage tank systems are buried and inaccessible. Short of excavating the system, appropriate records are the only method of establishing what cannot be seen. Failure to maintain records, either through an ownership change or other circumstances should not be an excuse. Current state regulations and federal requirements in 40 CFR 280.20(b)(3)(ii) require the retention of these records for the operating life of the piping system. In deference to the commentator's concern, section 245.435(b)(2)(ii) is amended in the final-form rulemaking to indicate that some similar form of information that demonstrates compliance with sections 245.421(b)(2)(ii)(B), 422(b)(2) and 422(c)(2) may be acceptable.

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62. **Comment:** In subsection (b)(2)(ii)(A), it has been demonstrated within the industry that, especially for risers, wrapping of piping is an effective method of corrosion protection. Furthermore, if the EQB feels that wrapping alone is not sufficient, this section should clarify that wrapping used along with appropriate coatings does meet the cathodic protection requirement. (20)

Response: The Department does not agree with the commentator. This section already adequately addresses coating with a suitable dielectric material. Piping coated with such material is considered to be protected, whether it is wrapped or not wrapped. The final-form rulemaking also correctly indicates that wrapping alone is not sufficient corrosion protection for metal piping. However, the majority of riser pipes do not fall under this subsection; it only applies to piping that routinely contains product. Fills, vents, vapor recovery and gauge risers do not routinely contain product.

63. **Comment:** Subsection (a) pertains to new underground storage tank systems. Subsection (a)(3) states the following: "An owner or operator of a tank system changing from unregulated to regulated service shall provide certification or documentation that the tank system meets new tank system requirements." Subsection (a) relates to new tank systems, but subsection (a)(3) relates to existing tank systems. The requirements of subsection (a)(3) should be moved to a separate subsection that addresses the requirements for owners or operators changing from unregulated to regulated service. (21)

Response: A new tank is one that has never stored regulated substance and has never been registered in accordance with the Storage Tank Act or section 245.41. All new tanks are required to be installed by a certified tank installer; that probably was not the case for a tank that has previously held an unregulated substance. This paragraph gives an owner of this type of tank a way to meet the technical standards without closing the old tank and installing a new UST.

64. **Comment:** Subsection (a) pertains to new UST systems. Subsection (a)(3) states the following: "An owner or operator of a tank system changing from unregulated to regulated service shall provide certification or documentation that the tank system meets new tank system requirements." This provision should include a time frame for when the certification or documentation must be provided, and what type of certification or documentation would be acceptable to prove the tank system meets the new tank system requirements. (21)

Response: This subsection has been amended in the final-form rulemaking to designate those that can certify the system installation, when it must be certified and what documentation must be provided to the Department. These additions are consistent with tanks initially installed for storing regulated substance and for reuse of removed tanks.

§ 245.422. Upgrading of existing underground storage tank systems.

65. **Comment:** This section contains major new retrofit and upgrade requirements that merit further public discussion. This includes release detection equipment required to be upgraded for systems using interstitial monitoring or electronic line leak detection from an

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alarm to an automatic shut-off device. We therefore request a public hearing to address this portion of the proposed rulemaking. (12)

Response: The Department acknowledges the commentator's concerns about a potentially major upgrade program. The final-form rulemaking has been amended to require upgraded release detection and line leak detectors only for new and replacement UST systems.

66. **Comment:** We recommend that the paragraph on interior lining explicitly reference American Petroleum Institute Recommended Practice 1631, Interior Lining and Periodic Inspection of Underground Storage Tanks. This document covers recommendations for the interior lining of existing steel and fiberglass reinforced plastic USTs used to store petroleum motor fuels as well as the inspection of those liners. (12)

Response: The Department acknowledges the commentator's concerns. The final-form rulemaking has been amended to reference API RP 1631 and National-Leak Prevention Association (NLPA) Standard 631 "Entry, Cleaning, Interior Inspection, Repair and Lining of Underground Storage Tanks."

67. **Comment:** The requirement for an electronic line leak detector is too restrictive and there are no other options. Clarification as to if these regulations are applicable to single-wall and double-wall piping is requested. Are mechanical leak detectors acceptable with double-walled piping? Are the electronic leak detectors only applicable to single-walled piping? (20)

Response: Subsection (e) does not require an electronic line leak detector (LLD). This requirement is for a pump shutoff. This requirement is consistent with federal rules at 40 CFR 280.44(a). This may be accomplished with an electronic LLD, a properly configured interstitial monitor or a mechanical LLD with appropriate control circuitry. There is no distinction within this section as to single wall or double wall piping; it applies equally to both. The interstitial option only applies when an interstice exists. See response to Comment 65.

68. **Comment:** We agree with the proposed requirement to install line leak detection systems with automatic shut-off devices on tank systems installed after the effective date of the adoption of the proposed amendments. However, tank-systems existing prior to the effective date of the adoption of the amendments should not be required to upgrade their systems currently installed with equipment that alarms or restricts product flow. The equipment currently required to be installed on existing equipment is effective in the prevention of releases, consistent with federal environmental law, and is protective of human health and the environment. (19)

Response: The Department appreciates the commentator's recognition of the need for more effective line leak detection systems on new UST. See response to Comment 65.

69. **Comment:** The type of piping that section 245.422(e)(2) and (3) apply to is not entirely clear. If these paragraphs remain, it should be made clear that the requirements only apply to pressure piping. (19)

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Response: Even though paragraphs (2) and (3) only apply to line leak detectors provided on pressurized piping systems, the Department recognizes that it may be incorrectly applied to suction systems. Therefore, subsection (e) has been amended in the final-form rulemaking to clarify that the provision only applies to pressure piping systems. See response to Comment 65.

§ 245.432. Operation and maintenance including corrosion protection.

70. **Comment:** The proposed amendment should be revised to exclude fiberglass reinforced plastic (FRP) tanks. FRP tanks are not subject to internal corrosion from contact with water and the subject rules should be limited to protecting human health and the environment. (19)

Response: The Department does not agree with the commentator. FRP tanks are subject to microbial growth. There is limited research that links microbial growth to the degradation (corrosion) of fiberglass tanks. The presence of water and bacteria can interfere with or disable tank release detection, regardless of the type of tank. If water is not properly managed and removed it can be pumped throughout the tank system and damage ancillary equipment. Improper water management within a tank may also cause phase separation of the fuel components and render the tank contents (fuel) unusable, necessitating product disposal as a waste. The Fiberglass Tank and Pipe Institute also recommends operating fiberglass tanks in accordance with API RP-1621, including the removal of tank water bottoms. The Department believes it is important to prevent degradation in all product-containing components. The proper management of water is a good beginning to this task, especially in gasoline tanks containing ethanol additives. Therefore, the final-form rulemaking has been amended to indicate that no amount of water is desirable in gasoline containing ethanol.

71. **Comment:** Subsection (e) is not clear and methods to check for a leak in the interstitial space of secondary piping are not currently available. (20)

Response: Interstitial monitoring of piping is a common practice and the methodologies are well known. The regulatory requirements for interstitial monitoring are contained within § 245.444(7). It was not the Department's intention to require release detection inside the interstice only. The wording of this subsection has been modified to clarify that any portion of the secondary containment structure may be monitored. In the case of secondarily contained piping systems, this is normally accomplished either by visually or electronically monitoring a sump at low points in the piping run.

72. **Comment:** Under subsection (f), excess water in petroleum tanks must be disposed in accordance with "applicable State and Federal requirements." The final-form regulation should reference the applicable requirements. Similar language is found at § 245.451(c). (21)

Response: This language is included in Chapter 245 to put tank owners, operators and certified individuals on notice that requirements outside of the Storage Tank Act may apply to the management of excess water removed from a petroleum UST. The proper management of excess water removed from petroleum USTs is determined on a case-by-

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case basis depending on the particular characteristics of the contaminated water and the end use of the material. Therefore, tank owners, operators and certified individuals faced with the question of proper handling should contact the Department's Waste Management Program in the regional office where the facility is located for detailed assistance. The final-form rulemaking has been amended to show examples of state and federal requirements.

§ 245.435. Reporting and recordkeeping.

73. **Comment:** The proposed requirement in subsection (b)(2)(vii) to permanently maintain all tightness test records of containment sumps and dispenser pans is excessive. Records should be required for the most recent liquid tight test. Keeping records of all liquid tight testing throughout the life of a tank system would be impracticable and difficult to maintain. (20)

Response: Although the Department agrees that keeping all records may be difficult, it does not agree that it is impracticable. To ease the recordkeeping burden on the owner and operator, the Department has amended the recordkeeping requirement for sump testing in the final-form rulemaking to be similar to the commentator's suggestion and consistent with tank tightness testing recordkeeping requirements in 40 CFR 280 and Chapter 245.

§ 245.441. General requirements for underground storage tank systems.

74. **Comment:** Subsection (e) is not clear and clarification on how to check for a leak in the interstitial space of secondary piping is needed. (20)

Response: The intent of this subsection is to establish a frequency of operation. The requirements for interstitial monitoring are located in 245.444(7). This section does not require that a monitor be placed within the interstice, only that the interstice be monitored. A reference to the interstitial section of the subchapter is added to clarify that interstitial monitoring is the method to use to monitor the interstice and a future date to meet this requirement is added.

75. **Comment:** Subsection (e) requires monthly monitoring of certain existing tank system equipment "when practicable." "When practicable" should be replaced with a term or phrase that is definitive and enforceable, or specify when monthly monitoring would not apply. Similar language is found at section 245.553(c), relating to out-of-service inspections. (21)

Response: The Department amended this section in the final-form rulemaking to add clarity and to provide a future date for existing tank systems to meet this requirement. See response to Comment 74.

§ 245.442. Requirements for petroleum underground storage tank systems.

76. **Comment:** This section is not clear and clarification is needed on how to check for a leak in the interstitial space of secondary piping and how these regulations apply to single-walled vs. double-walled piping. (20)

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Response: Subsection 245.442(a) only applies to new UST systems, which are required to have secondary containment. Interstitial monitoring should be performed in accordance with section 245.444(7), which is referenced in section 245.442(a). No further clarification should be necessary. See response to Comment 74.

§ 245.444. Methods of release detection for tanks.

77. **Comment:** The requirement that the evaluation of the site and the attendant report authentication must be performed by a professional geologist is inappropriate as no geologic interpretation is being performed. This appears to be a mis-interpretation of the Engineer, Land Surveyor and Geologists Registration Law. This requirement unfairly restricts many professional engineers in civil, environmental, geotechnical, and groundwater engineering disciplines from performing work within their area of professional expertise. This requirement also unnecessarily increases the cost of storage tank installations. At a minimum, the language should be expanded to allow the evaluation and certification to also be performed by a professional engineer. What is the EQB's statutory authority for allowing only professional geologists to perform the site evaluations? (6, 13, 21)

Response: The Department acknowledges that the language in the proposed rulemaking may be too limiting, yet we are concerned that professionals with proper experience and credentials perform work associated with regulated storage tanks. For those reasons, this requirement is deleted in the final-form rulemaking. In its place, the final-form rulemaking contains a broad requirement similar to that already found in the corrective action process regulations at section 245.314 (relating to professional seals). If an activity consists of a practice regulated by the Engineer, Land Surveyor and Geologists Registration Law, then a properly licensed individual must perform the activity or provide a seal on a report submitted to the Department. The Department of State administers that statute and retains authority over its implementation. However, sections 501(a)(2) and (7) of the Storage Tank Act (35 P.S. § 6021.501(a)(2) and (7)) require the Department to develop and implement a regulatory program concerning leak detection systems and the proper installation of USTs. Because the laws of the Commonwealth require that properly qualified individuals carry out certain tasks relating to storage tanks, the final-form rulemaking reflects those requirements.

78. **Comment:** The requirement to use a professional geologist when using the release detection methods of vapor or groundwater monitoring is of questionable value. It should only be required where such monitoring is being installed and not at existing sites. (12)

Response: See response to Comment 77.

79. **Comment:** This proposed amendment changes the requirement in subsection (3) for tightness tests performed by an automatic tank gauge (ATG) from that portion of the tank that routinely contains product to 90% of the overfill set point.

Monthly testing of tank by an automatic tank gauge to 0.2 GPH is not the same as tank tightness testing to 0.1 GPH. The EPA has separate third party testing protocols for

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tightness testing and monthly monitoring; most ATG's do not have third party for tank tightness testing. I believe the intent of this change is for tank tightness testing and not for monthly ATG monitoring. I recommend that only paragraph 3 (tank tightness testing) be changed and that paragraph 4 (ATG monitoring) remains as it currently exists. If paragraph 4 is changed, it will require the tanks to be filled to the top at least once a month at huge expense if normal volume is always less than 50%. (9)

Response: The Department acknowledges the commentator's concerns and has removed the requirement from the final-form rulemaking for the tank to be filled to the overflow set point when using an ATG to perform a tank tightness test. The requirement for certification of an ATG in paragraph 4 applies only to an ATG installed prior to December 22, 1990, as established in federal requirements at 40 CFR Part 280, which were not certified by the ATG manufacturer to perform product monitoring that can detect a 0.2 gallon per hour leak rate (not a tank tightness test). The final-form rulemaking has been amended to clarify this issue.

§ 245.445. Methods of release detection for piping.

80. **Comment:** The proposed amendment will require the line leak device to shut off the flow of regulated substance when a leak is detected. Does this change apply to the detection of a 3-gallon per hour (GPH) leak rate and not to the monthly monitoring 0.2 GPH leak detection requirement? The amendment should include the required minimum leak rate for shut down. Automatic shut down at 0.2 GPH or less, has and will result in many false alarms resulting in considerable loss of revenue.

If automatic shut down is required, even at 3 GPH, owners will disable or bypass this function (jumper the relay) when a false alarm prevents him from selling product. This has happened in the past and defeats the purpose of automatic shut down to contain leaks. The best method to achieve the desired leak detection containment (short of double wall piping) is for mechanical line leak detection (3 GPH) with automatic slowing of flow when a leak is detected. This method is not easy to bypass and will cause the station operator to take action by calling a servicing company so that he can sell product. Requiring a service log to be maintained, will track leak detection occurrences and actions taken and should be available for inspectors to review. (9)

Response: The commentator is correct; the automatic shut off provision in section 245.445(1) only applies to the 3 GPH release (line leak) detection method. As in the past, if owners disable required release detection equipment, the Department will pursue enforcement action using the enforcement tools available to the Department under the Storage Tank Act.

The Department acknowledges the commentator's concerns about replacing automatic line leak detectors (aLLD) on an existing system with a leak detector that shuts off the flow of product when triggered. The final-form rulemaking is amended to require only the upgrade of an existing line leak detector to an aLLD that shuts off the flow of product, when the entire piping system to the dispenser or the entire release detection system is replaced.

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Following the requirements of the federal regulations, Chapter 245 already requires service logs for all permanently installed release detection equipment. The previous 12 months' worth of maintenance data must be available to Department and third-party certified inspectors for review during their inspections.

81. **Comment:** The amendment to subsection (1) has caused some confusion. Some have assumed the proposed amendment to mean electronic line leak detection is required. The wording here should be clear as to the intent and requirements of this amendment. (9)

Response: The Department acknowledges the commentator's concerns. This section allows for other line leak detection devices besides electronic. The final-form rulemaking has been amended and adds clarity to this section. Also see response to Comments 65, 68 and 80.

82. **Comment:** We agree with the proposed requirement to install line leak detection systems with automatic shut-off devices on tank systems installed after the effective date of the adoption of the proposed amendments. However, tank-systems existing prior to the effective date of the adoption of the amendments should not be required to upgrade their systems currently installed with equipment that alarms or restricts product flow. The equipment currently required to be installed on existing equipment is effective in the prevention of releases, consistent with federal environmental law, and is protective of human health and the environment. (19)

Response: See response to Comments 65 and 68.

§ 245.451. Temporary closure (out-of-service).

83. **Comment:** This section should be amended to waive inspections for USTs in temporary closure status, or when permits are withheld or withdrawn. Instead, the Department should require inspection of such tanks prior to permitting, or changing the tank status from non-operating back to operating. (2)

Response: The Department agrees with the commentator, and the final-form rulemaking has been amended to reflect the waiver of inspections and withdrawal or withholding of operating permits when tanks are placed in temporary closure or out-of-service status. Related changes are included in the tank registration and operating permit provisions in Subchapters A and C.

84. **Comment:** The regulations should allow owners and operators 30 days to empty an UST being placed into temporary out-of-service status rather than requiring "immediate" emptying of the UST, which is technically infeasible. (20)

Response: The Department recognizes the commentator's concerns and has amended the final-form rulemaking to require that a temporary out-of-service UST be emptied within 30 days or prior to reporting the UST change in operating status to the Department, whichever occurs first, unless notified otherwise by the Department.

§ 245.453. Assessing the site at closure or change-in-service.

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85. **Comment:** Although the Board did not propose amending this section, the language “unless otherwise agreed upon or waived by the Department,” presently included with the proposed AST closure technical document reference in section 245.561(3), should also be added to subsection (a). This would give regulated persons some flexibility on a case-specific basis. (16)

Response: The Department acknowledges the commentator’s concerns. The final-form rulemaking has been amended to clarify that the standard of performance established by this section is for the tank owner/operator to “measure for the presence of a release where contamination is most likely to be present at the underground storage tank site” upon closure of the UST. If a tank owner/operator chooses to follow the Department’s technical guidance document, then the owner will have met the standard of performance. Alternatively, the tank owner/operator may choose not to follow the guidance document, but instead use another process for proper site assessment that equally protects the public and the environment and that meets all regulatory and statutory requirements.

§ 245.503. Variances.

86. **Comment:** Dominion supports the proposed changes, allowing variances when unique or peculiar circumstances make compliance technically impractical and allowing variances for the use of new technologies. (8)

Response: The Department acknowledges and appreciates the commentator’s support for the proposed changes to this section.

§ 245.505. Applicability.

87. **Comment:** Dominion supports the proposed changes providing temporary exclusions with a phase-in period for existing large ASTs that become regulated due to changes to the definition of “regulated substance” or heating oil ASTs that become re-regulated due to changes to the definition of “consumptive use.” (8)

Response: The Department acknowledges and appreciates the commentator’s support for the proposed changes to this section.

§ 245.523. Aboveground storage tanks in vaults.

88. **Comment:** Paragraph (11) requires certain underground piping distribution systems to “be appropriately monitored.” The term “appropriately” is indefinite. The final-form regulation should include specific monitoring requirements. (21)

Response: The Department acknowledges the commentator’s concerns. The final-form rulemaking has been amended to clarify that the underground piping must be monitored as required in paragraph (7) and monitoring records retained for 12 months as required under sections 245.516 or 245.615.

§ 245.534. Interior coatings and linings.

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89. **Comment:** Subsection (c) will require inspections when "major modifications" are made to interior linings or coatings. The phrase "major modifications" is vague and indefinite. The criteria used to determine if a modification is major should be included in the final-form rulemaking. Similar language is also found at section 245.552(e) (relating to in-service inspections). (21)

Response: The Department does not agree with the commentator. The term "major modification" is clearly and adequately defined in section 245.1 and that definition is applicable to the referenced sections in this comment.

§ 245.541. Overfill prevention requirements.

90. **Comment:** The Department should alter the proposed amendment to subsection (e) to allow for the use of a visual gauge, in lieu of a high-level alarm, if the large AST also has a manned operator shutdown procedure. Our experience is that the use of visual gauges has proven satisfactory to prevent overfills at facilities with manned operations. The installation of high-level alarms will require emptying and cleaning of the large ASTs prior to working on them. That is an expensive and potentially dangerous proposition, and is not justified prior to the next scheduled removal from service (i.e., an out-of-service inspection). (8, 16, 21)

Response: The Department acknowledges the commentator's concerns. The current regulatory requirements for installation of high-level alarm when a large AST is taken out-of-service have been in place since October 11, 1997 and the Department believes these requirements are appropriate. No additional deadlines are necessary for these tanks. However, ASTs that do not routinely undergo out-of-service inspections may still need to address overfill prevention. Therefore, the final-form rulemaking has been amended to reflect overfill protection requirements consistent with national industry standards, such as API 2350, NFPA 30 or PEI RP 200 for saddle-mounted ASTs and ASTs that are not routinely required to conduct out-of-service inspections.

91. **Comment:** Three-year installation requirements for alarm systems and emergency containment structures do not take financial and logistical considerations into account. The requirements under section 245.541(e) for high-level alarm with a cut-off device installation within three years will be difficult for industry to achieve. These changes must be properly planned and engineered, and a contractor must be employed to install them, much of which is completely out of the hands of a manufacturer. This process could stretch over the span of several years. We recommend that the language be amended in order to give industry flexibility to fulfill this requirement. (17)

Response: See responses to Comments 90 and 96.

§ 245.542. Containment requirements for aboveground storage tank systems.

92. **Comment:** This section appears to mandate the use of Department guidance documents to comply with the requirements to verify permeability of emergency containment structures. By mandating the use of guidance documents, the Department is circumventing the

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opportunity for industry and citizens to comment on revisions to the regulations since guidance documents are not subject to the same notice and review provisions that apply to regulations. The reference to the guidance document should therefore be removed, and the requirements in the technical guidance document should be included in the final-form rulemaking. (4, 19, 21)

Response: The Department acknowledges the commentator's concerns. This section established the standard of performance for "verification by a professional engineer that the emergency containment structure, coupled with the tank monitoring program and response plan, is capable of detecting and recovering a release and is designed to prevent contamination of the waters of this Commonwealth." The final-form rulemaking is amended to clarify that the guidance is available for use when conducting this verification. If a tank owner chooses to follow the procedures in the technical guidance document, then the owner will have met the standard of performance. Alternatively, the tank owner/operator may choose not to follow the guidance document, but instead use another verification process that equally protects the public and the environment and that meets all regulatory and statutory requirements.

93. **Comment:** The incorporation of guidance or technical documents within this regulation is of concern because the opportunity for external review and comment on such documents is much more limited than is the case with actual regulations. For instance, proposed and final EQB rulemakings are subject to review by legislative standing committees and the Independent Regulatory Review Commission, which can represent important checks on a regulation's consistency with legislative intent, reasonableness and cost-effectiveness; technical documents do not receive these levels of review. In addition, referring to technical documents to provide acceptable industry test methods, as would be the case for permeability testing in section 245.542(d)(2)(ii), would be inconsistent with other aspects of the rule in which industry methods are incorporated directly into the regulation itself. Accordingly, references to technical documents in the rule should be removed and, if necessary, replaced with substantive provisions. (16)

Response: See response to Comment 92. In addition, examples of industry standards on test methods for determining permeability (such as various ASTM methods and engineering standards listed in API Publication 351) have been added to this section of the final-form rulemaking.

94. **Comment:** To the extent references to technical documents remain in the rulemaking, the language "unless otherwise agreed upon or waived by the Department," presently included with the proposed AST closure technical document reference in section 245.561(3), should also be added to the proposed AST emergency containment verification technical document reference in section 245.542(d)(2)(ii). This would give regulated persons some flexibility on a case-specific basis. (16)

Response: The Department does not believe that the commentator's recommended addition is needed. The current regulation provides for a wide array of considerations that are ultimately evaluated and verified by a professional engineer on a case-specific basis. If additional considerations are needed, the variance process at section 245.503 is available.

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95. **Comment:** This section requires a determination of the containment structure permeability to be determined, but does not list any methods or alternatives, which is in conflict with other sections of Chapter 245. (4)

Response: See responses to Comments 92 and 93.

96. **Comment:** Three-year installation requirements for alarm systems and emergency containment structures do not take financial and logistical considerations into account. The requirements for emergency containment structures to be upgraded under section 245.542(d) within three years or before the next scheduled out-of-service inspection will be difficult for industry to achieve. These changes must be properly planned and engineered, and a contractor must be employed to install them, much of which is completely out of the hands of a manufacturer. This process could stretch over the span of several years. We recommend that the language be amended in order to give industry flexibility to fulfill this requirement. (17)

Response: The Department acknowledges the commentator's concerns. See response to Comment 90 on requirements for overfill alarms. The Department believes that 3 years is adequate to meet emergency containment requirements retained in the final-form rulemaking. The standards for emergency containment have been in place in the current regulations since October 11, 1997. There has been ample time for the regulated community to be aware of the emergency containment standards and to plan to meet these standards. The new 3-year deadline to meet emergency containment requirements only affects ASTs that are not required to conduct routine out-of-service inspections and those that may not have routine scheduled out-of-service inspections since 1997. Additionally, under federal OSHA standards and Oil Pollution Program requirements in 40 CFR Part 112, all aboveground storage tanks should already have adequate containment.

§ 245.543. Leak detection requirements.

97. **Comment:** In subsection (c), the requirement to test the ASTs at issue for tightness at the next service inspection is unclear. Is this intended to be the next in-service inspection or the next out-of-service inspection? Please clarify. (7, 10)

Response: The requirement for testing the AST is applicable to both in-service and out-of-service inspections. However, the Department believes that changes reflecting nondestructive examinations that must be performed during an out-of-service inspection now adequately satisfy evaluation of the tank bottom during the out-of-service inspection. Therefore, the final-form rulemaking has been amended to only require a separate leak test during the in-service inspection.

98. **Comment:** We would appreciate clarification of subsection (c). This subsection requires large ASTs "without secondary containment under the bottom of the tank" and that "do not have cathodic protection or an internal lining" to be "tested for tightness at the next scheduled service inspection." We understand this to mean that only large ASTs without secondary containment and cathodic protection must be tested for tightness. Please clarify when this requirement applies. (12)

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Response: This subsection applies to large ASTs that do not have secondary containment under the tank bottom or one of two forms of corrosion prevention for the tank bottom. Cathodic protection and internal lining both serve as forms of corrosion prevention for the tank bottom, one form providing external protection and the other form providing internal protection against corrosion. Having either secondary containment, cathodic protection or internal lining precludes the tank from this testing requirement. The Department believes that the rulemaking is clear on this requirement. Also, see response to Comment 97.

99. **Comment:** Subsection (d) references *API Publication 334, A Guide to Leak Detection for Aboveground Storage Tanks*. We note that this document describes methods for detecting leaks, which is not necessarily the same thing as "tightness testing," which subsection (d) is intended to address. We would like to have the opportunity to discuss this in further detail with the Department and, at a minimum, suggest that the term "tightness testing" be changed to "leak detection." (12)

Response: The Department acknowledges the commentator's concerns. The final-form rulemaking has been amended to require a leak test, rather than testing for tightness. This is consistent with the testing terminology in API Publication 334. Further, specific leak test methods that will satisfy this requirement have been added to this section of the final-form rulemaking. See response to Comment 97.

100. **Comment:** We have five questions concerning subsection (d). First, what is required for a third party to certify the test method and procedure to be used? The final-form regulation should provide details on how certification is accomplished. Second, if a National association must recognize the method or procedure, what is the need for the certification? Third, why must a third-party expert perform the test? Fourth, who determines if the third-party is an expert? Finally, can the party that performs the pre-test certification be the same party that performs the test? (21)

Response: The Department acknowledges the commentator's concerns. The final-form rulemaking has been amended and the requirement for certification clarified. The final-form rulemaking also addresses the test methods that may be used to satisfy the testing requirement and that a third-party inspector or an industry technician experienced in the test method and certified under American Society for Nondestructive Testing (ASNT) standards recognized by the test equipment manufacturer must perform the test. The STAC recommended that the final-form rulemaking require tests to be performed by a third-party expert, and not an employee of the tank owner, and the leak tests are conducted as part of the inspection process. Typically, industry leak testing experts other than employees of the tank owner perform such highly technical work on ASTs, and the Department believes that this approach is appropriate. See response to Comment 99.

§ 245.554. Installation and modification inspections.

101. **Comment:** Keeping the installation inspection report for the operational life of the AST is not necessary once a more recent out-of-service inspection report is available. This requirement should be modified to only require keeping the initial installation inspection report until it is replaced with the report for the first out-of-service inspection. (20)

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Response: The Department does not agree with the commentator. The installation inspection is not the same as an out-of-service inspection. The installation inspection report typically contains information that may not be included on the out-of-service inspection report, and the Department believes that inspection reports for installation, modification and out-of-service inspections should be retained for the operational life of an AST. The current regulations allow for retaining the most recent in-service inspection. All other inspection reports must be retained for the operational life of the AST.

§ 245.561. Permanent closure or change-in-service.

102. **Comment:** This section should be amended to waive service inspections for large ASTs in temporary closure status, or when permits are withheld or withdrawn. Instead, the Department should require inspection of such tanks prior to permitting, or changing the tank status from non-operating back to operating. This is especially true for large ASTs, which will likely have a service inspection due within the five-year temporary removal from service window. Requiring such a costly inspection on a tank that may never be placed back into active service does not make sense. (2)

Response: The Department acknowledges the commentator's concerns. Section 245.562 of the final-form rulemaking has been amended to address these concerns. Permanent closure or change-in-service requirements in section 245.561 are not applicable to temporary closure status. See responses to Comments 104 and 105.

103. **Comment:** This section appears to mandate the use of Department guidance documents to comply with the requirements to properly close large AST systems. By mandating the use of guidance documents, the Department is circumventing the opportunity for industry and citizens to comment on revisions to the regulations since guidance documents are not subject to the same notice and review provisions that apply to regulations. The reference to the guidance document should therefore be removed, and the requirements in the technical guidance document should be included in the final-form rulemaking. (4, 16, 19, 21)

Response: The Department acknowledges the commentator's concerns. The final-form rulemaking has been amended to clarify that the standard of performance established by this section is for the tank owner/operator to "complete a site assessment to measure for the presence of any release from the storage tank system" upon closure of the AST. If a tank owner/operator chooses to follow the Department's technical guidance document, then the owner will have met the standard of performance. Alternatively, the tank owner/operator may choose not to follow the guidance document, but instead use another process for proper site assessment that equally protects the public and the environment and that meets all regulatory and statutory requirements.

§ 245.562. Temporary removal-from-service.

104. **Comment:** This section should be amended to waive service inspections for large ASTs in temporary closure status, or when permits are withheld or withdrawn. Instead, the Department should require inspection of such tanks prior to permitting, or changing the tank status from non-operating back to operating. This is especially true for large ASTs, which will likely have a service inspection due within the five-year temporary removal

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from service window. Requiring such a costly inspection on a tank that may never be placed back into active service does not make sense. (2)

Response: The Department acknowledges the commentator's concerns and agrees with the commentator. The final-form rulemaking has been amended to allow routine scheduled service inspections to be delayed on tanks that are in temporary closure or out-of-service status. The delayed inspections must be performed, submitted to the Department and deficiencies remedied prior to placing regulated substance back into the tanks and returning them to operational service. See responses to Comments 26, 38 and 83.

105. **Comment:** Although the Board did not propose amending this section, the subsection (f) requirement for temporary out-of-service large ASTs to be closed within five years is misguided, given the uncertain nature of the regulated industry and unforeseen changes in the future. This requirement should be replaced with two concepts: (1) in-service inspections would need to resume if the AST was in temporary out-of-service status for more than five years; and, (2) a full-blown API 653 out-of-service inspection would need to be conducted and any necessary upgrades completed prior to placing the AST back in service. (2)

Response: The Department acknowledges the commentator's concerns. The final-form rulemaking has been amended to address inspection concerns (see response to Comment 104). The Department does not believe that an unlimited temporary out-of-service period is appropriate for all large ASTs. However, the final-form rulemaking amends the variance provisions in section 245.503, which may be used to allow for extending the temporary out-of-service timeframe where ASTs may need to be retained further for anticipated or potential future operational use.

106. **Comment:** This section unnecessarily limits large AST tank owners to three options when placing the tank into temporary out-of-service status – continuing service inspections, permanent closure or application for a variance from the regulations to remain in temporary out-of-service status. A better approach would be to allow for unlimited time in temporary out-of-service status, so long as the requirements of section 245.562(a)-(d) are followed, combined with the requirement that an out-of-service inspection be completed and any deficiencies corrected prior to putting the large AST back into operating service. (14, 16)

Response: See responses to Comments 104 and 105.

§ 245.612. Performance and design standards.

107. **Comment:** Please clarify in subsections (d) and (e) if it is the intention of the Department to have any one (1) of the listed controls meet the need for additional spill and overflow protection on double-walled small ASTs. Implementing each alone should provide added benefits. Also, please clarify in subsection (e) that existing small double-walled ASTs without these controls have three (3) years to implement this change. (15)

Response: The Department acknowledges the commentator's concerns. The measures addressed for double-walled small aboveground storage tanks are required by EPA to meet Oil Program requirements in 40 CFR 112.7 and are also reflected in NFPA 30, and PEI

COMMENT AND RESPONSE DOCUMENT

Recommended Practice 200 for installation of manufactured aboveground storage tanks. PEI RP 200 provides detailed diagrams with instructions on when specific valves, cutoffs and controls should be used. To help clarify when each of the listed controls are needed, the final-form rulemaking has been amended to include specific reference to PEI RP 200 and NFPA 30. The 3-year delay for tanks containing newly regulated substances and heating oil consumed on the premises has been addressed in the final-form rulemaking in section 245.605.

§ 245.614. Requirements for closure.

108. **Comment:** This section should be amended to waive service inspections for small ASTs in temporary closure status, or when permits are withheld or withdrawn. Instead, the Department should require inspection of such tanks prior to permitting, or changing the tank status from non-operating back to operating. (2)

Response: The Department acknowledges the commentator's concerns. The final-form rulemaking has been amended to allow routine scheduled service inspections to be delayed on tanks that are in temporary closure or removal from service status. The delayed inspections must be performed, submitted to the Department and deficiencies remedied prior to placing regulated substance back into the tanks and returning them to operational service. Also see responses to Comments 27 and 38 addressing tank registration and permitting requirements.

§ 245.704. General requirements.

109. **Comment:** The proposed rulemaking indicates that USTIF deductible coverage must be approved under section 701(b) of the Storage Tank Act (35 P.S. § 6021.701(b)). It is unclear whether the Department will require submission of individual deductible coverage mechanisms for approval, or if the Department is proposing to deem the listed methods as approved by rule. This should be clarified. (10)

Response: The Department acknowledges the commentator's concerns. The Department is not requiring routine submission of individual deductible coverage mechanisms for approval. Rather, the changes are intended only to address the mechanisms an owner may use to meet coverage requirements. The final-form rulemaking has been amended to further clarify this point.

Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart D. ENVIRONMENTAL HEALTH AND SAFETY

ARTICLE VI. GENERAL HEALTH AND SAFETY

CHAPTER 245. ADMINISTRATION OF THE STORAGE TANK AND

SPILL PREVENTION PROGRAM

Subchapter A. GENERAL PROVISIONS

GENERAL

§ 245.1. Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

* * * * *

Aboveground storage tank – One or a combination of stationary tanks with a capacity in excess of 250 gallons, including the underground pipes and dispensing systems connected thereto within the emergency containment area, which is **used, will be used** or was used to contain an accumulation of regulated substances, and the volume of which, including the volume of piping within the storage tank facility, is greater than 90% above the surface of the ground. The term includes tanks which can be visually inspected, from the exterior, in an underground area **AND TANKS BEING CONSTRUCTED OR INSTALLED FOR REGULATED USE**. The term does not include the following, or pipes connected thereto:

* * * * *

Air Pollution Control Act – The Air Pollution Control Act (35 P.S. §§ [4101-4106] 4001-4015)

* * * * *

Certification categories – Individual certification categories issued to certified installers or certified inspectors to perform tank handling, tightness testing or inspection activities on aboveground or underground storage tank systems and facilities. The term includes category specific certifications in one or more of the following:

- (i) *Storage tank inspector certification categories:*
 - (A) *IAF-Inspection of aboveground field constructed and aboveground manufactured storage tank systems and facilities.*
 - (B) *IAM-Inspection of aboveground manufactured storage tank systems and facilities.*
 - (C) *IUM-Inspection of underground storage tank systems and facilities.*

- (ii) *Storage tank installer certification categories:*
 - (A) *[ACVI] ACVL-Aboveground storage tank SYSTEM civil installation and modification.*
 - (B) *AFMX-Aboveground field constructed metallic storage tank installation, modification and removal, and aboveground manufactured metallic storage tank modification.*

- (C) AFR-Aboveground field constructed storage tank SYSTEM removal.
- (D) AMEX-Aboveground storage tank SYSTEM mechanical installation, modification and removal.
- (E) AMMX-Aboveground manufactured metallic storage tank SYSTEM installation and modification.
- (F) AMNX-Aboveground nonmetallic storage tank SYSTEM installation and modification.
- (G) [MFR-Manufactured] AMR-ABOVEGROUND MANUFACTURED storage tank SYSTEM removal.
- (H) TL-Storage tank liner installation and modification, AND UNDERGROUND STORAGE TANK LINER EVALUATION.
- (I) UMX-Underground storage tank system installation and modification.
- (J) UTT-Underground storage tank SYSTEM tightness tester
- (K) UMR-UNDERGROUND STORAGE TANK SYSTEM REMOVAL.

Certified company – An entity, including, but not limited to, a sole proprietorship, a partnership or a corporation, which is [authorized by this title] certified by the Department and employs certified installers or certified inspectors to conduct tank handling activities, tightness testing activities or inspection activities [using certified installers or certified inspectors, or both].

* * * * *

Consumptive use - The term means, with respect to heating oil, that which is **stored in an aboveground storage tank of 30,000 gallons or less capacity or that which is stored in an underground storage tank and is** consumed on the premises.

* * * * *

Hazardous substance storage tank system—

(i) A storage tank system that contains a hazardous substance defined in section 101(14) of CERCLA (42 U.S.C.A. § [101] **9601**(14)).

(ii) The term does not include a storage tank system that contains a substance regulated as a hazardous waste under Subtitle C of CERCLA, or mixture of the substances and petroleum, and which is not a petroleum system.

* * * * *

[New underground storage tank system – An underground storage tank system that will be used to contain an accumulation of regulated substances and for which installation has commenced after December 22, 1988. (See the definition of “existing underground storage tank system.”)]

* * * * *

Nontank handling project activities – Activities performed by a CERTIFIED INDIVIDUAL, certified company or employee of a certified company on a project that may not be tank handling activities, but are part of the certified INDIVIDUAL’S OR company’s responsibility while completing tank handling or inspection activities on a storage tank system project.

* * * * *

Person—An individual, partnership, corporation, association, joint venture, consortium, institution, trust, firm, joint-stock company, cooperative enterprise, municipality, municipal authority, Federal Government or agency, Commonwealth Department, agency, board, commission or authority, or other legal entity which is recognized by law as the subject of rights and duties. In provisions of the act prescribing a fine, imprisonment or penalty, or a combination thereof [~~The~~], **THE** term includes the officers and directors of a corporation or other legal entity having officers and directors.

* * * * *

Pipeline facilities (including gathering lines) – New and existing pipe rights-of-way and associated equipment, facilities or buildings **regulated under the Hazardous Liquid Pipeline Safety Act of 1979 or the Natural Gas Pipeline Safety Act of 1968, codified without substantive change in 1994 by Pub. L. No. 103-272, 108 Stat. 1371 (49 U.S.C.A. §§ 60101-60125) which may include coastal, interstate or intrastate pipelines. [and]**

(i) THE TERM INCLUDES tanks essential to the operation of the pipeline, such as tanks used to hold substances that operate compressors or pumps directly connected to the pipeline and breakout tanks used solely to relieve pressure surges from the pipeline and then re-inject substances from the pipeline back into the pipeline [~~but~~].

(ii) THE TERM does not include [~~dual purpose~~] tanks WHICH DISPENSE SUBSTANCES TO VEHICLES, RAILCARS, BARGE OR TANKER TRUCK TRANSPORTS or tanks at complex facilities which [~~may~~] serve [~~both as breakout tanks and~~] as storage tanks or feed stock tanks for the purposes of this chapter.

* * * * *

Regulated substance –

(i) An element, compound, mixture, solution or substance that, when released into the environment, may present substantial danger to the public health, welfare or the environment which is one of the following:

(A) A substance defined as a hazardous substance in section 101(14) of [the] **[Comprehensive Environmental Response, Compensation, and Liability Act of 1980] CERCLA** (42 U.S.C.A. § 9601), **including hazardous substances that are liquid or gaseous, or suspended therein regardless of holding temperature,** but not including a substance regulated as a hazardous waste under Subtitle C of the Resource Conservation and Recovery Act of 1976 (42 U.S.C.A. §§ 6921-6931).

(B) Petroleum, including crude oil or a fraction thereof and **petroleum** hydrocarbons which are liquid at standard conditions of temperature and pressure (60° F and 14.7 pounds per square inch absolute), including, but not limited to, oil, petroleum, **PETROLEUM MIXED WITH ETHANOL,** fuel oil, oil sludge, oil refuse, oil mixed with other nonhazardous wastes and crude oils, gasoline and kerosene.

(C) Other substances determined by the Department by regulation whose containment, storage, use or dispensing may present a hazard to the public health and safety or the environment, but not including gaseous substances used exclusively for the administration of medical care. **This includes the following other regulated substances:**

(D) **Nonpetroleum oils including bio[-]diesel; synthetic fuels and oils, such as silicone fluids; tung oils and wood-derivative oils, such as resin/rosin oils; and inedible seed oils from plants, which are liquid at standard conditions of temperature and pressure. ~~[When requirements between hazardous and~~**

~~petroleum substances differ, the] THE requirements IN THIS CHAPTER for petroleum tanks IN CLAUSE (B) apply for this group of substances.~~

~~(II) [Compounds] PURE ETHANOL INTENDED for BLENDING WITH MOTOR FUEL. [use as additives in gasoline and not already found on the list from section 101(14) of CERCLA.] The requirements IN THIS CHAPTER [for hazardous substances apply to this group of compounds in their unblended condition, and the requirements] for petroleum tanks IN CLAUSE (B) apply [after blending with gasoline reduces their concentration to less than 15% by volume of the stored substance].~~

~~(III) Nonpetroleum substances listed in 34 Pa.Code Chapter 323 (relating to hazardous substance list) that are environmental hazards and are liquid or gaseous, or suspended therein regardless of holding temperature. Substances that appear on this list and do not have a CERCLA reportable quantity assigned shall have a 1-pound reportable quantity for the purposes of this chapter. The requirements for hazardous substance apply to this group of compounds, except where they are already included in a group of substances classified as petroleum or regulated as a highly hazardous substance.]~~

* * * * *

Tightness testing activities – Testing activities which are designed and intended to detect leaks when performing precision tests, volumetric and ~~[non-volumetric]~~ nonvolumetric tests on underground storage ~~[tanks]~~ tank systems.

* * * * *

Underground storage tank – One or a combination of tanks (including underground pipes connected thereto) which are used, **were used or will be used** to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is 10% or more beneath the surface of the ground. **THE TERM**

INCLUDES TANKS BEING CONSTRUCTED OR INSTALLED FOR REGULATED

USE. The term does not include:

* * * * *

TANK HANDLING ACTIVITIES

§ 245.21. Tank handling and inspection requirements.

(a) Tank handling activities shall be conducted by a certified installer except in the case of modification to an aboveground nonmetallic storage tank, which may be modified by the tank manufacturer. Storage tank facility owners and operators may not use persons who are not Department certified to conduct tank handling activities except as noted in this subsection. **The certified installer shall perform the tank handling activity or provide direct onsite supervision and control of the activity.**

* * * * *

TIGHTNESS TESTING ACTIVITIES

§ 245.31. Underground storage tank tightness testing requirements.

(a) Tightness testing activities shall be conducted by a Department certified underground **STORAGE TANK SYSTEM** tightness [~~testing~~] **TESTER** (UTT) [~~installer~~], except when performed by an owner or operator using installed automatic tank gauging or monitoring equipment meeting requirements of § 245.444(3) and (4) (relating to methods of release detection for tanks).

(b) Tightness testing is required to be conducted when it is:

(1) Used as a method of release (leak) detection as prescribed in §§ 245.442**(b)**(1), [~~and~~] 245.443(1), [(relating to requirements for petroleum underground storage tank system; and requirements for hazardous substance underground storage tank systems) § 245.444(3) and § 245.445(2) ~~(relating to methods of release detection for piping).~~]

* * * * *

(c) A complete written test report shall be provided to the tank owner as documentation of test results within 20 days of the test. The test methodology, a certification that the test meets the requirements of § 245.444(3) [(relating to methods of release detection for tanks] or § 245.445(2) (RELATING TO METHODS OF RELEASE DETECTION FOR PIPING), and sufficient test data, which were used to conclude that the tank passed or failed the tightness test, shall be included in the test report.

(f) Certified underground STORAGE TANK SYSTEM tightness [~~testing~~] **TESTERS** (UTT) [~~installers~~] shall maintain complete records of tightness testing activities for a minimum of 10 years as provided in § 245.132(a)(3) (relating to standards of performance).

(g) TIGHTNESS TESTING OF THE UNDERGROUND STORAGE TANK

SYSTEM'S PIPING SHALL BE CONDUCTED BY A DEPARTMENT CERTIFIED UNDERGROUND STORAGE TANK SYSTEM TIGHTNESS TESTER (UTT) AFTER _____
(Editor's Note: THE BLANK REFERS TO A DATE 1 YEAR AFTER THE EFFECTIVE DATE OF ADOPTION OF THIS REGULATION.)

TANK REGISTRATION AND FEES

§ 245.41. Tank registration requirements.

(a) Tank owners shall properly register each storage tank by meeting the requirements of this section and paying the [appropriate] registration fee required by § 245.42 (relating to tank registration fees).

(b) Tank owners shall register each aboveground storage tank and each underground storage tank with the Department, except as specifically excluded by Department policy or this chapter, on a form provided by the Department, within 30 days after installation or acquisition of an ownership interest in the storage tank. Unless otherwise approved by the Department, a regulated substance must not be placed in the tank and the tank may not be operated until the tank is properly registered and the Department approves an operating permit for the tank.

(c) A form for registration of a storage tank must be complete upon submission to the Department and provide the following:

- (1) Tank owner, operator and contact information.
- (2) General facility, site and location information.

(3) Specific tank description and usage information, INCLUDING

REGULATED SUBSTANCE OR SUBSTANCES THAT WILL BE
STORED IN EACH TANK.

(4) Specific tank construction, system components and installation information.

(5) Owner or owner's representative certification validating the registration
information and operating permit application.

(6) Certified tank installer information and signature (WHEN REQUIRED).

(7) Certified tank inspector information and signature for certain classes of
tanks addressed at § 245.21 (relating to tank handling and inspection
requirements).

(8) Other applicable information that may be required by the Department.

(d) The owner's registration form shall also serve as an operating permit
application. The Department may register a tank and not approve an operating permit
for the tank if the application, tank system or the storage tank facility does not meet the
requirements of this chapter or the permit applicant is in violation of the act. THE
DEPARTMENT WILL AUTOMATICALLY WITHHOLD OR WITHDRAW THE
OPERATING PERMIT FOR A STORAGE TANK THAT IS REPORTED ON THE
REGISTRATION FORM IN TEMPORARY CLOSURE OR TEMPORARY
REMOVAL FROM SERVICE (OUT-OF-SERVICE) STATUS. Tank owners may not
store, dispense from or place a regulated substance in a storage tank that does not have
an operating permit unless otherwise agreed upon by the Department. Additionally,
certain classes of tanks require a site specific installation permit prior to beginning
construction of a new or replacement storage tank in accordance with Subchapter C

(relating to permitting of underground and aboveground storage tank systems and facilities). Submission of a site specific installation permit application is a separate requirement for these tanks that is not satisfied by the registration form submission.

(e) A combination of tanks that operate as a single unit require registration of each tank unless otherwise agreed upon by the Department. A tank that has separate compartments within the tank shall be registered separately and charged a separate tank fee for each compartment unless the compartments are connected in a manner that fills, dispenses and operates as a single unit maintaining the same regulated substance at the same operating level in each compartment.

(f) Tank owners shall submit a registration form to amend registration information previously submitted to the Department within 30 days of a change in the previously submitted information. These changes include [~~but are not limited to,~~] the following:

- (1) Removal or relocation of a storage tank to a new facility.
- (2) Temporary or permanent closure or removal from service of a storage tank.
- (3) Change in use of a storage tank to or from regulated or nonregulated status, for example, changing a storage tank to use as a process vessel.
- (4) Change in substance OR SUBSTANCES stored in the tank, unless otherwise agreed upon by the Department.
- (5) Change of ownership or change of operator – new and previous owner.
- (6) Change of contact, mailing address or telephone number.
- (7) Installation of a new or replacement storage tank at an existing facility.

(g) The Department may require submission of supporting documentation and process information for exemption or exclusion from regulation for a tank change in status or use from a regulated to a nonregulated status.

§ 245.42. Tank registration fees.

(a) Annual registration fees to be paid by owners of aboveground storage tanks are established under section 302 of the act (35 P.S. § 6021.302) as follows:

(1) \$50 for each aboveground storage tank with a capacity less than or equal to 5,000 gallons.

(2) \$125 for each aboveground storage tank with a capacity of more than 5,000 gallons and less than or equal to 50,000 gallons.

(3) \$300 for each aboveground storage tank with a capacity of more than 50,000 gallons.

(b) Annual registration fees to be paid by owners of underground storage tanks are established under section 502 of the act (35 P.S. § 6021.502) as \$50 for each underground storage tank.

(c) The Department will issue an invoice to the tank owner after receipt of a complete registration form under § 245.41(c) (relating to tank registration requirements). A tank owner filing a registration shall remit the appropriate fee upon receipt of the invoice.

(d) Registration expiration dates are established for storage tanks according to facility location. The Department will prorate the registration fee established by this

section to reflect the percentage of time remaining in the registration year from the date of initial registration of a storage tank. The Department will not refund registration fees if an owner permanently closes a storage tank or exempts a storage tank through a change-in-service [or change-in-status] TO STORE A NONREGULATED SUBSTANCE OR CHANGE TO NONREGULATED USE (SUCH AS A PROCESS VESSEL) prior to the expiration of the storage tank's registration.

(e) The Department will issue a certificate of registration to an owner upon payment of the required registration fee. The tank owner shall have the current valid certificate of registration available for inspection by the Department, certified storage tank inspector or installer and product distributor. At facilities where a regulated substance is sold at retail to the public, the certificate of registration or an exact copy shall be publicly displayed in a noticeable area at the facility.

(f) The Department will issue an annual invoice to the tank owner for the annual renewal of all regulated tanks at the owner's facility once per year, at least 60 days prior to the expiration of the certificate of registration.

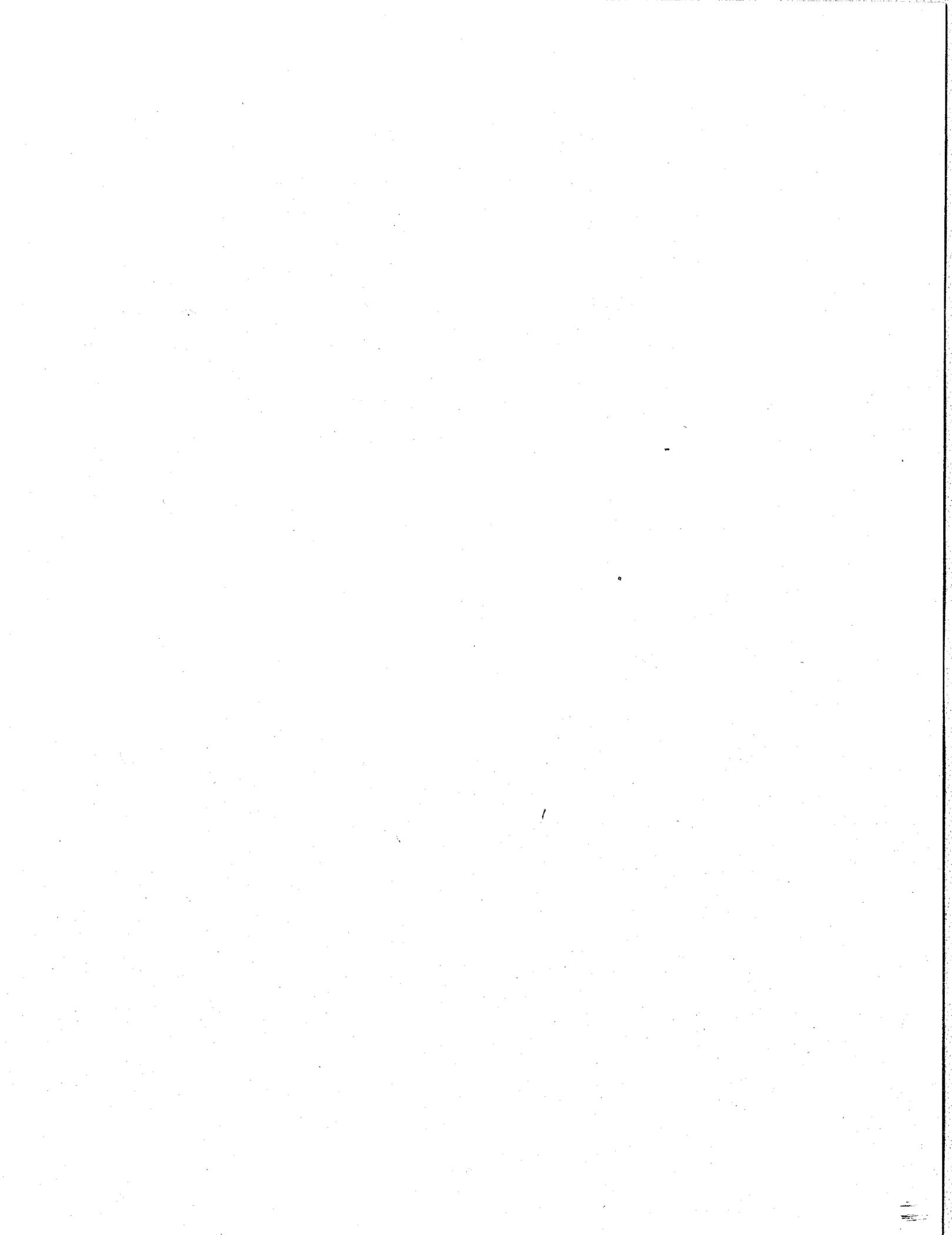
(g) Fees are payable no later than 60 days after the invoice date, and will be considered delinquent 90 days after the invoice date.

§ 245.43. Failure to pay registration fee.

(a) An owner who fails to pay the required registration fee [] MAY be subject to Commonwealth policy and guidelines for collection of delinquent debts due the Commonwealth.

(b) Failure to pay registration fees could result in Departmental actions against the storage tank owner and the operator, including [~~but not limited to,~~] revocation of operating permits issued by the Department under this chapter.

(c) The Department may register a tank, but may withhold or deny the operating permit for the tank if the owner has a delinquent registration debt for any regulated storage tank.



**Subchapter B. CERTIFICATION PROGRAM FOR INSTALLERS AND
INSPECTORS OF STORAGE TANKS AND STORAGE TANK FACILITIES
GENERAL CERTIFICATION REQUIREMENTS**

* * * * *

§ 245.102. Requirement for certification.

(a) A person may not conduct tank handling or tightness testing activities unless that person holds a current installer certification issued by the Department for the applicable certification category as indicated in § 245.110 (relating to certification of installers), except as provided in § 245.31 (relating to underground storage tank tightness testing requirements). **[Except as provided in § 245.103 (relating to phase-in from interim certification), installer]** Installer certification will only be issued by the Department to a person who:

* * * * *

(4) Is not found to be in violation of the act or this chapter **[and]**, or has not had a certification revoked by the Department under § 245.109 (relating to revocation of certification).

* * * * *

(b) A person may not conduct inspection activities at a storage tank system or storage tank facility required by the Department under the act and this part unless that person holds a current inspector certification issued by the Department for the applicable inspector certification category. **[Except as provided in § 245.103, installer]** Inspector certification will only be issued by the Department to a person who:

* * * * *

(4) Is not found to be in violation of the act or this chapter **[and] , or** has not had a certification revoked by the Department under § 245.109.

* * * * *

(e) If the EQB deletes or consolidates certification categories or amends qualifications for certification prior to the expiration date of an installer or inspector's category certification, the category certification may still be used until the expiration date of that category certification.

§ 245.103. [Phase-in from interim certification.] (Reserved)

[(a) The Department may issue an installer certification or inspector certification on a temporary basis for the applicable certification category to any person who meets the minimum experience requirements under § 245.111 or § 245.113 (relating to certified installer experience and qualifications; and certified inspector experience and qualifications).

(b) A person certified as an installer or inspector on an interim basis under section 108 of the act (35 P. S. § 6021.108) who meets the minimum experience and qualification requirements under § 245.111 or § 245.113 may request temporary installer certification or temporary inspector certification on or before January 21, 1992. Failure to be granted temporary installer certification or temporary inspector certification on or before March 23, 1992, will result in revocation of interim certification.

(c) To be granted permanent installer certification or permanent inspector certification, a person who obtains temporary installer certification or temporary

inspector certification under this section, shall, on or before September 21, 1994, achieve a passing grade on a certification examination administered or approved by the Department for one or more of the certified installer or inspector categories described in § 245.110 or § 245.112 (relating to certification of installers; and certification of inspectors). Failure to achieve a passing grade within this time will result in expiration of the temporary installer certification or temporary inspector certification.

(d) If the EQB deletes or consolidates certification categories or amends qualifications for certification prior to the expiration date of an installer or inspector's permanent certification, the permanent certification may still be used until the expiration date of the certification.]

§ 245.104. Application for installer or inspector certification.

- (a) The applicant shall be a natural person.
- (b) An application for installer or inspector certification shall be submitted to the Department on current forms provided by the Department and [shall] must contain the following information:
 - * * * * *
- (c) An application for certification shall be received by the Department no later than [120] 60 days prior to the announced date of the certification examination.
- (d) An application shall be complete upon submission.
- (e) An applicant meeting the requirements of §§ 245.102(a)(4) or (b)(4) [and 245.103]

(relating to requirement for certification [**;and phase-in from interim certification**]) will be granted admission to the certification examinations for which the applicant has requested certification and is qualified.

§ 245.105. Certification examinations.

* * * * *

(c) Only applicants who have been authorized by the Department, in accordance with this chapter, to take an examination will be admitted to an examination or issued a certification as a result of passing an examination. Authorization to take an examination will be based on compliance with **[the requirements of]** this chapter. **Applicants who are authorized to take an examination are eligible to take the examination for up to 1 year from the date of authorization.**

(d) To receive a passing grade on the examinations, the applicant for certification shall achieve a minimum score of **[90] 80%** on each technical section and a minimum score of 80% on the administrative section of the examination.

(e) **[An applicant who fails two examinations for the same certification may not retake the examination until the applicant has successfully completed a training program that is administered or approved by the Department and focuses on those areas of the examination in which the applicant is deficient. Successful completion means attendance at all sessions of training and attainment of the minimum passing grade established by the Department in the approval of the training course under § 245.141 (relating to training approval), for all sections of all qualifying tests given as part of the training program.] An applicant who fails an examination is eligible to**

retake the examination for up to 1 year from the failed examination test date, but no later than 18 months from date of authorization.

§ 245.106. Conflict of interest.

(a) Except as provided in subsection (b), a certified inspector may not be one or more of the following:

- (1) An **[employee] employee** of the tank owner **[or] , the tank owner OR**

OPERATOR.

* * * * *

§ 245.108. Suspension of certification.

(a) The Department may suspend the certification of a certified installer or certified inspector for good cause which includes, but is not limited to:

- (1) A violation of the act or this **[part] chapter.**

(2) Incompetency on the part of the certified installer or certified inspector as evidenced by errors in conducting duties and activities for which the certification in question was issued.

- (3) Failure to successfully complete a training program required by the Department.

- (4) In the case of a certified inspector's failure to:

(i) Inform the owner or operator and the Department of conditions or procedures that are not in accordance with the manufacturer's technical and procedural specifications for installation, construction, modification or operation of the storage tank system or storage

tank facility **and not in compliance with the act or this chapter.**

(ii) Conduct, review or observe a test or inspection activity required by the act or this **[part] chapter.**

* * * * *

(5) In the case of a certified installer's failure to:

(i) Be present during tank handling activities at the storage tank system or storage tank facility as required by the act **[and] or this [part] chapter.**

(ii) Conduct tank handling activities in accordance with the requirements of the act **[and] or this [part] chapter.**

(iii) Submit tank handling reports and activities to the Department within ~~[60]~~ **30** days of conducting the tank handling activities. **FOR TANK HANDLING ACTIVITIES INVOLVING MULTIPLE CERTIFIED INDIVIDUALS AND CERTIFICATION CATEGORIES, THE TANK HANDLING REPORT SHALL BE SUBMITTED WITHIN 30 DAYS OF THE COMPLETION OF ALL PROJECT TANK HANDLING AND INSPECTION ACTIVITIES.**

* * * * *

(9) A violation of The Clean Streams Law, **Air Pollution Control Act** or the Solid Waste Management Act or regulations promulgated under those statutes by the certified individual which results in the following:

* * * * *

(10) Failure to perform underground tightness testing activities and documentation in accordance with § 245.31 (relating to underground storage tank tightness testing

requirements).

* * * * *

§ 245.109. Revocation of certification.

(a) The Department may revoke the certification of a certified installer or certified inspector if the certified installer or certified inspector has done one or more of the following:

(1) Demonstrated a willful disregard of, or willful or repeated violations of the act or **[regulations promulgated thereunder or] this [part] chapter.**

* * * * *

§ 245.110. Certification of installers.

* * * * *

(b) Installer certifications may be issued for the following categories:

* * * * *

(2) *Underground storage tank-removal {UMR}*. Removal from service of underground storage tank systems or storage tank facilities.

~~[(2)]~~ (3) *Underground storage tank **SYSTEM**-tightness tester {UTT}*. Tightness testing activities involved in conducting and interpreting results of volumetric and nonvolumetric tests on underground storage tank systems or storage tank facilities.

~~[(3) **Manufactured storage tank-removal {MTR}**. Removal from service of **underground storage tank systems and manufactured aboveground storage tank systems or storage tank facilities.**]~~

* * * * *

(6) *Aboveground manufactured storage tank-removal {AMR}*. Removal from service of aboveground manufactured storage tank systems or storage tank facilities.

~~[(6)]~~ (7) *Aboveground field constructed metallic storage tank-installation, modification and removal {AFMX}*. Installation, modification and removal of aboveground field constructed metallic storage tanks and corrosion protection systems. **This category also covers the modification of tank components of an aboveground manufactured storage tank system.**

~~[(7)]~~ (8) *Aboveground field constructed storage tank-removal {AFR}*. Removal from service of aboveground field constructed **and manufactured aboveground** storage tank systems or storage tank facilities.

~~[(8)]~~ (9) *Aboveground storage tank mechanical-installation, modification and removal {AMEX}*. Installation, modification and removal of tank related mechanical appurtenances, including, but not limited to, valves, fill piping, suction piping, foam system piping, pumps, corrosion protection systems, release detection systems, and spill and overflow prevention systems that are components of an aboveground storage tank system or storage tank facility.

~~[(9)]~~ (10) *Aboveground storage tank-civil {ACVL}*. Installation and modification of tank related structural components, including, but not limited to, foundations, dike walls, field grading, above and below grade vaults, pump supports, pipe supports, corrosion protection systems and drainage systems associated with an aboveground storage tank system or storage tank facility.

~~[(10)]~~ (11) *Storage tank-liner {TL}*. Activities involved in **installing** **installation or modification of** internal linings for underground and aboveground storage tank systems or

storage tank facilities **and the evaluation of underground storage tank linings as required in § 245.422(b)(1)(ii) (relating to upgrading of existing underground systems).**

§ 245.111. Certified installer experience and qualifications.

(a) An applicant shall meet the following minimum experience ~~[or]~~ education, ~~[and]~~ **training OR CERTIFICATION** requirements ~~[, or both,]~~ and have completed the required number of activities in the appropriate category for an **initial** installer **category** certification:

<i>Category</i>	<i>[Total] Experience [or] , Education, [plus Experience] [And] Training OR CERTIFICATION</i>	<i>Total Number of Activities Completed</i>
UMX	2 years, or college degree and 1 year <u>Technical training</u>	[15] 9 installations
UMR	2 years, or college degree and 1 year <u>TECHNICAL TRAINING</u>	[15] 6 removals
UTT	Department approved training with testing equipment manufacturer's certification	<u>None</u>

AFMX	3 years, or college degree and 2 years	[20] <u>12</u> which may be installations
	<u>Technical training</u>	or major modifications
AFR	2 years, or college degree and 1 year	[15] <u>6</u> removals
	<u>Technical training</u>	
AMEX	3 years, or college degree and 2 years	[20 (10 installations and 10 modifications)] <u>12 installations or modifications (at least 6 installations)</u>
	<u>Technical training</u>	
ACVL	3 years, or college degree and 2 years	[20 (10 installations and 10 modifications)] <u>12 installations or modifications (at least 6 installations)</u>
	<u>Technical training</u>	
TL	2 years	[15] <u>9</u> tank linings
	<u>Manufacturer's certification</u>	

(b) The total number of activities completed required by subsection (a) shall have been completed within the [7] 3-year period immediately prior to submitting the application for certification. The activities shall have been completed in compliance with Federal and State requirements and the applicant shall have had substantial personal involvement at the

storage tank site in the activities. Noncertified individuals may work at the site but the certified installer is directly responsible to assure that the activities are conducted properly. This work qualifies toward the total number of activities completed requirements.

* * * * *

(g) [Six months experience may be accredited to an installer applicant who successfully completes a Department approved training program applicable to the certification category being requested. The 6 months experience shall be accredited to the total years of experience required by subsection (a), except for applicants who are substituting a college degree for experience.] [Category-specific] THE technical training required by subsection (a) shall be completed during the experience interval [unless otherwise determined by the Department] AND SHALL BE DEMONSTRATED THROUGH THE SUBMISSION OF PROOF OF SUCCESSFUL COMPLETION OF A CATEGORY-SPECIFIC TRAINING COURSE APPROVED BY THE DEPARTMENT IN ACCORDANCE WITH § 245.141. SUCCESSFUL COMPLETION MEANS ATTENDANCE AT ALL SESSIONS OF THE TRAINING AND ATTAINMENT OF THE MINIMUM PASSING GRADE FOR THE APPROVED COURSE. The requirement for category-specific technical training is effective _____ (Editor's Note: The blank refers to a date 1 year after the effective date of adoption of this regulation.).

(h) The applicant shall [document current] CERTIFY COMPLETION OF safety training which is appropriate for the certification category. Training must be in accordance with regulatory requirements and industry standards and procedures such as Occupational Safety and Health Administration requirements in 29 CFR

1910 (relating to occupational and health standards for industry).

§ 245.112. Certification of inspectors.

* * * * *

(b) Inspector certifications may be issued for the following categories:

* * * * *

(3) IAF aboveground field constructed **and aboveground manufactured** storage tank systems and storage tank facilities.

§ 245.113. Certified inspector experience and qualifications.

(a) An **[initial]** applicant shall meet the following minimum experience, **EDUCATION, TRAINING OR CERTIFICATION REQUIREMENTS, [or education requirements, or both,] [and qualifications]** and have completed the required number of activities in the appropriate category **[of an] FOR AN INITIAL** inspector **category** certification:

<u>[Total] Experience, EDUCATION,</u>	<u>Total Number of</u>
<u>TRAINING OR CERTIFICATION</u>	
<u>[and Qualification]</u>	

<i>Category</i>	<i>[or Education plus Experience]</i>	<i>Activities Completed</i>
IUM	<p>[1.] 4 years, or college degree and 2 years</p> <p>[2.] Department approved tank tightness testing familiarization course or UTT certification</p> <p>[or]</p> <p>[IAM certification and Department approved tank tightness testing familiarization course or UTT certification]</p> <p><u>UMX certification</u></p> <p><u>Corrosion protection training</u></p>	<p>[20 (10 installations and 10 major modifications) or (20 operations inspections for certification renewal applicants)] <u>None</u></p> <p>[None]</p>
IAM	<p>[1.] 4 years, or college degree and 2 years</p> <p>[2. Nondestructive testing level 2 certification using current ASNT recommended practice (SNT-TC-1A) or Department approved aboveground tank inspector training course or] API 653 Certification</p> <p><u>or</u></p>	<p>[20 (which may be any combination of installations, major modifications or service inspections)] <u>None</u></p>

[IAF Certification]

[None]

STI Inspector Certification

or

Department-approved aboveground

tank inspector certification

IAF

[1.]4 years, or college degree and 2 years

[2. Nondestructive testing level 2

certification using current ASNT

recommended practice (SNT-TC-1A) or

Department-approved API 653 training

course

or]

API 653 certification[.]

or

Department-approved aboveground

tank inspector certification

[20 (which may be any combination of

installations, major modifications or

inspections under API 653 standards)]

12 integrity or construction inspections

(b) The total number of activities completed required by subsection (a) shall have been completed within the [7] 3-year period immediately prior to submitting the application for

certification. The activities shall have been completed in compliance with Federal and State requirements and the applicant shall have had substantial personal involvement at the storage tank site in the activities.

* * * * *

(d) The total number of activities completed required by subsection (a) may be met through the conducting of **[tank handling or]** inspection activities. Noncertified individuals may work at the site but the certified inspector is directly responsible to assure that the activities are conducted properly. This work qualifies toward the total number of activities completed requirements.

* * * * *

(g) The applicant shall ~~[document current]~~ CERTIFY COMPLETION OF safety training which is appropriate for the certification category. Training must be in accordance with regulatory requirements and industry standards and procedures such as Occupational Safety and Health Administration requirements in 29 CFR 1910 (relating to occupational and health standards for industry).

(h) Certified inspectors of underground storage tanks (IUM) shall complete Department-PROVIDED inspector training prior to conducting UST facility operation inspections required in § 245.411 (relating to inspection frequency).

§ 245.114. Renewal and amendment of certification.

(a) [Except as provided in § 245.103 (relating to phase-in from interim certification), certification shall be for 3 years from the date of issuance unless

suspended or revoked. The date of certification expiration for amended certification applications shall coincide with the expiration dates of other certification categories for which the same certification examination modules were administered and passing grades were received. An applicant for renewal shall:] Certification categories renewed after _____ (Editor's Note: The blank refers to a date 60 days after the effective date of adoption of this regulation.) will have a uniform expiration date of 3 years from the issuance date of the first category [renewed] after _____ (Editor's Note: The blank refers to A DATE 60 DAYS AFTER the effective date of adoption of this regulation.)

(b) After the conversion to a uniform expiration date as provided in subsection (a), the issued certification will be valid for 3 years from the previous expiration date, unless suspended or revoked before that date.

(c) An applicant shall meet the following minimum training requirements or number of activities in the appropriate category for renewal of installer certification:

<u>Category</u>	<u>Training</u>	<u>Total Number of Activities Completed</u> <u>(Renewal by activities to be phased out _____ (Editor's note: The blank refers to A DATE 2 YEARS AFTER the effective date OF ADOPTION of this regulation)</u>
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<u>UMR</u>	<u>EXAMINATION OR TECHNICAL TRAINING</u> <u>ADMINISTRATIVE TRAINING</u>	<u>6 REMOVALS</u>
<u>UMX</u>	<u>Examination or Technical Training</u> <u>Administrative Training</u>	<u>[12] 9 installations or major modifications</u>
<u>UTT</u>	<u>Testing equipment manufacturer's certification</u> <u>Administrative Training</u>	<u>None</u>
<u>MTR</u>	<u>Examination or Technical Training</u> <u>Administrative Training</u>	<u>6 removals]</u>
<u>AMMX</u>	<u>Examination or Technical Training</u> <u>Administrative Training</u>	<u>[12] 9 installations or major modifications</u>
<u>AMNX</u>	<u>Examination or Technical Training</u> <u>Administrative Training</u>	<u>[12] 9 installations or major modifications</u>
<u>AFMX</u>	<u>Examination or Technical Training</u> <u>Administrative Training</u>	<u>12 installations or major modifications</u>

<u>AFR</u>	<u>Examination or Technical Training</u> <u>Administrative Training</u>	<u>6 removals</u>
<u>AMR</u>	<u>EXAMINATION OR TECHNICAL</u> <u>TRAINING</u> <u>ADMINISTRATIVE TRAINING</u>	<u>6 REMOVALS</u>
<u>AMEX</u>	<u>Examination or Technical Training</u> <u>Administrative Training</u>	<u>12 installations or major</u> <u>modifications</u>
<u>ACVL</u>	<u>Examination or Technical Training</u> <u>Administrative Training</u>	<u>12 installations or major</u> <u>modifications</u>
<u>TL</u>	<u>Manufacturer's certification</u> <u>Administrative Training</u>	<u>[12] 9 tank linings</u>

(d) An applicant shall meet the following requirements in the appropriate category for renewal of inspector certification:

<u>Category</u>	<u>Qualifications and Training</u>
<u>IUM</u>	<u>Department Inspector Training</u>

IAM

API 653 Certification

or

STI Inspector Certification

or

Department approved inspector

certification

and

Department Inspector Training

IAF

API 653 certification

or

Department approved inspector

certification

and

Department Inspector Training

(e) Renewal of categories based on number of activities completed without technical training or examination as provided in subsection (c) will be a method of renewal until _____ (Editor's Note: The blank refers to a date 2 years after the effective date of adoption of this regulation).

(f) Technical and administrative training shall be obtained within 2 years prior to

application submission.

(1) Administrative training will be provided by the Department.

ADMINISTRATIVE TRAINING IN SUBSECTION (c) IS REQUIRED

AFTER _____ (EDITOR'S NOTE: THE BLANK REFERS TO A DATE 2 YEARS AFTER THE EFFECTIVE DATE OF ADOPTION OF THIS REGULATION.).

(2) TECHNICAL TRAINING IS CATEGORY-SPECIFIC AND MUST BE APPROVED BY THE DEPARTMENT IN ACCORDANCE WITH § 245.141 (RELATING TO TRAINING APPROVAL).

(g) An applicant for renewal shall:

(1) Submit a completed application for renewal to the Department [at least] 60 to 120 days prior to the [renewal] expiration date or examination test date. Applicants who fail to submit a renewal application within 60 days following the expiration date shall meet the experience, qualifications and examination requirements for initial certification as required in § 245.111 or § 245.113 (relating to certified installer experience and qualifications; certified inspector experience and qualifications) and the requirements in § 245.105 (relating to certification examinations).

(2) The applicant shall [~~document current~~] CERTIFY COMPLETION OF safety training which is appropriate for the certification category. Training must be in accordance with regulatory requirements and industry standards and procedures such as Occupational Safety and Health Administration requirements in 29 CFR 1910 (relating to occupational and health standards for industry).

[(2)] (3) ***

[(3) Have been actively involved in tank handling or inspection activities in each individually certified category during the previous 3-year period immediately prior to submitting the renewal application for certification or take the technical module examinations again for all inactive certification categories and achieve a passing grade as described in § 245.105(d) (relating to certification examinations).]

[(b)] (h) ***

* * * * *

[(c)] (i) Certified installers or certified inspectors required to amend their certifications in accordance with subsection **[(b)](h)(1)** or (3) shall apply for amendment on a form provided by the Department.

[(d)] (j) Certified installers or certified inspectors required to amend their certifications in accordance with subsection **[(b)] (h)(2)** shall comply with the applicable requirements of this chapter related to application, experience, qualifications and examination.

COMPANY CERTIFICATION

§ 245.121. Certification of companies.

[After March 23, 1992 a] A company may not **[perform or]** employ a certified installer or certified inspector to perform tank handling, **tightness testing** or inspection activities unless the company holds a valid certification issued by the Department under this chapter and the company verifies that the certified installer or certified inspector holds a valid certification issued under this chapter for the appropriate category.

§ 245.122. Applications for company certification.

(a) Applications for certification shall be submitted to the Department on forms provided by the Department and **[shall]** include information that will enable the Department to determine if issuance of the certification **[shall conform] conforms** to **[the requirements of]** the act and this chapter. The following information shall be included:

* * * * *

(3) **[A summary of the previous tank handling and inspection activities performed by the company and the officers of the company over the 7-year period immediately preceding the application.] Information on previous certification revocations under §§ 245.109 and 245.124 (relating to revocation of certification; and revocation of company certification) of company officers, the company and the company under a previous or fictitious name.**

* * * * *

(c) **The Department may not issue company certification if one or more of the following apply:**

- (1) **The company is found to be in violation of the act or this chapter.**
- (2) **The company certification was previously revoked under § 245.124.**
- (3) **An officer of the company has had their individual certification revoked under §245.109.**
- (4) **An officer of the company was an officer in a company whose company certification was revoked under §245.124 at the time the conduct resulting in**

revocation occurred.

§ 245.123. Suspension of company certification.

(a) The Department may suspend the certification of a certified company for good cause, which includes, but is not limited to:

* * * * *

(4) A violation of The Clean Streams Law, Air Pollution Control Act or the Solid Waste Management Act or regulations promulgated thereunder by the company or a certified installer or a certified inspector employed by the company which results in the following:

* * * * *

(6) Failure to provide oversight of employee certification applications, tank handling and inspection reports.

(7) Submission of false information to the Department or tank owner.

(8) Failure to have a properly certified installer in direct onsite supervision and control of a tank handling activity.

(b) A certified company shall surrender certification documents to the Department upon notification of suspension.

(c) The Department may reinstate the certification if the following apply:

* * * * *

[(c)] (d) Suspension of a certification by the Department shall prevent a company from conducting tank handling, tightness testing or inspection activities during the suspension.

§ 245.124. Revocation of company certification.

(a) The Department may revoke the certification of a certified company for one or more of the following conditions:

* * * * *

(4) Willfully submitting false information to the Department.

(b) Revocation of a certification by the Department shall prevent a company from conducting tank handling, **tightness testing** or inspection activities.

(c) A certified company shall surrender certification documents to the Department upon notification of revocation.

§ 245.125. Renewal and amendment of company certification.

(a) Company certification shall be for 3 years from the date of issuance unless suspended or revoked before that date. An applicant for renewal shall submit a completed application for renewal to the Department [at least] **60 to** 120 days prior to the [renewal] **expiration** date.

(b) A certified company shall notify the Department and file an amendment to its company certification on a form approved by the Department whenever there is a change in the information provided in the application for the certification. **This form shall be submitted within 14 days of the date of a change in information.**

STANDARDS FOR PERFORMANCE

* * * * *

§ 245.132. Standards of performance.

(a) Certified companies, certified installers and certified inspectors shall:

(1) Maintain [**manufacturers, American Society of Nondestructive Testing (ASNT), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), Underwriters Laboratory (UL), Petroleum Equipment Institute (PEI), EPA and Department]** current technical and administrative specifications and manuals, **Nationally recognized codes and standards, and State and Federal regulations** which pertain to the categories for which certification was issued. [This material is available from the following sources:] **Nationally recognized organizations are identified in §§ 245.405, [245.505] 245.504 and 245.604 (relating to codes and standards; [applicability;] and referenced organizations).**

(i) **American Society of Nondestructive Testing, 1711 Arlingate Lane, Post Office Box 28518, Columbus, Ohio 43228-0518.**

(ii) **American Petroleum Institute, 2535 One Main Place, Dallas, TX 75202-3904.**

(iii) **American Society of Mechanical Engineers, 345 East 47th Street, New York, NY 10017.**

(iv) **Underwriters Laboratory, Suite 400, 818 Eighteenth Street, N.W., Washington D.C. 20006.**

(v) **Petroleum Equipment Institute, Post Office Box 2380, Tulsa, Oklahoma 74101.**

(vi) **Environmental Protection Agency, Region III, UST/LUST Section (3HW63), 841 Chestnut Building, Philadelphia, Pennsylvania 19107.**

(vii) **Department of Environmental Protection, Division of Storage Tanks, 400**

Market Street, Post Office Box 8762, Harrisburg, Pennsylvania 17105-8762.]

(iv) (2) Complete and [file with] submit TO THE DEPARTMENT, within 60 days of the INSPECTION activity OR 30 DAYS OF A TANK HANDLING ACTIVITY, [to the Department {on} a DEPARTMENT APPROVED form[,] [provided by the Department,] [a certification] certifying that the tank handling activity or inspection activity conducted by the certified installer or certified inspector meets the requirements of the act and this [part] chapter and accurately describes the conditions of the storage tank system and facility.

FOR TANK HANDLING ACTIVITIES INVOLVING MULTIPLE CERTIFIED INDIVIDUALS AND CERTIFICATION CATEGORIES, THE TANK HANDLING REPORT SHALL BE SUBMITTED WITHIN 30 DAYS OF THE COMPLETION OF ALL PROJECT TANK HANDLING AND INSPECTION ACTIVITIES.

(3) Maintain complete records of tank handling and inspection activities, nondestructive examination and testing results and tightness testing records for a minimum of 10 years.

* * * * *

(6) Not affix the certified installer's or certified inspector's signature or certification number to documentation concerning the installation or inspection of a component of a storage tank system project or to documentation concerning tank handling or inspection activity, unless:

* * * * *

(iii) Installation or modification inspection activities were conducted on a large

or field constructed aboveground storage tank and the certified inspector was involved prior to the initiation of the project and was present at critical times, so that the inspector can reliably determine that the following requirements were met:

(A) Industry standards and project specifications were followed throughout the tank handling activity.

(B) Appropriate testing and non-destructive examinations were properly conducted.

(C) The tank is suitable for operational service.

* * * * *

(7) Not certify to an owner or operator or the Department that a storage tank system project or component thereof is complete unless it complies with the act or this chapter. Project certification applies to both certified activities and nontank handling activities that may have been performed as part of the project.

(8) Adhere to equipment manufacturer's instructions, accepted industry standards and applicable industry codes of practice when performing tank handling, tightness testing or inspection activities or other nontank handling activities on the project.

(9) Provide requested records and documentation to the Department under section 107(c) of the act (35 P.S. § 6201.107(c)).

(b) A certified installer or certified inspector shall display [his] a certification identification card or certificate upon request.

(c) A certified company is responsible for employees having appropriate safety and technical training. Certified companies, certified installers and certified inspectors shall adhere to health and safety procedures, such as those required by the

Federal Occupational Safety and Health Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH).

TRAINING APPROVAL

§ 245.141. Training approval.

* * * * *

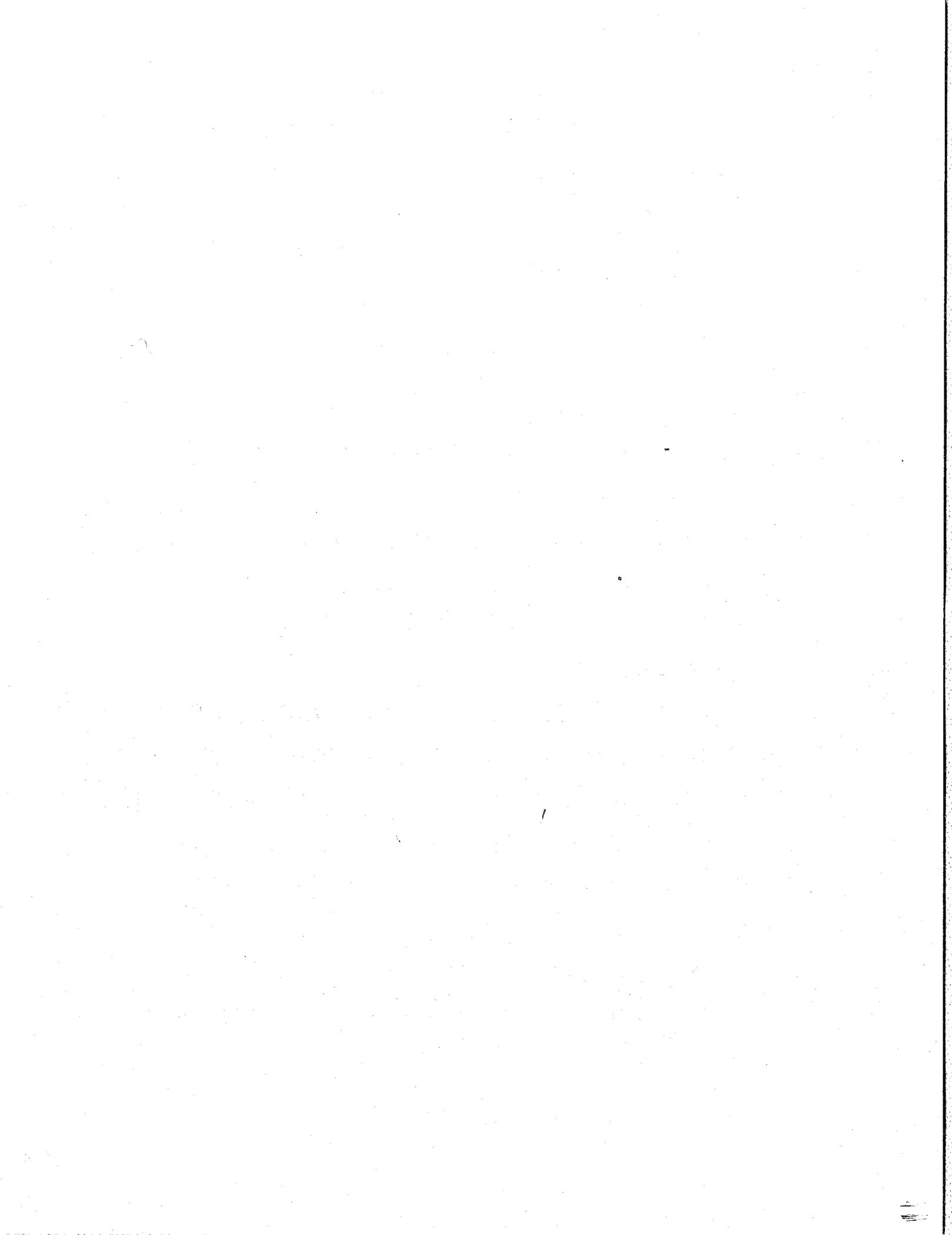
(c) Training approval shall be for 3 years from the date of issuance. An applicant for renewal shall submit a completed application for renewal to the Department **[at least] 60 to 120 days** prior to the **[renewal] expiration** date.

(d) **The Department may approve industry recognized training without the submission of an application as provided in subsection (a).**

§ 245.142. TRAINING COURSES.

(a) TECHNICAL TRAINING FOR INITIAL CATEGORY-SPECIFIC CERTIFICATION IN § 245.111 (RELATING TO CERTIFIED INSTALLER EXPERIENCE AND QUALIFICATIONS) MUST BE BASED ON NATIONALLY RECOGNIZED CODES AND STANDARDS IN CONJUNCTION WITH MANUFACTURERS SPECIFICATIONS.

(b) TECHNICAL TRAINING FOR RENEWAL OF CATEGORY-SPECIFIC CERTIFICATION IN § 245.114 (c) (RELATING TO RENEWAL AND AMENDMENT OF CERTIFICATION) MUST AT A MINIMUM REVIEW THE TECHNICAL AND REGULATORY MATERIAL APPROPRIATE FOR THE CERTIFICATION CATEGORY.



**Subchapter C. PERMITTING OF UNDERGROUND AND
ABOVEGROUND STORAGE TANK SYSTEMS AND FACILITIES**

GENERAL

* * * * *

§ 245.203. General requirements for permits.

(a) Except as provided in subsections (b)–(d), a person may not operate an aboveground or underground storage tank system or storage tank facility, or install a storage tank system or facility covered by § 245.231 (relating to scope), unless the person has first applied for and obtained a permit for the activity from the Department under this subchapter.

(b) A person is not required to submit **[an] a separate** application for a permit if the storage tank system is subject to a permit-by-rule **[, if the person maintains and operates the].** The storage tank system **must be registered with the Department in accordance with the requirements in Subchapter A (relating to general provisions) and must be maintained and operated** in compliance with the standards and requirements of the Department under the act and this chapter. Failure to comply with standards could result in administrative or other Departmental actions against the storage tank owner/operator.

(c) A person may continue to operate an existing storage tank system, **registered with the Department on or before October 11, 1997, when the tank system is operated** for its intended use, until the Department notifies the person to submit a permit application under this subchapter **or the Department notifies the person the tank system is deemed permitted**, if the person maintains and operates the storage tank system in compliance with the act and this chapter.

(d) Operation of existing storage tank systems will be allowed to continue until the Department takes final action on the permit application requested in subsection (c) or the Department notifies the [owner/operator] PERSON that the tank system is deemed permitted OR THAT THE PERMIT IS WITHHELD OR DENIED.

(e) Operating permits will be renewed automatically on an annual basis concurrent with registration. There will be no additional fee or paperwork required beyond the registration requirements [~~established in Subchapter A~~].

(f) THE DEPARTMENT WILL AUTOMATICALLY WITHHOLD OR WITHDRAW THE OPERATING PERMIT FOR A STORAGE TANK THAT IS REPORTED UNDER § 245.41 (RELATING TO TANK REGISTRATION REQUIREMENTS) IN TEMPORARY CLOSURE OR TEMPORARY REMOVAL FROM SERVICE (OUT-OF-SERVICE) STATUS. THE DEPARTMENT MAY RENEW THE PERMIT WHEN AN AMENDED REGISTRATION FORM IS RECEIVED SHOWING THE TANK RETURNING FROM TEMPORARY CLOSURE OR TEMPORARY REMOVAL FROM SERVICE STATUS TO AN OPERATING STATUS.

(g) A STORAGE TANK SYSTEM MAY NOT BE OPERATED IF THE DEPARTMENT SUSPENDS, REVOKES OR DENIES THE TANK OPERATING PERMIT. A PERSON MAY NOT DELIVER OR PLACE A REGULATED SUBSTANCE IN A STORAGE TANK IF THE DEPARTMENT SUSPENDS, REVOKES OR DENIES THE TANK OPERATING PERMIT.

* * * * *

GENERAL OPERATING PERMITS

§ 245.221. **Scope.** Storage tank systems not covered by § 245.211 (relating to scope) are subject to general operating permits.

§ 245.222. **Application requirements.**

Applications for a general operating permit shall be submitted on a Department form. The application [shall] **must** certify the following:

(1) General requirements for all storage tank systems are as follows:

(i) The storage tank system is properly registered.

(ii) Tank handling and inspection activities are performed by Department certified individuals, as specified in **§ 245.21 (relating to tank handling and inspection requirements) and Subchapter B (relating to certification program for installers and inspectors of storage tanks and storage tank facilities).**

(iii) The storage tank system is in compliance with applicable administrative, technical and operational requirements as specified in Subchapter E [or], Subchapter F **or Subchapter G (relating to technical standards for underground storage tanks; [and] technical standards for aboveground storage tanks and facilities; and simplified program for small aboveground storage tanks).**

* * * * *

SITE SPECIFIC INSTALLATION PERMITS

§ 245.231. **Scope.**

(a) Site specific installation permits are required prior to the construction,

reconstruction or installation of one or more of the following:

(1) New aboveground storage tank systems with a capacity greater than 21,000 gallons at an existing large aboveground storage tank facility.

(2) New large aboveground storage tank facilities.

(3) New highly hazardous substance tank systems.

(4) New underground field constructed storage tank systems.

(b) Site specific installation [permits] **permit applications** meeting the requirements in §§ 245.232(a)(1) and (2) and 245.236 (relating to general requirements; and public notice) are required **to be approved** prior to [the] construction, reconstruction or installation [of one or more of the following:]. **Additional application requirements include the following:**

(1) [New underground field constructed storage tank systems.] **Large aboveground storage tank system at a new facility or existing small aboveground tank facility require compliance with § 245.232(a)(3) and (4) and (b) (relating to general requirements).**

(2) [New underground highly hazardous substance tanks.] **Large aboveground storage tank system at an existing large aboveground storage tank facility on new location require compliance with § 245.232(a)(3) and (b).**

(3) [New small aboveground highly hazardous substance tanks.] **Large aboveground storage tank system at an existing large aboveground storage tank facility on the footprint of previous aboveground storage tank system require compliance with § 245.232(b) and § 245.234(b) (relating to siting requirements).**

(4) Small aboveground storage tank systems at a new large aboveground storage tank facility require compliance with § 245.232(a)(3) and (b).

(c) If the facility owner or operator can demonstrate that, on [October 11, 1997, either construction has commenced or the owner/operator has entered into contractual agreements for construction of a new storage tank or facility covered by this section] or before _____, *(Editor's Note: The blank refers to the effective date of adoption of this regulation.)* **construction has commenced on an aboveground storage tank with a capacity greater than 30,000 gallons used or to be used for storing heating oil for consumptive use on the premises OR ON A TANK REGULATED DUE TO THE ADDITION OF NEW REGULATED SUBSTANCES DEFINED IN § 245.1 (RELATING TO DEFINITIONS) (SEE "REGULATED SUBSTANCE" (i)(C)(I) AND (II)), the requirements of this section will not apply.**

§ 245.232. General requirements.

* * * * *

(c) Applications for site specific installation permits shall be accompanied by the proper fee required by section 304(c) of the act (35 P.S. § 6021.304(c)) for aboveground storage tanks and section 504(c) of the act (35 P.S. § 6021.504(c)) for underground storage tanks.

* * * * *

§245.234. Siting requirements.

(a) The Department will not issue a site specific storage tank system or facility

installation permit if:

* * * * *

(3) The Department determines that construction design criteria or engineering specifications submitted by a professional engineer are not in accordance with generally accepted sound engineering practices or existing conditions at the site require mitigation to properly support the tank systems and the applicant's proposed mitigation actions are not deemed adequate.

(b) The applicant shall provide the following additional information if appropriate:

* * * * *

(3) A professional engineer's construction design criteria and engineering specifications necessary to mitigate surface or subsurface conditions which may result in excessive tank system settlement or unstable support of the applicant's proposed tank systems.

§ 245.235. Environmental assessment.

(a) An application for a site specific permit shall include an environmental assessment on a form prescribed by the Department.

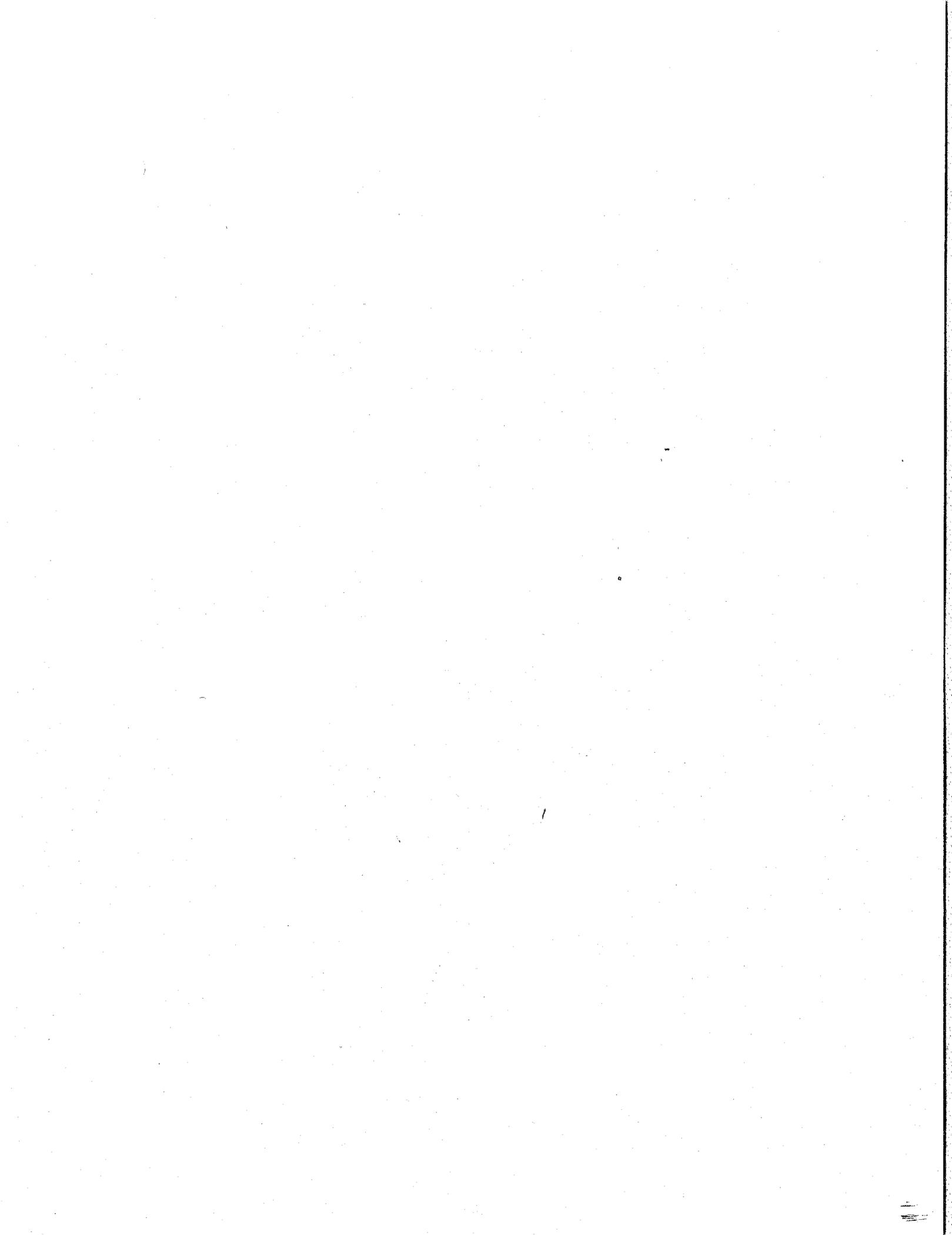
(b) An environmental assessment in a permit application **[shall] must** include detailed analysis of the potential impact of the proposed facility on the environment, public health and public safety, including air quality, water quality, threatened or endangered species and water uses. The applicant shall consider environmental features such as recreational river corridors, State and Federal parks, historic and archaeological sites, National wildlife refuges, State and Federal natural areas, prime farmland,

wetlands, special protection watersheds designated under Chapter 93 (relating to water quality standards), public water supplies and other features deemed appropriate by the Department or the applicant.

(c) The Department [, **after consultation with appropriate governmental agencies and potentially affected persons,**] will evaluate the assessment provided under subsection (a) to determine whether the proposed operation has the potential to cause environmental harm. **The Department will consult with appropriate governmental agencies and potentially affected persons concerning potential environmental harm.** If the Department determines that the proposed operation has that potential, it will notify the applicant in writing.

(d) If the Department or the applicant determines that the proposed operation may cause environmental harm, the applicant shall provide the Department with a written explanation of how it plans to mitigate the potential harm.

* * * * *



**Subchapter D. CORRECTIVE ACTION PROCESS FOR
OWNERS AND OPERATORS OF STORAGE TANKS AND STORAGE
TANK FACILITIES AND OTHER
RESPONSIBLE PARTIES**

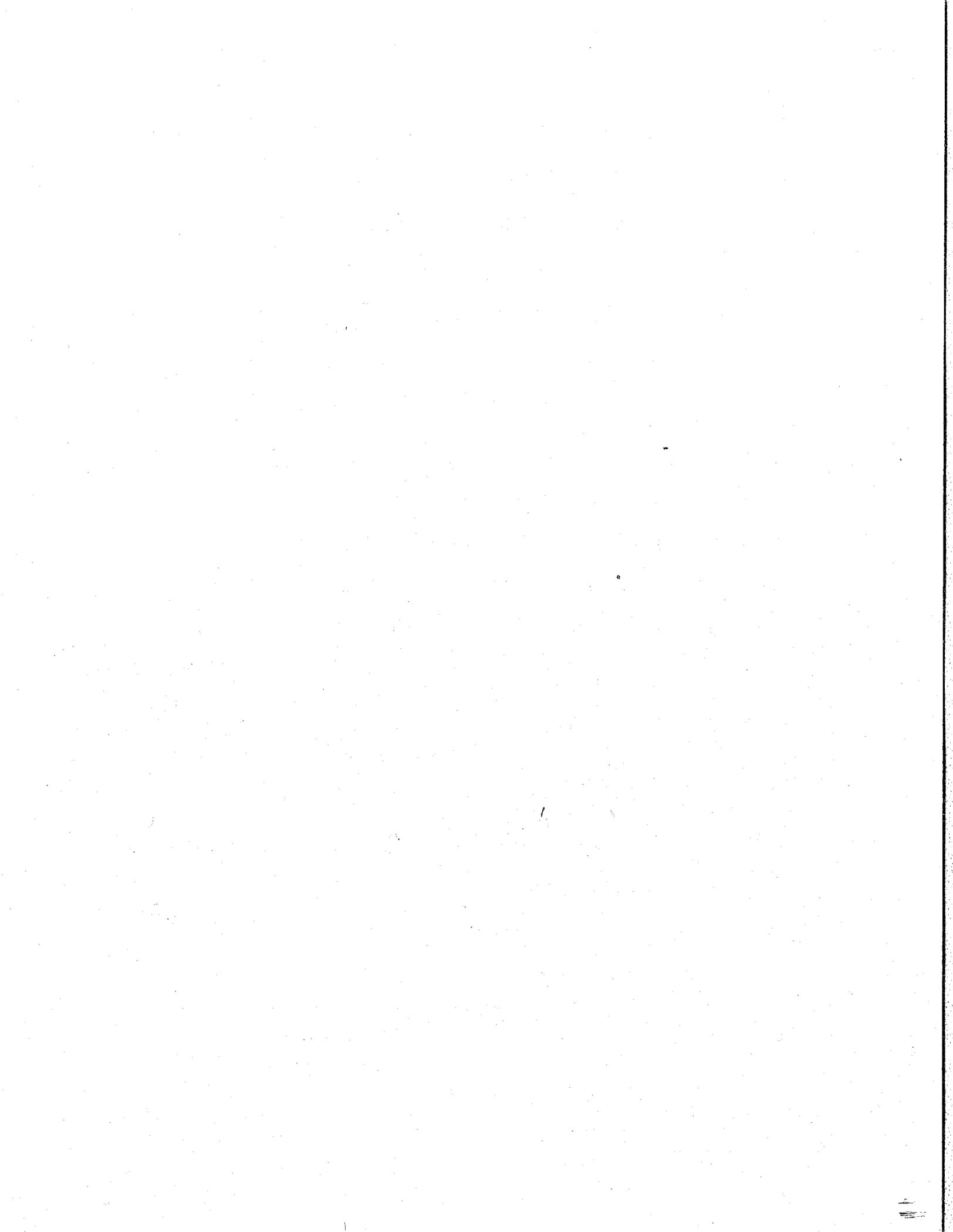
* * * * *

§ 245.311. Remedial action plan.

(a) Unless a site characterization report is submitted in accordance with § 245.310(b) (relating to site characterization report), the responsible party shall prepare and submit to the Department within 45 days of submission of a site characterization report required by § 245.310(a) selecting the background or Statewide health standard, within 45 days of deemed approval or receipt of a written approval of a site characterization report selecting the site-specific standard or within an alternative time frame as determined by the Department, two copies of a remedial action plan prior to implementation of the remedial action plan. The remedial action plan **[shall] must** be complete and concisely organized and **[shall]** contain the following elements, as necessary, based on the nature, extent, type, volume or complexity of the release:

- (1) A brief summary of the site characterization report conclusions.
- (2) A copy of the plans relating to worker health and safety, management of wastes generated and quality assurance/quality control procedures, as they relate to the remedial action, if different from the plans submitted in accordance with § 245.310(a)~~[(27)]~~(25).

* * * * *



**Subchapter E. TECHNICAL STANDARDS FOR UNDERGROUND
STORAGE TANKS**

GENERAL

* * * * *

§ 245.403. Applicability.

* * * * *

(c) *Temporary exclusions. Existing tanks that become regulated due to the addition of new regulated substances in § 245.1 ((relating to definitions) (See the definition of “regulated substance” (i)(C)(I) [~~—(H)] AND (II))~~) are subject to this [subsection] CHAPTER and shall be registered with the Department by*

_____ (*Editors Note: The blank refers to a date 60 days after the effective date of adoption of this regulation.*). In addition, these tanks are temporarily excluded from the requirements of §§ 245.421, 245.422, 245.431, 245.432 and 245.441 – 446, [respectively,] until _____ (*Editors Note: The blank refers to a date three years after the effective date of adoption of this regulation.*).

§ 245.404. Variances.

When unique or peculiar circumstances make compliance with this subchapter technically **impractical**, infeasible or unsafe, the Department may, upon written application from the owner/operator of a storage tank system subject to this subchapter, grant a variance from one or more specific provisions of this subchapter:

- (1) A variance may only be granted when the storage tank system meets alternative

technical standards that fully protect human health and the environment.

(2) A written application for a variance shall be submitted to the Department and provide the following information:

(i) The facility name and identification number for which the variance is sought.

(ii) The specific sections of this subchapter from which a variance is sought.

(iii) The unique or peculiar conditions which make compliance with the sections identified in subparagraph (ii) technically **impractical**, infeasible or unsafe.

(iv) Evidence, including plans, specifications and test results, which supports an alternative design, practice, schedule or method as being no less protective of human health and the environment than the requirements of the sections identified in subparagraph (ii).

(3) **New technologies may be granted a variance. New technologies must be reviewed and [appropriately] documented by a professional engineer and documentation provided to the Department with the variance request.**

(4) When granting the variance, the Department may impose specific conditions necessary to ensure the adequate protection of human health and the environment.

(5) The Department will provide to the applicant a written notice of approval, approval with additional conditions or denial. Granted variances will be published in the *Pennsylvania Bulletin*.

(6) The Department may not grant any variance which would result in regulatory controls less stringent than other applicable Federal or State regulations, **SUCH AS 37**

Pa. Code Part I, Subpart B (RELATING TO FLAMMABLE AND COMBUSTIBLE LIQUIDS) AND 40 CFR Part 280 (RELATING TO TECHNICAL STANDARDS AND CORRECTIVE ACTION REQUIREMENTS FOR OWNERS AND OPERATORS OF UNDERGROUND STORAGE TANKS (UST)).

§ 245.405. Codes and standards.

[All regulated underground storage tank systems shall comply with applicable industry codes. By policy, the Department can recognize industry codes and practices which can be used to comply with this chapter. A list of industry codes and practices which may be used to comply with this subchapter may be obtained from the Department.]

(a) The following [] NATIONALLY RECOGNIZED associations and their codes and standards shall be used in conjunction with manufacturer's specifications to comply with this subchapter.

- (1) American Concrete Institute (ACI)**
- (2) American National Standards Institute (ANSI)**
- (3) American Petroleum Institute (API)**
- (4) American Society for Testing and Materials (ASTM)**
- (5) Association of Composite Tanks (ACT)**
- (6) Fiberglass Petroleum Tank and Pipe Institute**
- (7) NACE International – The Corrosion Society (NACE)**

(8) National Fire Protection Association (NFPA)

(9) National Leak Prevention Association (NLPA)

(10) Petroleum Equipment Institute (PEI)

(11) Steel Tank Institute (STI)

(12) Underwriters Laboratory (UL)

(b) The most current or latest edition of the codes and standard shall be applied when used to meet the technical standards and requirements of this subchapter.

Other Nationally recognized associations and their codes and standards not referenced in this part may also be used to comply with this subchapter, when [appropriate] APPROVED BY THE DEPARTMENT.

(c) When Nationally recognized codes and standards or manufacturer's specifications are updated, facilities or storage tank systems installed to previously existing standards prior to the update will not automatically be required to be upgraded to meet the new standards, UNLESS SPECIFICALLY REQUIRED IN THE REVISED STANDARDS OR BY THE DEPARTMENT.

(d) Regulatory requirements shall prevail over Nationally recognized codes and standards whenever there is a conflict.

FACILITY INSPECTIONS

§ 245.411. Inspection frequency.

(a) *Inspection of tanks.* Underground storage tank owners or operators shall have their underground storage tank facility inspected by a certified inspector at the frequency established in subsections (b)–(d). The inspection shall include, but not be limited to, **[leak] release** detection, assessment of the underground **storage** tank system and ancillary equipment, **operation of overfill and spill prevention equipment where practicable, corrosion protection testing, or verification that corrosion protection is functional,** and release prevention measures.

(b) *Initial inspections.*

(1) **[Tank] Storage tank** facilities with tank systems installed prior to December 1989, shall be inspected prior to October 11, 1999 **[whichever date is later]**.

(2) **[Tank] Newly installed storage tank** systems **[installed after October 11, 1997,]** shall be inspected **[within] between 6 to 12 months [of] after** installation. If the facility ownership changes, an inspection of the facility shall be completed **[within] between** the first **6 to 12** months of operation **unless another time frame is agreed to by the Department.**

(3) **[Tank] STORAGE TANK** facilities not inspected in accordance with paragraph (1) or (2) shall have an initial inspection by October 11, 2002.

(c) *Subsequent routine facility inspections.*

(1) **[Subsequent] THE INTERVAL BETWEEN SUBSEQUENT ROUTINE** facility inspections shall **~~[be conducted at least once every]~~ NOT EXCEED [5] 3 years (36 months)** commencing after the last inspection, except as provided **IN THE PHASE-IN PERIODS** in paragraph (2).

(2) [Facilities with total secondary containment of both piping and the tank shall be inspected at least once every 10 years commencing from the date of the last inspection.] ON _____ (Editor's Note: The blank refers to the effective date of adoption of this regulation.) , EXISTING FACILITIES WITH ROUTINE INSPECTIONS SCHEDULED MORE THAN 3 YEARS FROM THIS DATE SHALL BE INSPECTED BY THE FOLLOWING DATES, UNLESS NOTIFIED OTHERWISE BY THE DEPARTMENT:

(i) BEFORE AUGUST 8, 2008 IF CURRENTLY SCHEDULED FOR INSPECTION BETWEEN _____ (Editor's Note: The blank refers to a date 3 years after the effective date of adoption of this regulation.) AND AUGUST 7, 2011, INCLUSIVE.

(ii) BEFORE AUGUST 8, 2009 IF CURRENTLY SCHEDULED FOR INSPECTION BETWEEN AUGUST 8, 2011 AND AUGUST 7, 2013, INCLUSIVE.

(iii) BEFORE AUGUST 8, 2010 IF CURRENTLY SCHEDULED FOR INSPECTION AFTER AUGUST 7, 2013.

(d) *Additional inspections and mandatory training.* Inspections in addition to those in subsections (b) and (c) may be [requested in writing] required by the Department when the prior inspection determined release detection [or] , corrosion protection OR OPERATIONAL violation(s) occurred, or when the Department determines the inspections are necessary to verify compliance with this subchapter. The Department may require facility owners and operators to successfully complete a release detection or operator [maintenance] training course, SUCH AS THOSE OFFERED

BY PEI OR PROFESSIONAL INDUSTRY TRAINERS APPROVED UNDER § 245.141 (RELATING TO TRAINING APPROVAL), when related violations are documented through an inspection. THE OWNER OR OPERATOR SHALL INCUR THE COSTS OF THE TRAINING.

**UNDERGROUND STORAGE TANK SYSTEMS: DESIGN, CONSTRUCTION,
INSTALLATION AND NOTIFICATION**

§ 245.421. Performance standards for [new] underground storage tank systems.

(a) New underground storage tank systems.

(1) Underground storage tank systems installed OR REPLACED after _____

(Editor's Note: The blank refers to the effective date of adoption of this regulation.)

must have total secondary containment, which consist of double-walled tanks, double-walled piping (FOR PIPING THAT ROUTINELY CONTAINS AND CONVEYS REGULATED SUBSTANCES (PRODUCT)) and liquid-tight containment sumps [,]. THE SUMPS MUST BE INSTALLED AT PIPING CONNECTIONS THAT ROUTINELY CONTAIN AND CONVEY PRODUCT FROM THE TANK, SUCH AS [~~tank manway riser~~] TANK-TOP sumps and dispenser pan sumps, that allow for release detection monitoring of the system (SEE PEI RP 100). Also, NEW OR REPLACEMENT tank systems installed with pressurized PRODUCT piping systems must be equipped with automatic line leak detectors AND AUTOMATIC PUMP SHUTOFF DEVICES that meet the requirements of § 245.445(1) (relating to methods of release detection for piping).

(2) At least 30 days prior to the installation of a new OR REPLACEMENT tank or [a-new] underground storage tank system INSTALLED AFTER _____
(Editor's Note: The blank refers to a date 60 days after the effective date of adoption of this regulation.), or within another reasonable time agreed upon by the Department, owners and operators shall notify the Department of the proposed installation on a form provided by the Department.

(3) An owner or operator of a tank system changing from unregulated to regulated service must provide certification [~~or documentation~~] BY A DEPARTMENT CERTIFIED INSTALLER OR INSPECTOR that the tank system meets new tank system requirements, USING THE REGISTRATION FORM (SEE § 245.41 (RELATING TO TANK REGISTRATION REQUIREMENTS)) PRIOR TO PLACING PRODUCT INTO THE TANK AND OPERATING THE STORAGE TANK SYSTEM.

(b) To prevent releases due to structural failure, corrosion or spills and overfills for as long as the underground storage tank system is used to store regulated substances, owners and operators of new **and existing** underground storage tank systems shall ensure that the system meets the following requirements:

(1) Tanks. A tank **[shall] must** be properly designed, and constructed. A tank or portion of a tank **including the outer metallic wall of a double-walled tank** that is underground and routinely contains product shall be protected from corrosion in accordance with a code of practice developed by a Nationally recognized association or independent testing laboratory, using one of the following methods:

(i) The tank is constructed of fiberglass-reinforced plastic.

(ii) The tank is constructed of steel and cathodically protected in the following manner:

(A) The tank is coated with a suitable dielectric material.

(B) Field-installed cathodic protection systems are designed by a corrosion expert.

(C) Impressed current systems are designed **[to] by a corrosion expert and** allow determination of current operating status as required in § 245.432(a)(3) (relating to operation and maintenance including corrosion protection).

(D) Cathodic protection systems are operated and maintained in accordance with § 245.432.

(iii) The tank is constructed of a steel-fiberglass-reinforced-plastic composite.

(iv) The tank is constructed of metal without additional corrosion protection measures if:

(A) The tank is installed at a site that is determined by a corrosion expert not to be corrosive enough to cause it to have a release due to corrosion during its operating life.

(B) Owners and operators maintain records that demonstrate compliance with clause (A) for the remaining life of the tank.

(2) *Piping.* The piping **and ancillary equipment** that routinely **[contains] contain** regulated substances shall be protected from **corrosion and** deterioration. **[Piping] New piping SYSTEMS that routinely [contains] CONTAIN AND CONVEY regulated substances FROM THE TANK must be double-walled with liquid-tight**

containment sumps and dispenser pan sumps installed in accordance with paragraph (4)(ii). Whenever more than [30%] 50% of the [system] EXISTING piping THAT ROUTINELY CONTAINS AND CONVEYS PRODUCT FROM THE TANK is replaced, the entire piping SYSTEM THAT ROUTINELY CONTAINS AND CONVEYS PRODUCT [for] FROM the tank [system] shall be replaced meeting the requirements [of] FOR NEW PIPING SYSTEMS IN this subsection. The portions of the PRODUCT piping system, including joints, flexible connectors and ancillary equipment that [is] are in contact with the ground [shall] must be properly designed, constructed and protected from corrosion in accordance with a code of practice developed by a Nationally recognized association or independent testing laboratory using one of the following methods:

- (i) The piping or component is constructed of nonmetallic material such as fiberglass reinforced plastic or other noncorrodible and UL listed material.
- (ii) The piping or component is constructed of [steel] metal and cathodically protected in the following manner:
 - (A) The piping is coated with a suitable dielectric material. The wrapping of piping with tape or similar material alone does not meet this requirement.
 - (B) Field-installed cathodic protection systems are designed by a corrosion expert.
 - (C) Impressed current systems are designed [to] by a corrosion expert and allow determination of current operating status as required in § 245.432(a)(3).
 - (D) Cathodic protection systems are operated and maintained in accordance with § 245.432.

(iii) The piping is constructed of metal without additional corrosion protection

measures if:

(A) The piping is installed at a site that is determined by a corrosion expert to not be corrosive enough to cause it to have a release due to corrosion during its operating life.

(B) Owners and operators maintain records that demonstrate compliance with clause (A) for the remaining life of the piping.

(3) *Spill and overfill prevention equipment.*

(i) Except as provided in subparagraph [(iii)] (iv), to prevent spilling and overfilling associated with product transfer to the underground storage tank system, owners and operators shall ensure that their systems have the following spill and overfill prevention equipment:

(A) Spill prevention equipment that will prevent release of product to the environment when the transfer hose is detached from the fill pipe—for example, a spill catchment basin **or spill containment bucket.**

(B) Overfill prevention equipment that will do one or more of the following:

(I) Automatically shut off flow into the tank when the tank is no more than 95% full.

(II) Alert the transfer operator when the tank is no more **[more]** than 90% full by restricting the flow into the tank or triggering a high-level alarm.

(III) Restrict flow 30 minutes prior to overfilling, alert the operator with a high level alarm 1 minute before overfilling, or automatically shut off flow into

the tank so that none of the fittings located on top of the tank are exposed to product due to overfilling.

(ii) Bypassing overfill protection is prohibited for example, bypassing the flow vent valve with coax vapor recovery or a spill bucket drain valve is prohibited.

(iii) **Ball float valves may not be used on suction pump systems having an air eliminator, or on any system having coaxial stage-1 vapor recovery systems or receiving pressurized pump deliveries.**

(iv) Owners and operators are not required to use the spill and overfill prevention equipment specified in subparagraph (i) if the underground storage tank system is filled by transfers of no more than 25 gallons at one time.

(4) *Installation.*

(i) Tanks and piping shall be properly installed and system integrity tested in accordance with a code of practice developed by a Nationally recognized association or independent testing laboratory such as API 1615 and PEI RP100, and in accordance with the manufacturer's instructions.

(ii) **Newly installed spill containment buckets, ~~[tank riser]~~ TANK-TOP sumps, dispenser pans and containment sumps must be constructed to be liquid-tight, and shall be tested prior to use of the system to confirm liquid-tight construction using a hydrostatic test, vacuum test or other [appropriate] NATIONALLY RECOGNIZED LIQUID-TIGHT testing procedure OR METHOD RECOMMENDED BY THE CONTAINMENT EQUIPMENT MANUFACTURER.**

(iii) **Overfill prevention equipment shall be properly installed and tested in accordance with a code of practice developed by a Nationally recognized**

association, and in accordance with manufacturer's instructions. When ball float valves are used, the valve shall be installed with extractor fitting and ball floats must be readily accessible (not requiring excavation) for removal and operational verification.

[(5)] (c) *Certification of installation.* Owners and operators shall ensure that a certified installer has installed the tank system by providing a certification of compliance on an appropriate form provided by the Department.

§ 245.422. Upgrading of existing underground storage tank systems.

(a) *Alternatives allowed.* By December 22, 1998, existing underground storage tank systems shall comply with one of the following requirements:

(1) [~~New underground~~] **UNDERGROUND** storage tank system performance standards under § 245.421(b) (relating to performance standards for [new] underground storage tank systems).

(2) The upgrading requirements in subsections (b)—(d).

(3) Closure requirements under §§ 245.451—245.455 (relating to out-of-service underground storage tank systems and closure), including applicable requirements for corrective action under Subchapter D (relating to corrective action process for owners and operators of storage tanks and storage tank facilities and other responsible parties).

(b) *Tank upgrading requirements.* Steel tanks shall be upgraded to meet one of the following requirements in accordance with a code of practice developed by a Nationally recognized association or independent testing laboratory:

(1) *Interior lining.* A tank may **only** be upgraded by internal lining [if the] **prior to _____ (Editor's Note: The blank refers to the effective date of adoption**

of this regulation.) The following conditions [are] of existing lined tanks shall be met:

(i) The lining [is] was installed in accordance with § 245.434 (relating to repairs allowed).

(ii) Within 10 years after lining, and every 5 years thereafter, the lined tank is internally [inspected] evaluated by, or under the direct on-site supervision of a certified tank liner (TL) or by a professional engineer adhering to the evaluation process developed by a National association (SEE API 1631 AND NLPA 631) and found to be structurally sound with the lining still performing in accordance with original design specifications. The evaluation findings shall be documented on a form approved by the Department and shall be maintained at the facility for the duration of the tank's operating life.

(iii) Lined tank systems that do not meet original design specifications or have not been evaluated as required in subparagraph (ii) above shall be emptied [immediately], removed from service, and permanently closed in accordance with §§ 245.451 and 245.452 (relating to temporary closure, and permanent closure and changes-in-service).

* * * * *

(3) *Internal lining combined with cathodic protection.* A tank [may be] upgraded [by] prior to _____ (Editor's Note: The blank refers to the effective date of adoption of this regulation.) having both internal lining and cathodic protection [if] must meet the following [apply]:

(i) The lining [is] was installed in accordance with the requirements of § 245.434.

(ii) The cathodic protection system meets § 245.421(b)(1)(ii)(B)–(D).

(c) *Piping upgrading requirements.* Metal piping and fittings that routinely contain regulated substances and are in contact with the ground ~~[shall]~~ **must** be one or more of the following:

(1) Replaced with piping meeting the requirements of new piping in § 245.421(b)(2)(i) and (ii).

(2) Cathodically protected in accordance with a code of practice developed by a Nationally recognized association or independent testing laboratory and meets the requirements of § 245.421(b)(2)(ii)(B)–(D).

(3) Installed at a site that is determined to not be corrosive enough to cause a release due to corrosion for the remaining operating life of the piping under § 245.421(b)(2)(iii).

(d) *Spill and overfill prevention equipment.* To prevent spilling and overfilling associated with product transfer to the underground storage tank system, existing underground storage tank systems ~~[shall]~~ **must** comply with new underground storage tank system spill and overfill prevention equipment requirements in § 245.421(b)(3) **and (4)**.

~~[(c) *Release detection equipment.*~~

~~(1) **When release detection equipment is modified or replaced on an underground storage tank system greater than 3,000 gallons capacity, an automatic tank gauge certified in accordance with §245.441(a) (referring to general requirements for underground storage tank systems) must be installed as the release detection method unless interstitial monitoring is used for release detection in accordance with § 245.444 (7) (referring to release detection for tanks).**~~

~~(2) Underground storage tank systems using an interstitial monitor or an electronic line leak detection system in accordance with § 245.445(1) (relating to methods of release detection for piping), must upgrade from an alarm to a automatic pump shut-off device before _____ (Editor's Note: The blank refers to a date 2 years following the effective date of adoption of this proposal.).~~

~~(3) On an underground storage tank system, with a capacity greater than 3,000 gallons, mechanical line leak detection device that alerts the operator to the presence of a leak by slowing or restricting the flow of regulated substance to the dispenser, must be upgraded with an automatic line leak detection system with an automatic pump shut-off device meeting the requirements of § 245.445(1) before _____ (Editor's Note: The blank refers to a date 5 years following the effective date of adoption of this proposal.).]~~

(e) UNDER DISPENSER CONTAINMENT. WHEN A VERTICAL RISER, DISPENSER AND INTERCONNECTED PIPING AND FITTINGS ARE ADDED TO A STORAGE TANK SYSTEM OR REPLACED, THE DISPENSER MUST HAVE CONTAINMENT (LIQUID-TIGHT DISPENSER PAN) MEETING REQUIREMENTS IN § 245.421(b)(4)(ii).

§ 245.423. Registration requirements.

* * * * *

(f) Every owner, including a new owner of an existing tank system, shall [complete an amended registration form, provided by the Department, when one or more of the following conditions occur:] comply with tank registration requirements in Subchapter A (relating to general provisions).

- [(1) Change of tank ownership—new owner only.**
- (2) Installation of a new tank.**
- (3) Closure of a tank system or component.**
- (4) Change in tank system service such as, but not limited to, temporary closure or change to an unregulated substance.]**

* * * * *

§ 245.425. Reuse of removed tanks.

A storage tank removed from the ground may be reused as a regulated underground storage tank under the following circumstances:

- (1) [The tank is installed by a certified installer.**
- (2)] The tank [has been] was properly closed in accordance with § 245.452 (relating to permanent closure and changes-in-service) at the site where previously used.**
- (2) The tank is installed at the new site by a certified installer.**
- (3) The new installation meets the requirements of § [245.422 (relating to the upgrading of existing underground storage tank systems)] 245.421 (relating to performance standards for underground storage tank systems).**

* * * * *

- (5) Either the manufacturer, a person certified by the manufacturer or a registered professional engineer warrants that the tank meets the requirements of § 245.421(b)(1)[(a)] [(relating to performance standards for new underground storage tank systems)].**

GENERAL OPERATING REQUIREMENTS

§ 245.432. Operation and maintenance including corrosion protection.

(a) Owners and operators of steel underground storage tank systems with corrosion protection shall comply with the following requirements to ensure that releases due to corrosion are prevented for as long as the underground storage tank system is used to store regulated substances:

* * * * *

(3) Underground storage tank systems with impressed current cathodic protection systems shall be inspected or checked [by the operator] every 60 days to ensure the equipment is running properly. **As a minimum, the operator OR PERSON CONDUCTING THE 60-DAY CHECK shall document the date checked, annotate the system's functioning status, and for systems equipped with a direct current readout meter, record the amount of current indicated on the meter.**

(4) For underground storage tank systems using cathodic protection, records of the operation of the cathodic protection shall be maintained, in accordance with § 245.435 (relating to reporting and recordkeeping) to demonstrate compliance with the performance standards in this section. These records shall provide the following:

- (i) The results of the last three inspections required in paragraph (3).
- (ii) The results of testing from the last two inspections required in paragraph (2).

[(5)] (b) Monitoring and observation wells shall be clearly identified using industry codes and standards, and caps shall be secured to prevent unauthorized or accidental access.

[(6) Line] (c) Required equipment, including [~~but not limited to,~~] line leak detectors, product sensors and probes, dispenser pans, containment sumps, measuring devices (including gauge sticks), gauges, corrosion protection, spill prevention, overflow prevention and other appurtenances whose failure could contribute to a release of product, shall be maintained in a good state of repair **[and shall] to ensure they function as designed.**

(d) Tanks which have been lined and have not had corrosion protection added in accordance with §245.422(b)(2) shall have the lining evaluated BY, OR under the direct onsite supervision of, a TL certified tank installer or by a professional engineer.

(1) Evaluations shall adhere to an evaluation process developed by a National association identified in §245.405 (relating to codes and standards) (SEE API 1631 AND NLPA 631) as follows:

(i) Ten years after lining installation.

(ii) Every 5 years after the preceding evaluation.

(2) Each evaluation finding shall be documented on a form approved by the Department and shall be maintained at the facility for the duration of the tank's operating life.

(e) Lined tank systems that do not meet original design specifications or have not been evaluated as required in subsection (d) (1) and (2) shall be emptied [~~immediately~~], removed from service and permanently closed in accordance with §§ 245.451 and 245.452 (relating to temporary closure, and permanent closure and changes-in-service).

(f) Primary and secondary containment structure must be maintained in a leak free condition. If infiltration or a release is detected [~~in an interstee~~] WITHIN THE

SECONDARY CONTAINMENT, the defective component shall be repaired in accordance with § 245.434 (relating to repairs allowed). Repairs, including those performed to stop infiltration, shall be tested in accordance with § 245.434(5).

(g) A check for water in petroleum tanks shall be performed monthly and excess water shall be promptly removed as necessary. Water may not exceed the tank manufacturer's recommendations, PRODUCT SUPPLIER'S GUIDELINES, or ~~more than~~ 2 inches of accumulation in the bottom of the tank, whichever is less. NO AMOUNT OF WATER IS DESIRABLE IN GASOLINE CONTAINING ETHANOL. THEREFORE, WATER SHOULD NOT BE ALLOWED TO ACCUMULATE IN TANKS CONTAINING ETHANOL. Excess water shall be properly [] MANAGED in accordance with applicable State and Federal requirements, SUCH AS CHAPTER 299 (RELATING TO STORAGE AND TRANSPORTATION OF RESIDUAL WASTE), 40 CFR 261 Subpart B (RELATING TO HAZARDOUS WASTE IDENTIFICATION) AND 29 CFR 1910 (RELATING TO OCCUPATIONAL SAFETY AND HEALTH STANDARDS).

* * * * *

§ 245.434. Repairs allowed.

Owners and operators of underground storage tank systems shall ensure that repairs will prevent releases due to structural failure or corrosion as long as the underground storage tank system is used to store regulated substances. The repairs **[shall] must** meet the following requirements:

* * * * *

(5) Tanks, containment sumps, and piping repaired in response to a release shall be

tightness tested in accordance with §§ 245.444(3), 245.421(b)(4)(ii) and 245.445(2) (relating to methods of release detection for tanks; performance standards for underground storage tank systems and methods of release detection for piping), respectively, prior to placing the system back into service except as provided as follows:

(i) The repaired tank is internally inspected in accordance with a code of practice developed by a Nationally recognized association or an independent testing laboratory.

(ii) The repaired portion of the underground storage tank system is monitored monthly for releases in accordance with a method specified in § 245.444(4)–(9).

(iii) Another test method is used that is determined by the Department to be at least as protective of human health and the environment as those listed in subparagraphs (i) and (ii).

(6) Within 6 months following the repair of a cathodically protected underground storage tank system, the cathodic protection system shall be tested in accordance with §245.432(a)(2) and (3) (relating to operation and maintenance including corrosion protection) to ensure that it is operating properly.

(7) Underground storage tank system owners and operators shall maintain records of each repair including those in response to a release, for the remaining operating life of the underground storage tank system. **[that demonstrate compliance with this section.]**

§ 245.435. Reporting and recordkeeping.

(a) Owners and operators of underground storage tank systems shall cooperate fully

with inspections, monitoring and testing conducted by the Department, certified installers or certified inspectors, as well as requests for document submission, testing and monitoring by the owner or operator under section 107(c) of the act (35 P. S. § 6201.107(c)).

(b) Owners and operators shall maintain required records EITHER ONSITE AT THE UNDERGROUND STORAGE TANK FACILITY OR AT A READILY AVAILABLE ALTERNATIVE SITE. RECORDS MAINTAINED AT THE UNDERGROUND STORAGE TANK FACILITY SHALL BE IMMEDIATELY AVAILABLE FOR INSPECTION BY THE DEPARTMENT AND CERTIFIED INSPECTORS. If records are maintained offsite, the records shall be easily obtained and provided FOR INSPECTION OR FOR REVIEW BY THE DEPARTMENT upon request.

(1) *Reporting.* Owners and operators shall submit the following applicable information to the Department:

(i) Notification **in accordance with § 245.41 (relating to tank registration requirements)** for underground storage tank systems [(§ 245.423 (relating to registration requirements)), which includes], **including [but not limited to,] change of ownership, closure of a tank system, change of substance stored and change of tank status, and** certification of installation for new underground storage tank systems (§ 245.421 [(5)] (c) (relating to performance standards for [new] underground storage tank systems)).

(ii) Reports of confirmed, reportable releases (§ 245.305(d) (relating to reporting releases)).

(iii) A site characterization report (§ 245.310 (relating to site characterization report)).

(iv) Remedial action plans (§ 245.311 (relating to remedial action plan)), remedial action progress reports (§ 245.312 (relating to remedial action)) and remedial action completion reports (§ 245.313 (relating to remedial action completion report)).

(v) A notification before **INSTALLATION**, permanent closure or change-in-service **OF A STORAGE TANK OR STORAGE TANK SYSTEM (§ 245.421(a)(2) AND** (§ 245.452(a) (relating to permanent closure and changes-in-service)).

(vi) In the case of permanent closure, closure records to the Department when requested.

(2) **[Recordkeeping] Permanent recordkeeping.** Owners and operators shall maintain **records for new systems and available records for existing systems for the operational life of the tank system and retain the records for a minimum of 1 year after the tank system has been removed. Permanent records include** the following **[information]:**

(i) A corrosion expert's analysis of site corrosion potential if corrosion protection equipment is not used (§ 245.421**(b)(1)(iv) and (2)(iii) and § 422(b)(2)(iv) and (c)(3) (relating to upgrading of existing underground storage tank systems).**

(ii) **The corrosion expert's design of an impressed current system OR FIELD-INSTALLED CATHODIC PROTECTION SYSTEM OR SIMILAR INFORMATION [in accordance] THAT DEMONSTRATES COMPLIANCE with §§ 245.421(b)(2)(ii)(B) and 245.422(b)(2) and (c)(2).**

(iii) Documentation of tank system installation, system modification and tank upgrade activities.

(iv) Tank system assessment records prior to upgrading in accordance with §245.422(b).

(v) Documentation of [operation of corrosion protection equipment] the installation testing and commissioning reports required for corrosion protection systems by manufacturers and National standards in accordance with [(§ 245.432 (relating to operation and maintenance including corrosion protection))].

[(iii)] (vi) Documentation of underground storage tank system repairs **including those** in response to a release (§ 245.434(6) (relating to repairs allowed)).

(vii) ~~Documentation to demonstrate that containment sumps and dispenser pans installed or repaired after~~ *(Editor's Note: The blank refers to the effective date of adoption of this proposal)* were tested and verified to be liquid tight in accordance with § 245.421(b)(4) and § 245.434 (5).]

[(viii)] Tank lining evaluation reports (§ 245.432(d) (relating to lining evaluations)).

[(ix)] (viii) Documentation showing Department approval for a variance or alternate leak detection method (§§ 245.404 and 245.443 (relating to variances and hazardous substance underground storage tank systems)).

(3) Temporary records shall be maintained as follows:

(i) The current Storage Tank Registration/Permit Certificate.

[(iv) Current compliance with] (ii) Tank and pipe release detection [requirements] records for the past 12 months, including written certifications or performance claims for the release detections methods in use and documentation of

investigations of suspected releases (§§ 245.446 and 245.304 (relating to release detection recordkeeping and investigation of suspected releases)).

(iii) The last annual check/testing, and maintenance records of leak detection equipment including probes, monitors, line leak detectors, and automatic tank gauges that verify they are working properly and tested as required by the equipment manufacturers.

(iv) Documentation of the last two impressed current cathodic protection system inspection checks for each 60 day test period (§ 245.432 (relating to operation and maintenance including corrosion protection)).

(v) The last cathodic protection survey, done at 3-year intervals, on impressed current and galvanic cathodic protection systems in accordance with (§ 245.432).

[v] (vi) Results of the site investigation conducted at permanent closure or change-in-service (§ 245.455 (relating to closure records)).

[vi] (vii) A properly completed closure report required under [(§ 245.452(f) D)].

(viii) DOCUMENTATION OF THE LAST TEST THAT DEMONSTRATES EACH CONTAINMENT SUMP, DISPENSER PAN AND SPILL CONTAINMENT BUCKET INSTALLED OR REPAIRED AFTER

(Editor's Note: The blank refers to the effective date of adoption of this regulation.) WERE TESTED AND VERIFIED TO BE LIQUID-TIGHT IN ACCORDANCE WITH §§ 245.421(b)(4) AND 245.434 (5).

[(3) *Availability of records.* Owners and operators shall keep the records required at one of the following:

(i) At the underground storage tank site and immediately available for inspection by the Department and certified inspectors.

(ii) At a readily available alternative site and be provided for inspection to the Department upon request.]

RELEASE DETECTION

§ 245.441. General requirements for underground storage tank systems.

* * * * *

(c) Owners and operators of underground storage tank systems shall comply with the release detection requirements of this [subpart by December 22 of the year listed in the following table:] subchapter.

[SCHEDULE FOR PHASE-IN RELEASE DETECTION

Year When Release Detection is Required
(by December 22 of the year indicated)

Year System Was Installed	1989	1990	1991	1992	1993
Before 1965 or date unknown	RD	P			
1965-69		P/R			

	D		
1970-74	P	RD	
1975-79	P		RD
1980-88	P		RD

New tanks (after December 22, 1988) immediately upon installation.

= Shall begin release detection for all pressurized piping in accordance with § 245.442(2)(i) (relating to requirements for petroleum underground storage tank systems).

RD = Shall begin release detection for tanks and suction piping in accordance with §§ 245.442(1), (2)(ii) and 245.443 (relating to requirements for petroleum underground storage tank systems; and requirements for hazardous substance underground storage tank systems).]

(d) An existing tank system that cannot apply a method of release detection that complies with [the requirements of] this subchapter [shall] **must immediately EMPTY THE TANK AND** complete the closure procedures in §§ 245.451–245.455 (relating to out-of-service underground storage tank systems and closure) [by the date on which release detection is required for that underground storage tank system under subsection (c)].

(e) **For existing tank systems equipped with double-walled PRESSURIZED piping that routinely contains regulated substance, and containment sumps at the piping junctures and dispensers, the containment sumps [5] AND dispenser pan sumps [and piping interstices] of these systems shall be monitored monthly [where practicable] BEGINNING** *(Editor's Note: The blank refers to a date 2*

years after the effective date of adoption of this regulation.) and monthly MONITORING records maintained for the last 12 months of monitoring. MONITORING SHALL BE ACCOMPLISHED BY ONE OF THE FOLLOWING METHODS:

(1) MONTHLY VISUAL CHECK OF THE SUMPS.

(2) INTERSTITIAL MONITORING UNDER § 245.444(7) (RELATING TO METHODS OF RELEASE DETECTION FOR TANKS) (ALSO SEE SECONDARY CONTAINMENT – LIQUID SUMP SENSORS IN PEI RP 100).

§ 245.442. Requirements for petroleum underground storage tank systems.

(a) Owners and operators of underground storage tank systems installed after _____ (Editor's Note: The blank refers to the effective date of adoption of this regulation.) shall perform interstitial monitoring, at least once every 30 days, in accordance with § 245.444(7) (relating to methods of release detection for tanks) of both the tank and underground piping that routinely contains a product (regulated substance). In addition, pressurized piping for these systems must be equipped and operated with an automatic line leak detector with an automatic pump shut off device in accordance with § 245.445(1) (relating to methods of release detection for piping).

(b) Owners and operators of petroleum underground storage tank systems installed on or before _____ (Editor's Note: The blank refers to the effective date of adoption of this regulation.) shall provide release detection for tanks and piping as follows:

(1) Tanks. Tanks shall be monitored at least every 30 days for releases using one of

the methods listed in § 245.444(4)–(9) [(relating to methods of release detection for tanks)] except that:

(i) Underground storage tank systems that meet the performance standards in § 245.421 [or § 245.422] (relating to performance standards for [new] underground storage tank systems [; and upgrading of existing underground storage tank systems]), [and the may use monthly inventory control requirements in § 245.444(1) or (2), [may use] and tank tightness testing (conducted in accordance with § 245.444(3)) at least every 5 years until December 22, 1998, or until 10 years after the tank [is] was first installed or upgraded under § 245.422(b), [whichever is later] but not later than December 22, 2008.

(ii) Underground storage tank systems [that do not meet, the performance standards in § 245.421 or § 245.422 may use monthly inventory controls (conducted in accordance with § 245.444(1) or (2)) and annual tank tightness testing (conducted in accordance with § 245.444(3)) until December 22, 1998, when the tank shall be upgraded under § 245.422 or permanently closed under § 245.452 (relating to permanent closure and changes-in-service).] with a capacity of 1001 to 2,000 gallons may use manual tank gauging, conducted in accordance § 245.444(2) with and a tank tightness test at least every 5 years until *(Editor's Note: The blank refers to a date 10 years from the effective date of adoption of this regulation.)*.

(iii) Tanks with a capacity of 550 gallons or less may use manual tank gauging, conducted in accordance with § 245.444(2) as long as they continue to meet requirements of this subchapter.

(iv) Tanks with a capacity of 551 to 1,000 gallons using the longer test times specified may use manual tank gauging, conducted in accordance with § 245.444(2) as long as they continue to meet requirements of this subchapter.

~~[(v) Tank systems must meet the upgrade requirements of § 245.422(c) as appropriate.]~~

* * * * *

§ 245.444. Methods of release detection for tanks.

Each method of release detection for tanks used to meet the requirements of § 245.442 (relating to requirements for petroleum underground storage tank systems) shall be conducted in accordance with the following:

* * * * *

(3) *Tank tightness testing.* Tank tightness testing, or another test of equivalent performance, shall be capable of detecting a 0.1 gallon per hour leak rate from any portion of the tank that routinely contains product while accounting for the effects of thermal expansion or contraction of the product, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table. [When an appropriate automatic tank gauge is used to meet this requirement, the tank must be filled to the overfill set point.]

(4) *Automatic tank gauging.* Equipment for automatic tank gauging that tests for the loss of product and conducts inventory control shall meet one of the following requirements:

(i) The automatic product level monitor test can detect a 0.2 gallon per hour leak rate from any portion of the tank that routinely contains product.

(ii) For tank gauges installed prior to December 22, 1990, that do not meet the requirements of subparagraph (i), inventory control, or another test of equivalent performance, shall also be conducted in accordance with paragraph (1). **Tank gauges must be replaced or be certified BY AN INDEPENDENT THIRD PARTY VERIFYING THE GAUGE'S ABILITY TO DETECT THE LEAK RATE IN SUBPARAGRAPH (i) FOLLOWING EPA EVALUATION PROTOCOL BY _____ (Editor's Note: The blank refers to a date 1 year after the effective date of adoption of this regulation.)**

(5) *Vapor monitoring.* Testing or monitoring for vapors within the soil gas of the excavation zone [shall] **must** meet the following requirements:

* * * * *

(vi) In the underground storage tank excavation zone, the site is evaluated **by a LICENSED professional [geologist] UNDER THE ENGINEER, LAND SURVEYOR AND GEOLOGIST LAW (63 P.S. §§ 148-158.2)** to ensure compliance with [the requirements in] subparagraphs (i)– (iv) and to establish the number and positioning of monitoring wells that will detect releases within the excavation zone from any portion of the tank that routinely contains product. **The written site evaluation report authenticated by the person completing the evaluation must be maintained at the facility for the duration of the leak detection method.**

(6) *Groundwater monitoring.* Testing or monitoring for liquids on the groundwater [shall] **must** meet the following requirements:

(i) The regulated substance stored is immiscible in water and has a specific gravity of less than one.

(ii) Groundwater is never more than 20 feet from the ground surface and the hydraulic conductivity of the soils between the underground storage tank system and the

monitoring wells or devices is not less than 0.01 cm/sec—for example, the soil should consist of gravels, coarse to medium sands, coarse silts or other permeable materials.

(iii) The slotted portion of the monitoring well casing shall be designed to prevent migration of natural soils or filter pack into the well and to allow entry of regulated substances on the water table into the well under both high and low groundwater conditions.

(iv) Monitoring wells shall be sealed from the ground surface to the top of the filter pack.

(v) Monitoring wells or devices intercept the excavation zone or are as close to it as is technically feasible.

(vi) The continuous monitoring devices or manual methods used can detect the presence of at least 1/8 of an inch of free product on top of the groundwater in the monitoring wells.

(vii) Within and immediately below the underground storage tank system excavation zone, the site is evaluated **by a LICENSED professional [geologist] UNDER THE ENGINEER, LAND SURVEYOR AND GEOLOGIST LAW** to ensure compliance with subparagraphs (i)–(v) and to establish the number and positioning of monitoring wells or devices that will detect releases from any portion of the tank that routinely contains product. **The written site evaluation report authenticated by the person completing the evaluation must be maintained at the facility for the duration of the leak detection method.**

(viii) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering in accordance with § 245.432[(5)] (b).

(7) *Interstitial monitoring.* Interstitial monitoring between the underground storage tank system and a secondary barrier immediately around or beneath it may be used, but only if the system is designed, constructed and installed to detect a leak from any portion of the tank that routinely contains product and also meets one of the following requirements:

* * * * *

§ 245.445. Methods of release detection for piping.

Each method of release detection for piping used to meet the requirements of § 245.442 (relating to requirements for petroleum underground storage tank systems) shall be conducted in accordance with the following:

(1) *Automatic line leak detectors.* Methods which alert the operator to the presence of a leak by restricting or **automatically** shutting off the flow of regulated substances through piping or triggering an audible or visual alarm may be used only if they detect leaks of 3 gallons per hour at 10 pounds per square inch line pressure within 1 hour. An annual test of the operation of the leak detector shall be conducted in accordance with the manufacturer's requirements. **[Systems] UNDERGROUND STORAGE TANK SYSTEMS installed OR REPLACED after _____ (Editor's Note: The blank refers to the effective date of adoption of this regulation.) must [meet this requirement at installation. Systems installed on or before _____ (Editor's Note: The blank refers to the effective date of adoption of this proposal) that do not meet this requirement shall upgrade to] HAVE line leak detectors with an automatic pump shut-off device THAT SHUTS OFF THE FLOW OF REGULATED SUBSTANCES THROUGH PRESSURIZED PIPING THAT ROUTINELY CONTAINS AND CONVEYS PRODUCT FROM THE TANK [within the time frame specified in § 245.422(e) (relating to upgrading of existing underground storage tank systems)] (SEE § 245.421(a)(1) (RELATING TO PERFORMANCE STANDARDS FOR UNDERGROUND STORAGE TANK SYSTEMS)).**

* * * * *

**OUT-OF-SERVICE UNDERGROUND STORAGE TANK
SYSTEMS AND CLOSURE**

§ 245.451. Temporary closure (out-of-service).

(a) When an underground storage tank system is temporarily closed [, owners] (out-of-service), the owner shall complete and submit an amended registration form to the Department within 30 days in accordance with §245.41 (tank registration requirements).

(b) Owners and operators shall continue operation and maintenance of corrosion protection in accordance with § 245.432 (relating to operation and maintenance including corrosion protection), WHILE THE TANK IS TEMPORARILY OUT-OF-SERVICE, and release detection in accordance with §§ 245.441–245.446 (relating to release detection) UNTIL THE TANK IS EMPTY. [Subchapter D (relating to corrective action process for owners and operators of storage tanks and storage tank facilities and other responsible parties) shall be complied with if a release is suspected or confirmed.] [~~while the tank system is temporarily out-of-service.~~]
Records shall continue to be kept in accordance with § 245.435 (relating to REPORTING AND recordkeeping).

(c) Owners and operators shall [immediately] empty a tank being placed temporarily out-of-service WITHIN 30 DAYS OR PRIOR TO SUBMISSION OF THE REGISTRATION FORM TO THE DEPARTMENT, WHICHEVER OCCURS FIRST, UNLESS DIRECTED OTHERWISE BY THE DEPARTMENT.
Removed contents shall be reused, treated or disposed of in accordance with State

and Federal requirements, SUCH AS CHAPTER 299 (RELATING TO STORAGE AND TRANSPORTATION OF RESIDUAL WASTE) AND 29 CFR 1910 (RELATING TO OCCUPATIONAL SAFETY AND HEALTH STANDARDS).

Release detection is not required as long as the underground storage tank system is empty. The underground storage tank system is empty when all materials have been removed using commonly employed practices so that no more than 2.5 centimeters (1 inch) of residue, or 0.3% by weight of the total capacity of the underground storage tank system, remain in the system. **Owners and operators shall maintain release detection records [~~in accordance with~~] REQUIRED UNDER § 245.446(2) (relating to release detection recordkeeping) for the most recent 12-month period of active operation.**

(d) Subchapter D (relating to corrective action process for owners and operators of storage tanks and storage tank facilities and other responsible parties) shall be complied with if a release is suspected or confirmed.

(e) [~~Inspection~~] ROUTINE FACILITY INSPECTION requirements [~~shall be maintained as specified~~] AT 3-YEAR INTERVALS in § 245.411(c) (relating to inspection frequency) MAY BE DELAYED FOR A STORAGE TANK FACILITY WITH ALL TANK SYSTEMS TEMPORARILY CLOSED, UNLESS NOTIFIED OTHERWISE BY THE DEPARTMENT UNDER § 245.21(c) AND (d) (RELATING TO TANK HANDLING AND INSPECTION REQUIREMENTS). A DELAYED INSPECTION MUST BE PERFORMED ON A STORAGE TANK SYSTEM OR FACILITY IN TEMPORARY CLOSURE WHEN RETURNING THE TANK SYSTEM TO OPERATING STATUS.

[(b)] (f) When an underground storage tank system is temporarily closed for 3 months

or more, owners and operators shall also comply with the following requirements:

- (1) Vent lines shall be open and functioning.
- (2) All other lines, pumps, manways and ancillary equipment shall be capped and secure.

[c] (g) When an underground storage tank system is temporarily closed for more than 12 months, owners and operators shall **[permanently]**:

(1) **Permanently** close the underground storage tank system if it does not meet either performance standards in § 245.421 (relating to performance standards for ~~new~~ underground storage tank systems) for new underground storage tank systems or the upgrading requirements in § 245.422 (relating to upgrading of existing underground storage tank systems), except that the spill and overfill equipment requirements do not have to be met.

(2) Owners and operators shall permanently close the substandard underground storage tank systems at the end of this 12-month period in accordance with §§ 245.452–245.455, unless the Department provides an extension of the 12-month temporary closure period.

(3) Owners and operators shall complete a site assessment in accordance with § 245.453 (relating to assessing the site at closure or change-in-service) before an extension may be applied for.

(h) Underground storage tank systems that meet performance standards in § 245.421 (relating to performance standards for underground storage tank systems) or the upgrading requirements in § 245.422 (relating to upgrading of existing underground storage tank systems) shall be permanently closed within 3 years of

being placed temporarily out-of-service OR BY _____ (Editor's Note: The blank refers to a date 3 years after the effective date of adoption of this regulation.),

WHICHEVER IS GREATER, unless the Department grants an extension to this temporary closure period. THE DEPARTMENT MAY ESTABLISH CONDITIONS AND REQUIRE SUBMISSION OF DOCUMENTATION ASSOCIATED WITH EXTENSION OF THE TEMPORARY CLOSURE PERIOD, SUCH AS THE FOLLOWING:

(1) REQUIREMENTS FOR INSPECTION UNDER § 245.21 AND § 245.411.

(2) VERIFICATION AND TESTING OF CATHODIC PROTECTION SYSTEMS UNDER § 245.432.

(3) SITE ASSESSMENT UNDER § 245.453.

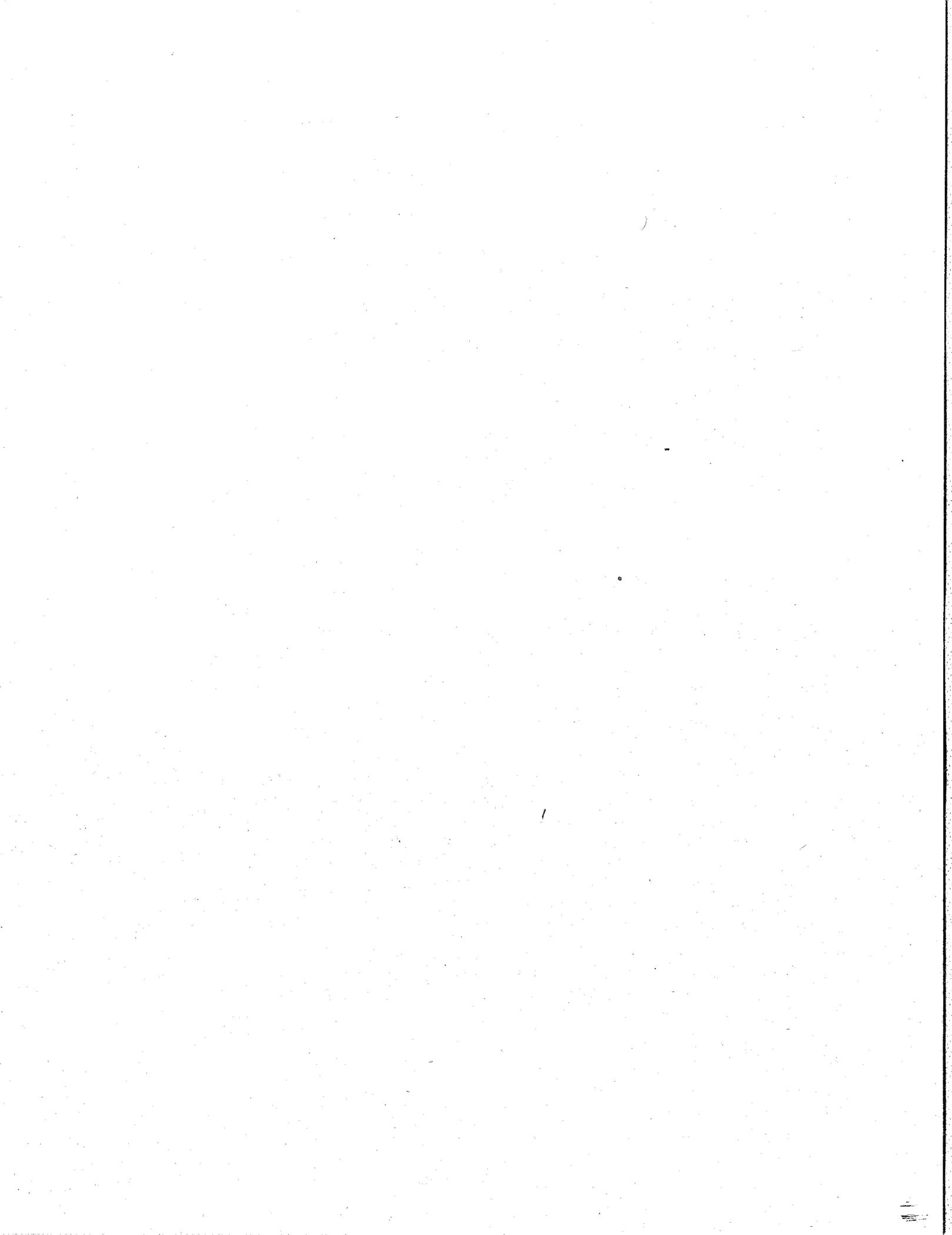
(4) OTHER CONSIDERATIONS DETERMINED BY THE DEPARTMENT.

* * * * *

§ 245.453. Assessing the site at closure or change-in-service.

(a) Before permanent closure or a change-in-service is completed, owners and operators shall measure for the presence of a release where contamination is most likely to be present at the underground storage tank site. Owners and operators shall sample for releases. **SAMPLING MAY BE ACCOMPLISHED** in a manner consistent with the Department, technical document entitled "*Closure Requirements for Underground Storage Tank Systems*" **OR IN A MANNER AT LEAST AS PROTECTIVE OF PUBLIC HEALTH AND SAFETY AND THE ENVIRONMENT AND WHICH MEETS ALL STATUTORY AND REGULATORY REQUIREMENTS.**

(b) If contaminated soils, contaminated groundwater or free product as a liquid or vapor is discovered under subsection (a), or by another manner, owners and operators shall begin corrective action in accordance with Subchapter D (relating to corrective action process for owners and operators of storage tanks and storage tank facilities and other responsible parties).



**Subchapter F. TECHNICAL STANDARDS FOR ABOVEGROUND
STORAGE TANKS AND FACILITIES**

GENERAL

* * * * *

§ 245.503. Variances.

When unique or peculiar circumstances make compliance with this subchapter technically **impractical**, infeasible or unsafe, the Department may, upon written application from the owner/operator of a storage tank system subject to this subchapter, grant a variance from one or more specific provisions of this subchapter.

(1) A variance may only be granted if the storage tank system meets alternative technical standards that fully protect human health and the environment.

(2) A written application for a variance shall be submitted to the Department and provide the following information:

(i) The facility name and identification number for which the variance is sought.

(ii) Specific sections of this subchapter from which the variance is sought.

(iii) The unique or peculiar conditions which make compliance with the sections identified in subparagraph (ii) technically **impractical**, infeasible or unsafe.

(iv) Evidence, including data, plans, specifications and test results, which supports an alternative design, practice, schedule or method as being at least as protective of human health and the environment as the requirement of the sections identified in subparagraph (ii).

(3) New technologies may be granted a variance. New technologies shall be reviewed and [appropriately] documented by a professional engineer and documentation provided to the Department with the variance request.

[(3)] (4) The Department will not grant a variance which would result in regulatory controls less stringent than other applicable Federal or State regulations, such as 37 Pa. Code Part I, Subpart B (relating to flammable and combustible liquids) and 40 CFR Part 112 (relating to oil pollution prevention).

[(4)] (5) When granting the variance, the Department may impose specific conditions necessary to assure that the variance will adequately protect the public health, safety or welfare and the environment.

[(5)] (6) The Department will provide to the applicant a written notice of approval, approval with conditions or denial.

§ 245.504. Referenced organizations.

(a) Nationally recognized associations which are referenced throughout this subchapter are as follows:

- (1) American Concrete Institute (ACI).
- (2) American National Standards Institute (ANSI).
- (3) American Petroleum Institute (API).
- (4) American Society of Mechanical Engineers (ASME).
- (5) American Society for Nondestructive Testing (ASNT).
- (6) American Society for Testing and Materials (ASTM).

(7) **[National Association of Corrosion Engineers] NACE International – The Corrosion Society** (NACE).

(8) National Fire Protection Association (NFPA).

(9) Petroleum Equipment Institute (PEI).

(10) **[Steel Structures Painting Council] SSPC – The Society for Protective Coatings** (SSPC).

(11) Steel Tank Institute (STI).

(12) Underwriters Laboratory (UL).

(b) Nationally recognized codes and standards shall be used in conjunction with manufacturer's specifications to comply with this subchapter. When used to meet the technical standards and requirements of this subchapter, the most current or latest edition of the codes and standards shall be applied. Other Nationally recognized codes and standards, not referenced in this part, may also be used to comply with this subchapter, when **[appropriate] APPROVED BY THE DEPARTMENT**.

(c) When Nationally recognized codes and standards **or manufacturer's specifications** are updated, facilities or storage tank systems installed to previously existing standards prior to the update, will not automatically be required to be upgraded to meet the new standard, **UNLESS SPECIFICALLY REQUIRED IN THE REVISED STANDARDS OR BY THE DEPARTMENT**.

(d) REGULATORY REQUIREMENTS SHALL PREVAIL OVER NATIONALLY RECOGNIZED CODES AND STANDARDS WHENEVER THERE IS A CONFLICT.

§ 245.505. Applicability.

Existing tanks that [became] BECOME regulated due to the addition of new

regulated substances as defined in § 245.1 ((relating to definitions) (See definition of “regulated substance” (i)(C)(I) [~~HH~~] AND (II)), and the regulation of aboveground tanks greater than 30,000 gallons capacity, storing heating oil that is consumed on the premises (See definition of “consumptive use” in § 245.1) are subject to the requirements of this [subsection] CHAPTER and shall be registered with the Department by _____ (Editor’s Note: The blank refers to a date 60 days after the effective date of adoption of this regulation.). In addition, these tanks are temporarily excluded from the following requirements:

(1) Monitoring requirements in § 245.541(c) (relating to overfill prevention requirements) until _____ (Editors Note: The blank refers to a date 3 years after the effective date of adoption of this regulation.).

(2) In-service inspection requirements in § 245.552 (relating to in-service inspections) until within 5 years of the date of construction or the date of the last inspection or by _____ (Editors Note: The blank refers to a date 3 years after the effective date of adoption of this regulation.) whichever is greater.

(3) Out-of-service inspection requirements in § 245.553 (relating to out-of-service inspections) until _____ (Editors Note: The blank refers to a date three years after the effective date of adoption of this regulation.) for tanks not previously inspected or 10 years after construction for tanks without known corrosion rates, whichever is greater, or within projected inspection intervals based on corrosion rates determined at the last out-of-service inspection, but not to exceed 20 years from the date of the last inspection.

OPERATIONS AND MAINTENANCE

§ 245.514. Security.

An owner/operator is responsible to assure that appropriate security measures and procedures based on the facility location are established and implemented to protect the environment and the public. These security measures and procedures may include, but are not limited to **monitoring**, fencing, lighting, access control, locked entrances and securing of valves and dispensers.

DESIGN, CONSTRUCTION AND INSTALLATION

§ 245.522. New aboveground tank installations and reconstructions.

(a) Tanks [**shall**] **must** be designed and constructed in accordance with an appropriate current code of practice developed by Nationally recognized associations such as UL, ACI, API, ASME, ASTM, **STI** or NACE **and will follow applicable engineering specifications.**

(b) Tanks shall have a stable foundation, capable of supporting the total weight of the tank when full of product without movement, rolling or unacceptable settling. The foundation shall minimize corrosion of the tank bottom and meet or exceed the specifications of the tank manufacturer. The foundation design and construction shall be based on sound engineering practices.

(c) Tanks shall be tested for tightness in accordance with current codes of practice developed by Nationally recognized associations and manufacturer's specifications. If a pneumatic test is used for manufactured (shop built) tanks, the fittings, welds, joints and connections shall be coated with a soap solution and checked for leaks. Aboveground field constructed storage tanks shall be hydrostatically tested. Deficiencies shall be remedied prior to tanks being placed into service. Hydrostatic test fluids shall be

discharged or disposed of in accordance with State and Federal requirements.

(d) Reconstruction of tanks **[shall] must** follow the current codes of practice developed by Nationally recognized associations **and be accomplished in accordance with sound engineering practices**. Reconstructed tanks **[shall] must** be inspected and hydrostatically tested before being placed into service. Reconstructed tanks **[shall] must** meet or exceed requirements specified in § 245.521 (relating to performance standards for aboveground storage tanks). Hydrostatic test fluids shall be discharged or disposed of in accordance with State and Federal requirements.

(e) Aboveground manufactured storage tanks that are relocated to another service site shall meet the performance requirements for aboveground storage tanks and shall be tested according to industry standards and inspected before being put back in service.

(f) The Department may require the tank owner to submit documentation of construction design criteria and engineering specifications for review.

§ 245.523. Aboveground storage tanks in underground vaults.

The following requirements shall be met when an owner or operator chooses to install an aboveground storage tank in an underground vault.

* * * * *

(11) Underground piping distribution systems for each tank system used to dispense class I or class II motor fuels for resale must be provided with release detection equivalent to underground piping release detection addressed at § 245.445 (relating to methods of release detection for piping) and [be appropriately]

monitored AS REQUIRED IN PARAGRAPH (7) WITH MONITORING RECORDS RETAINED FOR 12 MONTHS AS REQUIRED UNDER § 245.516 OR § 245.615 (RELATING TO RECORDKEEPING REQUIREMENTS).

§ 245.524. Aboveground tank modifications.

- (a) Modifications shall be designed and implemented in accordance with current codes of practice developed by Nationally recognized associations such as API, ACI, ASME, ASTM, NACE, STI or UL.
- (b) Modifications shall be performed in accordance with Nationally recognized codes and manufacturer's specifications or a professional engineer's design requirements.
- (c) Aboveground tanks which are modified shall be inspected and tested according to industry standards before being put in service when a major modification has been performed on the tank shell, tank roof or tank bottom. Deficiencies shall be remedied before being returned to service.
- (d) The Department may require the tank owner to submit documentation of construction modification design criteria and engineering specifications for review.**

CORROSION AND DETERIORATION PREVENTION

§ 245.534. Interior linings and coatings.

- (a) Coating or lining systems may be used to protect tank interiors from corrosion. The coating or lining system shall be designed in accordance with current codes of practices such as API 652 or associations such as NACE. Any appropriate coating which is bonded firmly to the interior surfaces may be used to protect a tank from corrosion.

(b) Specific requirements are as follows:

(1) Coatings and linings shall be chemically compatible with the substance to be stored.

(2) Coating material shall be applied and cured in strict accordance with manufacturer's specifications.

(3) Surfaces shall be prepared and inspected in accordance with applicable nationally recognized codes and standards.

(4) Coatings used to protect the bottom of a tank shall extend up the side of the tank a minimum of 18 inches, while some forms of lining may cover the entire tank interior.

(5) Coatings shall be examined for blisters and air pockets, and tested for pinholes. The coating thickness shall be checked to assure compliance with manufacturer's specifications.

(6) Defects in coating or lining systems shall be repaired or corrected prior to putting the tank or system into service.

(c) Interior linings or coatings shall be inspected by a third-party, Department certified, aboveground storage tank inspector at installation, when undergoing a major modification, and at least every 10 years or as warranted or recommended by the manufacturer or design engineer.

RELEASE PREVENTION AND LEAK DETECTION

§ 245.541. Overfill prevention requirements.

(a) [Owner/operators] An owner/operator shall ensure that releases from overfills do not occur. Transfer of stored substance may not exceed the volume available in the receiving tank and the transfer shall be adequately monitored. Immediate action shall be taken to stop the flow of regulated substance prior to exceeding tank capacity or in the event that an equipment failure occurs.

(b) Tanks **[installed after October 11, 1997, shall] must** be installed with the following:

(1) A gauge or monitoring device which accurately indicates the level or volume in the tank and is visible to the individual responsible for the transfer of product. The monitoring device shall be installed, calibrated and maintained in accordance with manufacturer's specifications.

(2) A high-level alarm **[and] with** an automatic high-level cut-off device or a high-level alarm **[and] with** a manned operator shutdown procedure in operation.

(c) Existing tanks shall have a gauge or monitoring device installed by October 11, 2000.

(d) An existing tank system which is taken out of service to perform a scheduled out-of-service inspection or a major modification to the tank shall be upgraded with a high-level alarm **[and] with a** cut-off device or a high-level alarm **[and] with** a manned operator shutdown procedure prior to being put back in service.

(e) An existing tank system which has not been required to be taken out of service to perform a scheduled inspection or modification must [be upgraded with a

~~high level alarm with a cut-off device or a high level alarm with a manned operator shutdown procedure~~ **HAVE OVERFILL PROTECTION CONSISTENT WITH NATIONAL INDUSTRY STANDARDS, SUCH AS API 2350, NFPA 30 OR PEI RP 200 by _____** *(Editor's Note: The blank refers to a date 3 years after the effective date of adoption of this regulation).*

§ 245.542. Containment requirements for aboveground storage tank systems.

- (a) Containment structures shall be compatible with the substance stored and minimize deterioration to the storage tank system.
- (b) Containment areas shall be designed, maintained and constructed in accordance with sound engineering practices adhering to Nationally recognized codes of practice such as NFPA, NACE, ACI or API and in compliance with State and Federal requirements.
- (c) Secondary containment under the tank bottom and around underground piping **[shall] must** be designed to direct any release to a monitoring point to meet leak detection requirements. Secondary containment shall be provided on a new tank at installation, and shall be provided on an existing tank at reconstruction or relocation of the tank or when the tank floor is replaced **(SEE API 650 APPENDIX I)**. Permeability of the secondary containment **[shall] must** be less than **[1x10⁻⁷] 1 x 10⁻⁷** cm/sec at anticipated hydrostatic head and shall be verified at the time of installation.
- (d) Aboveground tanks **[shall] must** have emergency containment structures, such as dike fields, curbing and containment collection systems, which contain releases from overfills, leaks and spills, when a new tank system is installed or at the next out-of-

service inspection for existing tank systems as established in § 245.553(d) (relating to out-of-service inspections) **or by _____** (*Editor's Note: The blank refers to a date 3 years after the effective date of adoption of this regulation.*), **whichever occurs first.**

(1) Permeability of [new] **newly installed or replacement** emergency containment structures [**installed after October 11, 1997, shall**] **must** be less than 1×10^{-6} cm/sec at anticipated hydrostatic head and be of sufficient thickness to prevent the released substance from penetrating the containment structure for a minimum of 72 hours, and until the release can be detected and recovered.

(2) Emergency containment structures for existing aboveground storage tanks shall meet one of the following standards **by _____** (*Editor's Note: The blank refers to a date 3 years after the effective date of adoption of this regulation.*) **or** at the next out-of-service inspection, prior to the tank being placed back into service, **whichever occurs first.**

(i) The standards for new emergency containment structures for aboveground storage tanks in paragraph (1).

(ii) Verification by a professional engineer that the emergency containment structure, coupled with the tank monitoring program and response plan, is capable of detecting and recovering a release and is designed to prevent contamination of the waters of this Commonwealth. **Verification [shall] MAY be conducted in a manner consistent with the Department's technical document entitled "Verification of Emergency Containment Structures for Aboveground Storage Tanks" [and] OR IN A MANNER AT LEAST AS PROTECTIVE OF PUBLIC HEALTH AND SAFETY AND THE**

ENVIRONMENT AND WHICH MEETS ALL STATUTORY AND REGULATORY REQUIREMENTS. VERIFICATION OF EARTHEN STRUCTURES should include determination of the containment structure permeability FOLLOWING NATIONALLY RECOGNIZED TESTING METHODS SUCH AS ASTM METHODS AND ENGINEERING STANDARDS LISTED IN API PUBLICATION 351.

(3) **Verification of the containment structure is valid until conditions at the site, monitoring program, response plan or procedures change.**

(4) All transfers of regulated substances to a tank within the emergency containment shall be monitored by designated personnel for the duration of the transfer.

* * * * *

§ 245.543. Leak detection requirements.

(a) Aboveground tank systems **[installed after October 11, 1997,]** shall **[provide]** **be provided** a method of leak detection **at installation that is** capable of detecting a release. The leak detection method shall be monitored at least monthly and shall be installed, calibrated, operated and maintained in accordance with industry practices and manufacturer's specifications.

* * * * *

(c) Existing aboveground storage tanks without secondary containment under the bottom of the tank that are in contact with the soil, such as vertical flat bottom tanks, and do not have cathodic protection or an internal lining shall be **[tested for tightness]** **LEAK TESTED** at the next scheduled **IN-service inspection [after October 11, 1997,]**

consistent with subsection (d) and continue [~~testing for tightness~~] **TO BE LEAK TESTED** at each **IN**-service inspection thereafter, until the tank is upgraded.

(d) Tank [~~test for tightness~~] **LEAK TEST shall [~~be based on~~] FOLLOW a [~~scientific or statistical method and~~] **NATIONALLY RECOGNIZED procedure [~~;~~ The test]** THAT IS BASED ON A VOLUMETRIC/MASS MEASUREMENT, AN ACOUSTIC MEASUREMENT, OR A SOIL-VAPOR MONITORING method [~~and procedure shall be third-party certified with a specific leak detection rate or a method and procedure that is recognized by a National association~~], such as THOSE ADDRESSED IN API Publication 334 “Guide to Leak Detection in Aboveground Storage Tanks.” The test shall be performed by a third-party [~~expert qualified in the test procedure~~] **INSPECTOR OR A TECHNICIAN WHO HAS EXPERIENCE WITH THE SELECTED METHOD AND IS QUALIFIED BY THE TEST EQUIPMENT MANUFACTURER OR CERTIFIED BY THE RELEVANT INDUSTRY ASSOCIATION SUCH AS ASNT (SEE RECOMMENDED PRACTICE NO. SNT-TC-1A) and IS not an employee of the tank owner.****

(e) Aboveground piping shall be visually checked for leaks in accordance with the facility operations and maintenance plan.

ABOVEGROUND STORAGE TANK INSPECTIONS

§ 245.552. In-service inspections.

(a) The in-service inspection shall follow the guidelines of a Nationally recognized association such as API 653 [~~and~~], API 570 and applicable engineering criteria (SEE § 245.524(b), § 245.542(d)(2) AND § 245.543(d)).

(b) The in-service inspection shall evaluate the following:

- (1) Containment areas.
- (2) Foundation.
- (3) Tank shell.
- (4) Tank roof.
- (5) Appurtenances.
- (6) Ancillary equipment including piping.
- (7) Leak detection method.
- (8) Cathodic protection system, if installed.
- (9) Tank system integrity and suitability for service.**

(c) Inspection information shall be submitted to the Department on a form provided by the Department and shall include the results of the evaluation in subsection (b) and the following:

- (1) A determination of the corrosion rate of the shell and piping.
- (2) A calculation of the life of the tank shell and piping based on corrosion rate.
- (3) The next inspection schedule based on **the API 653 calculated service life method or 1/4 of the corrosion rate life with a maximum of 5 years BETWEEN INSPECTIONS. Other site specific conditions, for example, maintenance practices, previous repairs, the nature of the substance stored or soil conditions that may affect corrosion rate life or tank system integrity and should be considered when projecting tank service life and the next inspection interval.**
- (4) The recommendations for maintaining tank system integrity.

(d) Inspection intervals for in-service inspections are as follows:

(1) Aboveground tanks installed after October 11, 1997, shall be initially inspected within 5 years of installation.

(2) Existing tanks shall be initially inspected as follows:

(i) Tanks over 5 years old without a previous inspection shall be inspected by October 11, 1999.

(ii) Tanks with an inspection more than 3 years prior to October 11, 1997, shall be inspected by October 11, 2000.

(iii) Tanks with an inspection within 3 years prior to October 11, 1997, shall be inspected within 6 years of the previous inspection.

(3) Tanks shall have an in-service inspection within 1/4 of the corrosion rate life with a maximum of 5 years from the previous inspection or installation.

(4) An out-of-service inspection may replace an in-service inspection.

(5) AN IN-SERVICE INSPECTION INTERVAL MAY BE DELAYED UNDER § 245.562 (RELATING TO TEMPORARY REMOVAL-FROM-SERVICE) FOR A TANK THAT IS TEMPORARILY REMOVED FROM SERVICE. THE DELAYED INSPECTION MUST BE CONDUCTED PRIOR TO PLACING REGULATED SUBSTANCE IN A TANK AND RETURNING THE TANK TO OPERATING STATUS. DEFICIENCIES NOTED DURING INSPECTION SHALL BE ADDRESSED AND REMEDIED AND AN AMENDED REGISTRATION FORM SUBMITTED TO THE DEPARTMENT PRIOR TO RETURNING THE TANK TO OPERATING STATUS.

(e) Inspection recommendations shall be addressed and DEFICIENCIES remedied [as appropriate]. When substantial modifications are necessary to correct deficiencies, they shall be made in accordance with manufacturer's specifications and engineering design criteria (SEE § 245.522(a) AND (b), § 245.524(b)(2), § 245.532(b) AND (c) AND § 245.534(c)). The Department may require submission and review of all documentation relating to these remedies. Required tank handling activities are reported to the Department by the certified installer. Tank handling activities involving major modifications shall also be inspected by a certified aboveground storage tank inspector and reported to the Department.

(f) The complete inspection report shall be kept at the facility until the next out-of-service inspection is completed.

§ 245.553. Out-of-service inspections.

(a) Inspections shall follow the guidelines of a Nationally recognized association such as API 653, API 570 or ASME and applicable engineering criteria (SEE § 245.524(b), § 245.534(c), § 245.542(d)(2) AND § 245.543(d)).

(b) The out-of-service inspection shall evaluate the following:

- (1) Containment areas.
- (2) Foundation and supports.
- (3) Tank shell.
- (4) Tank roof.
- (5) Tank bottom.

- (6) Appurtenances.
- (7) Ancillary equipment including piping.
- (8) Leak detection method.
- (9) Cathodic protection system, if installed.
- (10) Internal linings and coatings, if installed.
- (11) Tank system integrity and suitability for service.**

(c) The tank bottom evaluation OF METALLIC FLOORS shall be based on [a scientific or statistical procedure encompassing appropriate methods] ULTRASONIC TESTING AND VISUAL EXAMINATION AND MUST INCLUDE AT LEAST ONE OTHER METHOD of nondestructive examination SUCH AS MAGNETIC FLUX TESTS OR VACUUM TESTS OF BOTTOM LAP WELDS (SEE API 653 and ASTM METALLOGRAPHY- NONDESTRUCTIVE TESTING Vol. 03.03). The ULTRASONIC evaluation must be STATISTICALLY representative of the whole floor [when practicable] , excluding THE RELEASE PREVENTION BARRIER OR SECONDARY CONTAINMENT ON DOUBLE BOTTOM TANKS [removal of liners, heating coils or other appurtenances].

(d) Inspection information shall be submitted to the Department on a form provided by the Department and shall include the results of subsection (b) and the following:

- (1) A determination of the corrosion rate for tank shell, bottom plates and piping.
- (2) A calculation of the tank life and piping life based on the corrosion rate.

(3) The schedule for next out-of-service inspection, based on **the API 653 calculated service life method** or 1/2 of the corrosion rate life, with a maximum of 20 years between inspections. **Other site specific conditions, for example, maintenance practices, previous repairs, internal linings, the nature of the substance stored or soil conditions that may affect corrosion rate life and should be considered when projecting tank service life and the next inspection interval.**

(4) The recommendations for maintaining tank system integrity and meeting performance standards.

[(d)] (e) Inspection intervals for out-of-service inspections are as follows:

(1) Tanks installed after October 11, 1997, shall be initially inspected based on measured or similar service corrosion rates. When the corrosion rate is unknown the tanks actual bottom thickness shall be determined by inspection within 10 years of installation to determine the corrosion rate.

(2) Existing tanks shall be initially inspected as follows:

(i) If corrosion rates are not known, tanks shall be inspected within 10 years of installation or by October 11, 2000, whichever is later.

(ii) If corrosion rates can be determined or are known, tanks shall be inspected at **their API 653 calculated service life method** or 1/2 the corrosion rate life, from installation or previous out-of-service inspection or by October 11, 2000, whichever is later.

(3) Tanks shall have an out-of-service inspection at **their API 653 calculated service life method** or 1/2 of the corrosion rate life, with a maximum of 20 years from

the last out-of-service inspection.

(4) AN OUT-OF-SERVICE INSPECTION INTERVAL MAY BE DELAYED UNDER § 245.562 (RELATING TO TEMPORARY REMOVAL-FROM-SERVICE) FOR A TANK THAT IS TEMPORARILY REMOVED FROM SERVICE. THE DELAYED INSPECTION MUST BE CONDUCTED PRIOR TO PLACING REGULATED SUBSTANCE IN A TANK AND RETURNING THE TANK TO OPERATING STATUS. DEFICIENCIES NOTED DURING INSPECTION SHALL BE ADDRESSED AND REMEDIED AND AN AMENDED REGISTRATION FORM SUBMITTED TO THE DEPARTMENT PRIOR TO RETURNING THE TANK TO OPERATING STATUS.

[(e)] (f) Deficiencies shall be remedied before the tank is returned to service. When substantial modifications are necessary to correct deficiencies, they shall be made in accordance with manufacturer's specifications [~~and engineering~~] OR AN ENGINEER'S design criteria (SEE § 245.522(a) AND (b), § 245.524(b)(2) AND § 245.532(b) AND (c)). The Department may require submission and review documentation relating to these remedies. Required tank handling activities are reported to the Department by the certified installer. Tank handling activities involving major modifications shall also be inspected by a certified aboveground storage tank inspector and reported to the Department.

[(f)] (g) Aboveground storage tanks which can be completely examined from the exterior are exempt from out-of-service inspections except for tanks that are internally

lined.

[(g)] (h) The completed inspection report for out-of-service inspections shall be kept with the facility records under § 245.516 (relating to record keeping requirements).

§ 245.554. Installation and modification inspections.

(a) Aboveground storage tank systems shall be inspected by a Department certified inspector at the time of installation in accordance with § 245.522 (relating to new aboveground tank installations and reconstructions), and current Nationally recognized association's code of practice and manufacturer's specifications. The inspection report shall be kept for the operational life of the tank.

(b) Major modifications shall be inspected by a Department certified inspector at the time of modification under § 245.524 (relating to aboveground tank modifications) and a current codes of practice developed by Nationally recognized associations prior to being put back in service. The inspection report shall be kept for the operational life of the tank.

When substantial modifications are made to the tank floor, the next inspection date projections shall be determined based on the condition of the [floor] TANK subsequent to those modifications and reported to the Department by the certified inspector on the appropriate inspection form provided by the Department. Other site specific conditions, for example, maintenance practices, previous repairs, the nature of the substance stored or soil conditions that may affect corrosion rate life or tank system integrity should be considered when projecting tank service life and the next inspection interval.

(c) Tanks which are relocated or reconstructed shall be inspected by a Department certified inspector and tested for tightness in accordance with § 245.522 and current codes of practice developed by Nationally recognized associations prior to being put in service. The inspection report shall be kept for the operational life of the tank.

CLOSURE AND REMOVAL FROM SERVICE REQUIREMENTS

§ 245.561. Permanent closure or change-in-service.

Before permanent closure or change-in-service is completed, the owner/operator shall comply with the following:

* * * * *

(3) The [owner/operators] owner/operator shall complete a site assessment to measure for the presence of any release from the storage tank system and a closure report. The assessment of the site shall be made after the notification to the Department and [shall] MAY be conducted in a manner consistent with the Department's technical document entitled "Closure Requirements for Aboveground Storage Tank Systems" [unless otherwise agreed upon or waived by the Department] OR IN A MANNER AT LEAST AS PROTECTIVE OF PUBLIC HEALTH AND SAFETY AND THE ENVIRONMENT AND WHICH MEETS ALL STATUTORY AND REGULATORY REQUIREMENTS. The results of the site assessment and the closure report shall be retained for 3 years.

* * * * *

(6) Tank systems shall be cleaned, rendered free of hazardous vapors and ventilated if left onsite or tank systems shall be emptied and removed from the site in a

manner consistent with current industry practices and Bureau of **[Land Recycling and Waste Management]** requirements such as Chapters **[263] 263a** and 299 (relating to **[reserved] transporters of hazardous waste**; and storage and transportation of residual waste).

* * * * *

(8) The **[State Fire Marshal] appropriate state agency, county and local jurisdiction** shall be notified if the tank is under a fire marshal, **flammable and combustible liquids or other State agency, county or local jurisdiction** permit.

* * * * *

§ 245.562. Temporary removal-from-service.

(a) The owner/operator shall complete and submit an amended registration form to the Department within 30 days after the change in tank status.

(b) A tank system shall be emptied and regulated substances and contents shall be reused, treated or disposed of in accordance with State and Federal requirements.

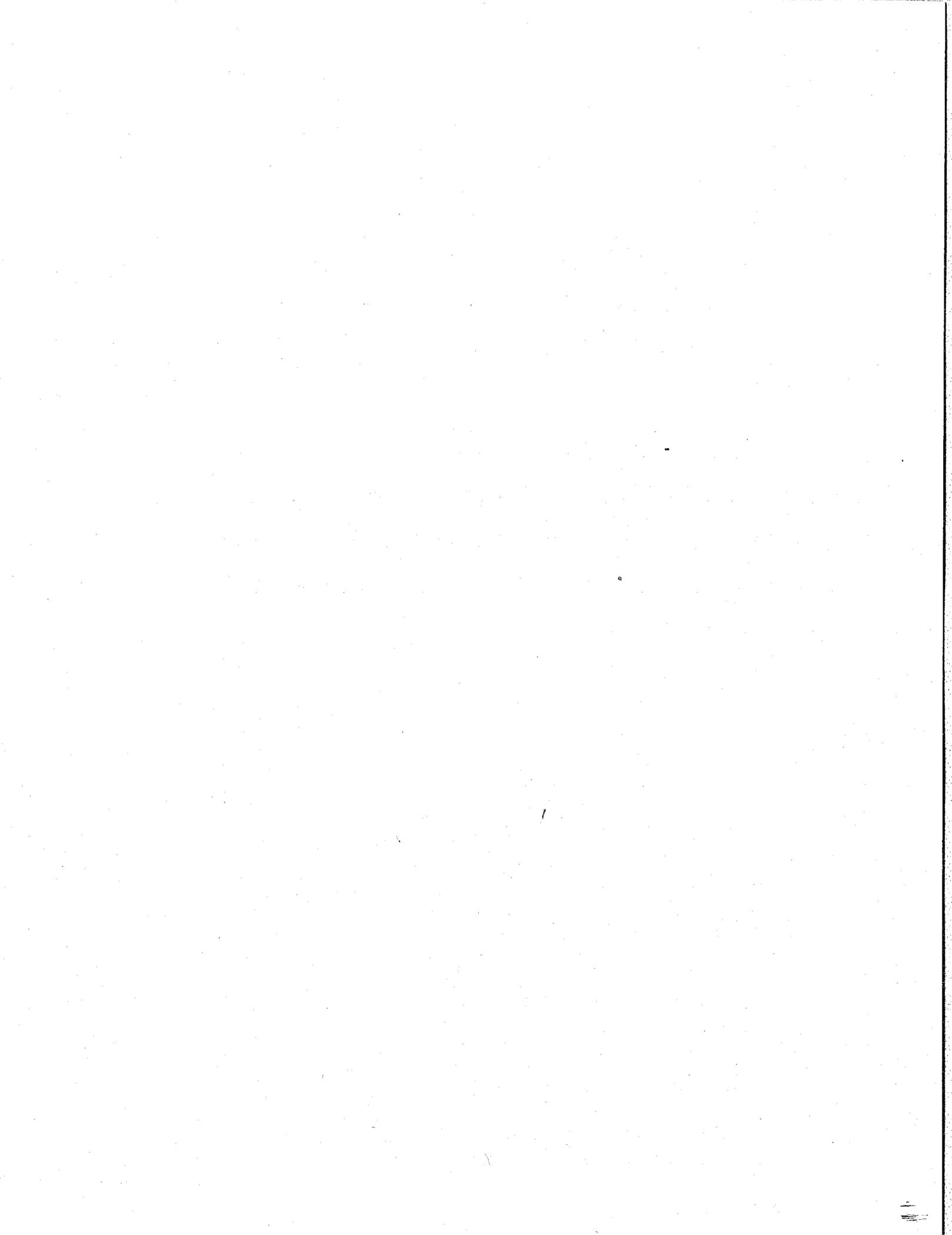
(c) A tank shall be secured against unauthorized entry and all piping entering or **[existing] EXITING** the tank, excluding vents, shall be capped or blinded.

(d) Tank integrity shall be maintained throughout the temporary removal-from-service time and the tank shall be protected against flotation.

(e) Inspection requirements shall be maintained as specified in § § 245.551—245.554 (relating to aboveground storage tank inspections). **IN-SERVICE AND OUT-OF-SERVICE INSPECTION INTERVALS MAY BE DELAYED FOR A TANK THAT**

IS TEMPORARILY REMOVED FROM SERVICE. THE DELAYED INSPECTIONS MUST BE CONDUCTED PRIOR TO PLACING REGULATED SUBSTANCE IN A TANK AND RETURNING THE TANK TO OPERATING STATUS. DEFICIENCIES NOTED DURING INSPECTION SHALL BE ADDRESSED AND REMEDIED AND AN AMENDED REGISTRATION FORM SUBMITTED TO THE DEPARTMENT PRIOR TO RETURNING THE TANK TO OPERATING STATUS.

(f) Tanks which are temporarily removed-from-service for 5 years or longer shall meet the requirements for permanent closure, **UNLESS THE TIME FRAME FOR RETAINING THE TANK OR TANKS IN TEMPORARY REMOVAL-FROM-SERVICE STATUS IS EXTENDED UNDER § 245.503 (RELATING TO VARIANCES).**



**Subchapter G. SIMPLIFIED PROGRAM FOR SMALL
ABOVEGROUND STORAGE TANKS**

GENERAL

§245.604. Referenced organizations.

(a) Nationally recognized associations which are referenced throughout this subchapter are as follows:

- (1) American National Standards Institute (ANSI).
- (2) American Petroleum Institute (API).
- (3) American Society of Mechanical Engineers (ASME).
- (4) American Society for Testing and Materials (ASTM).
- (5) **[National Association of Corrosion Engineers] NACE International – The Corrosion Society (NACE).**
- (6) National Fire Protection Association (NFPA).
- (7) Petroleum Equipment Institute (PEI).
- (8) **[Steel Structures Painting Council] SSPC – The Society for Protective Coatings (SSPC)**
- (9) Steel Tank Institute (STI).
- (10) Underwriters Laboratory (UL).

(b) Nationally recognized codes and standards shall be used in conjunction with manufacturer's specifications to comply with this subchapter. When used to meet the technical standards and requirements of this subchapter, the most current or latest edition of the codes and standards shall be applied. Other Nationally recognized codes and standards, not referenced in this part, may also be used to comply with this subchapter, when **[appropriate] APPROVED BY THE DEPARTMENT.**

(c) When Nationally recognized codes and standards are updated, facilities or storage tank systems installed to previously existing standards prior to the update will not

automatically be required to be upgraded to meet the new standard, **UNLESS SPECIFICALLY REQUIRED IN THE REVISED STANDARDS OR BY THE DEPARTMENT.**

(d) REGULATORY REQUIREMENTS SHALL PREVAIL OVER NATIONALLY RECOGNIZED CODES AND STANDARDS WHENEVER THERE IS A CONFLICT.

§ 245.605. Applicability.

Existing tanks that become regulated due to the addition of new regulated substances as defined in § 245.1 ((relating to definitions) (See “regulated substance”

(i)(C)(I) [- (HH)] AND (II) are subject to the requirements of this [subsection]

CHAPTER and shall be registered with the Department by _____ (Editor’s Note:

The blank refers to a date 60 days after the effective date of adoption of this

regulation.). In addition, these tanks are temporarily excluded from the following

technical requirements:

(1) Emergency and secondary containment requirements in § 245.612(e)

(relating to performance and design standards.) until _____ (Editors Note: The

blank refers to a date 3 years after the effective date of adoption of this regulation).

(2) A method of leak detection as required in § 245.613(a) (relating to

monitoring standards) until _____ (Editors Note: The blank refers to a date 1 year

after the effective date of adoption of this regulation.).

(3) In-service inspections required in § 245.616(c)(3) (relating to

inspection requirements) until _____ (Editors Note: The blank refers to a date 3

years after the effective date of adoption of this regulation.).

TECHNICAL REQUIREMENTS

§ 245.611. Testing requirements for new and substantially modified small aboveground storage tanks.

(a) Tanks [installed after October 11, 1997,] shall be tested for tightness at installation in accordance with current codes of practice developed by Nationally recognized associations and manufacturer's specifications, except for manufactured, shop built tanks that meet the requirements of subsection (b). The testing shall be completed, as part of the installation process, prior to putting the tank in service.

* * * * *

§ 245.612. Performance and design standards.

(a) Tanks shall be designed, constructed and installed or modified in accordance with current codes of practice developed by Nationally recognized associations such as API, ASME, ASTM, ANSI, STI and UL and the manufacturer's specifications. Tank handling activities shall be accomplished by a Department certified aboveground storage tank installer or under the installer's direct, onsite supervision and control.

(b) Tanks shall have a stable support or foundation capable of adequately supporting the total weight of the tank and its contents when in use. The support or foundation shall meet or exceed the specifications of the tank manufacturer and be designed and constructed in accordance with sound engineering practices.

(c) Ancillary equipment, including piping, shall be designed, installed and modified in accordance with current codes of practice developed by Nationally recognized associations such as API, SSPC, NACE, ASME, PEI and UL and the manufacturer's

specifications. Ancillary equipment shall be compatible with the substance stored and shall be adequately protected from corrosion, excessive wear and deterioration. Protective coatings shall be maintained throughout the entire operational life of the storage tank system.

(d) Tanks **[installed after October 11, 1997,]** shall be installed with secondary containment in or under the tank bottom to provide monitoring capability to satisfy leak detection requirements in § 245.613 (relating to monitoring standards) and emergency containment to contain possible releases, such as overfills, leaks and spills. Emergency containment shall be sufficiently impermeable to contain any potential release for a minimum of 72 hours and until the release can be detected and fully recovered in an expeditious manner. **Double walled tanks may meet both emergency and secondary containment requirements when the tank system is operated with spill and overflow protection controls including [, but not limited to,] the following:**

- (1) **A spill containment bucket at the tank fill point or containment at the remote fill point.**
- (2) **An overfill alarm [~~and automatic cutoff~~] OR PREVENTION device or MONITORING GAUGE AND shut down procedure.**
- (3) **Block valves on product lines.**
- (4) **Solenoid valve or anti-siphon device, if appropriate (SEE PEI RP 200).**

(e) Existing tanks which do not meet the requirements specified in subsection (d) shall be upgraded with secondary containment by October 11, 2007, and emergency containment by October 11, 2000.

(f) Tanks installed in underground vaults after October 11, 1997, and used for dispensing Class I and Class II motor fuels shall comply with § 245.523 (relating to aboveground storage tanks in underground vaults).

(g) The exterior of the tank system shall be protected by an appropriate coating or paint which shall be maintained throughout the entire operational life of the tank system.

(h) Tanks which are internally lined shall comply with § 245.534 (relating to interior linings and coatings).

(i) Tanks shall be labeled or marked in a manner consistent with industry standards and which provides for identifying the regulated substance stored from outside the containment area.

* * * * *

§ 245.614. Requirements for closure.

(a) Tank systems shall be cleaned, rendered free from hazardous vapors and ventilated if left onsite or shall be emptied and removed from the site in a manner consistent with current industry practices and Bureau of **[Land Recycling and]** Waste Management requirements such as Chapters **[263] 263a** and 299 (relating to **[reserved] transporters of hazardous waste**; and storage and transportation of residual waste).

Piping shall be removed or capped and fill ports shall be secured, capped or dismantled.

(b) The owner shall conduct a visual examination of the surface, soil and area surrounding and underlying the storage tank system for obvious indications or evidence of a release of regulated substance.

(1) If a release is suspected, it shall be investigated in accordance with § 245.304 (relating to investigation of suspected releases).

(2) If a release is confirmed, it shall be reported to the appropriate Department regional office responsible for the county in which the tank is located in accordance with § 245.305 (relating to reporting releases).

(c) The owner shall complete and submit an amended tank registration form to the Department within 30 days of:

(1) The completion of permanent closure.

(2) Change-in-service status of the tank.

(3) Temporary removal from service.

(d) Temporary removal from service requires that the owner/operator empty the tank system of regulated substances and conduct a visual examination of the area surrounding the tank as required in subsection (b), excluding the surface and soil underlying any tank bottom in contact with the ground. A tank may be considered to be in a temporary removal from service status when the tank is emptied and intended to remain out of use for 1 year or more.

(1) Temporary removal from service may not exceed 5 years, UNLESS THE OWNER CAN DEMONSTRATE AN OPERATIONAL NEED TO RETAIN THE TANK IN TEMPORARY REMOVAL-FROM-SERVICE BEYOND 5 YEARS AND THE DEPARTMENT AGREES TO EXTEND THIS TIME FRAME.

(2) Monitoring standards in § 245.613 (relating to monitoring standards) are not required when a tank is reported to the Department as temporarily removed from service.

(3) Inspection of tanks temporarily removed from service shall be performed in accordance with § 245.616 (relating to inspection requirements). IN-SERVICE INSPECTION INTERVAL MAY BE DELAYED FOR A TANK THAT IS TEMPORARILY REMOVED-FROM-SERVICE. THE DELAYED INSPECTION MUST BE CONDUCTED PRIOR TO PLACING REGULATED SUBSTANCE IN A TANK AND RETURNING THE TANK TO OPERATING STATUS. DEFICIENCIES NOTED DURING INSPECTION SHALL BE ADDRESSED AND REMEDIED AND AN AMENDED REGISTRATION FORM SUBMITTED TO THE DEPARTMENT PRIOR TO RETURNING A TANK TO OPERATING STATUS.

* * * * *

§ 245.616. Inspection requirements.

(a) Required inspections of small aboveground storage tanks shall be conducted by Department certified aboveground storage tank inspectors according to a current Nationally recognized association's code of practice such as API [**and**], STI or ASME

[and] or according to manufacturer's specifications and applicable engineering criteria (SEE § 245.612. RELATING TO PERFORMANCE AND DESIGN STANDARDS).

Deficiencies noted during the inspection shall be addressed and remedied [as appropriate]. When substantial modifications are necessary to correct deficiencies, they shall be made in accordance with manufacturer's specifications and applicable engineering design criteria. The Department may require submission and review of documentation relating to these remedies. The associated tank handling activities are reported to the Department by a certified installer.

(b) [After October 11, 1997, small] Small aboveground field constructed storage tanks shall be inspected at installation, reconstruction or relocation and when a major modification activity is performed on the tank shell or the tank bottom plates.

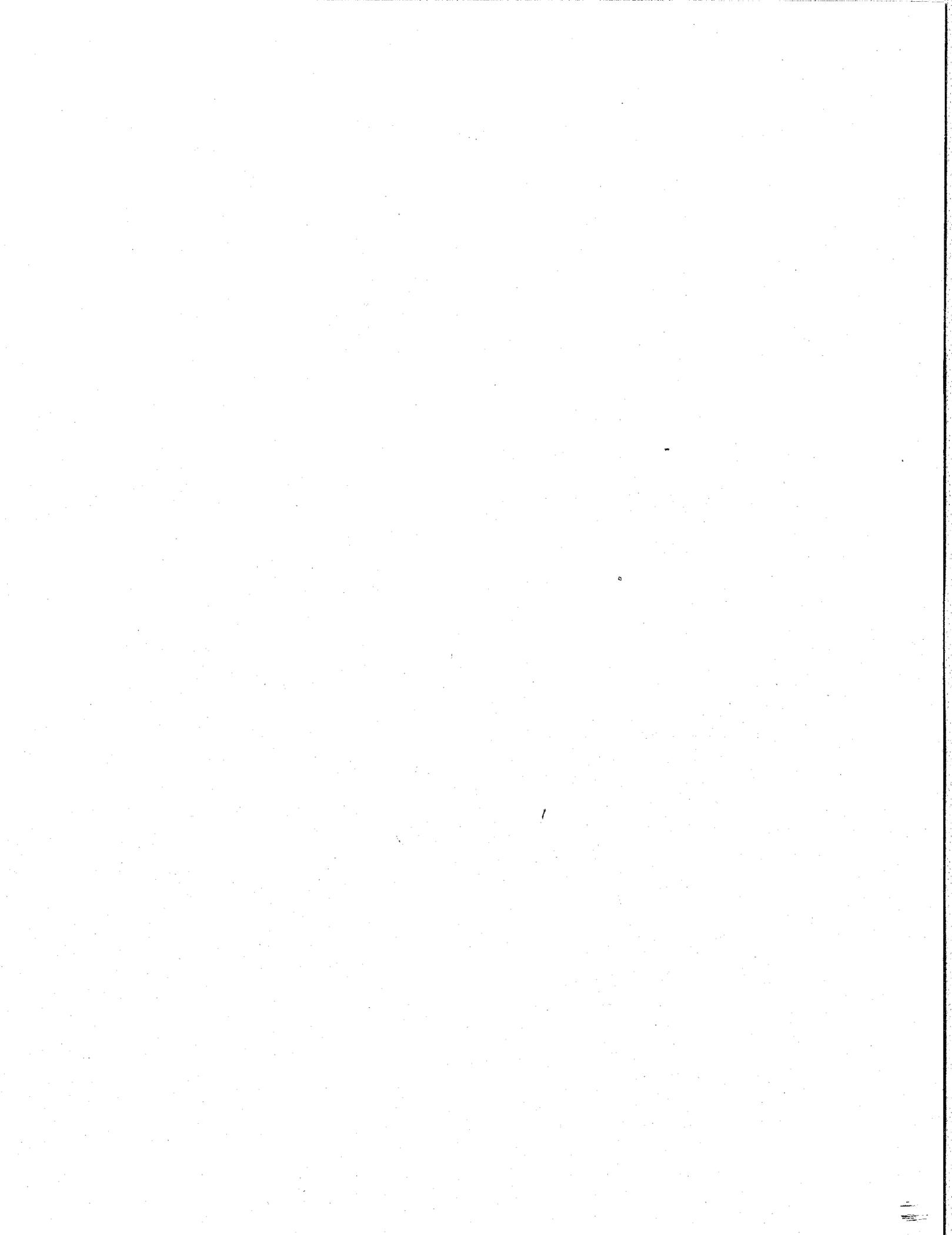
(c) The owner/operator of small aboveground storage tanks storing regulated substances with a capacity greater than 5,000 gallons and owner/operator of small aboveground storage tanks storing highly hazardous substances with a capacity greater than 1,100 gallons shall have in-service inspections conducted every 10 years or [at 1/4 of the] more often when corrosion [rate life with a maximum of 10 years between inspections], deterioration or other specific conditions necessitate. Other specific conditions may include [but are not limited to] maintenance practices, previous repairs, the nature of the substance stored and coatings or linings that should be considered when projecting tank service life and the next inspection interval. Internally lined tanks and flat bottom tanks without an interstice or external access to the tank bottom may require further evaluation or internal examination.

Inspections shall be phased in for tanks without a previous inspection as follows:

- (1) New tanks shall be initially inspected within 10 years of installation.
- (2) Existing tanks, less than 10 years old without a previous inspection, shall be inspected by October 13, 2003, or 10 years from the date of installation, whichever is later.
- (3) Existing tanks over 10 years old, without a previous inspection, shall be inspected by October 11, 2002.

(4) WHEN AN INSPECTION IS DELAYED UNDER § 245.614(d)(3)
(RELATING TO REQUIREMENTS FOR CLOSURE) FOR A TANK-IN
TEMPORARY REMOVAL-FROM-SERVICE STATUS, THE INSPECTION
MUST BE COMPLETED AND DEFICIENCIES REMEDIATED PRIOR TO
RETURNING THE TANK TO OPERATIONAL SERVICE.

- (d) In-service inspections shall evaluate the following:
- (1) Containment areas.
 - (2) Foundation and tank supports.
 - (3) Tank shell and tank roof, where a roof exists.
 - (4) Appurtenances.
 - (5) Ancillary equipment including piping.
 - (6) Leak detection method, including monthly leak detection records and maintenance checklists.
 - (7) Cathodic protection system, if installed.
 - (8) Coatings and protections from deterioration.
 - (9) Tank system integrity and suitability for service.**



**Subchapter H. FINANCIAL RESPONSIBILITY REQUIREMENTS FOR
OWNERS AND OPERATORS OF UNDERGROUND STORAGE TANKS AND
FACILITIES**

* * * * *

§ 245.704. General requirements.

(a) An owner or operator of an underground storage tank shall continuously participate in the USTIF, unless the EQB has determined that the underground storage tank is an exempt underground storage tank.

(b) An owner or operator of an underground storage tank shall have sufficient financial resources available to continuously meet the USTIF deductibles for both corrective action and third party liability as determined in accordance with § 245.707 (relating to coverage amounts for financial responsibility). **The deductible coverage must be in a method [approved] REQUIRED under section 701(b) of the act (35 P.S. § 6021.701(b)) including a guarantee, surety bond, qualification as a self-insurer, insurance or risk retention coverage, letter of credit, indemnity contract, trust fund, stand by trust fund, or other method approved OR DEEMED SATISFACTORY by the Department.**

(c) **[Upon request of the Department, an owner or operator of an underground storage tank shall submit a written certification or provide other written evidence] The owner or operator shall have written documentation of the USTIF deductible coverage readily available and provide this documentation to the Department upon request to demonstrate** that the owner or operator has sufficient financial resources to

meet the USTIF deductible for both corrective action and third party liability as determined in accordance with § 245.707. [The certification shall be made on a form provided by the Department.]

* * * * *

§ 245.707. Coverage amounts for financial responsibility.

The owner or operator of an underground storage tank, other than an exempt underground storage tank, shall comply with the financial responsibility requirements of this subchapter by maintaining sufficient financial resources to provide the coverage for both corrective action and third party liability, in the amounts set forth in paragraphs (1) and (2) for the applicable number of tanks:

(1) *For corrective action:*

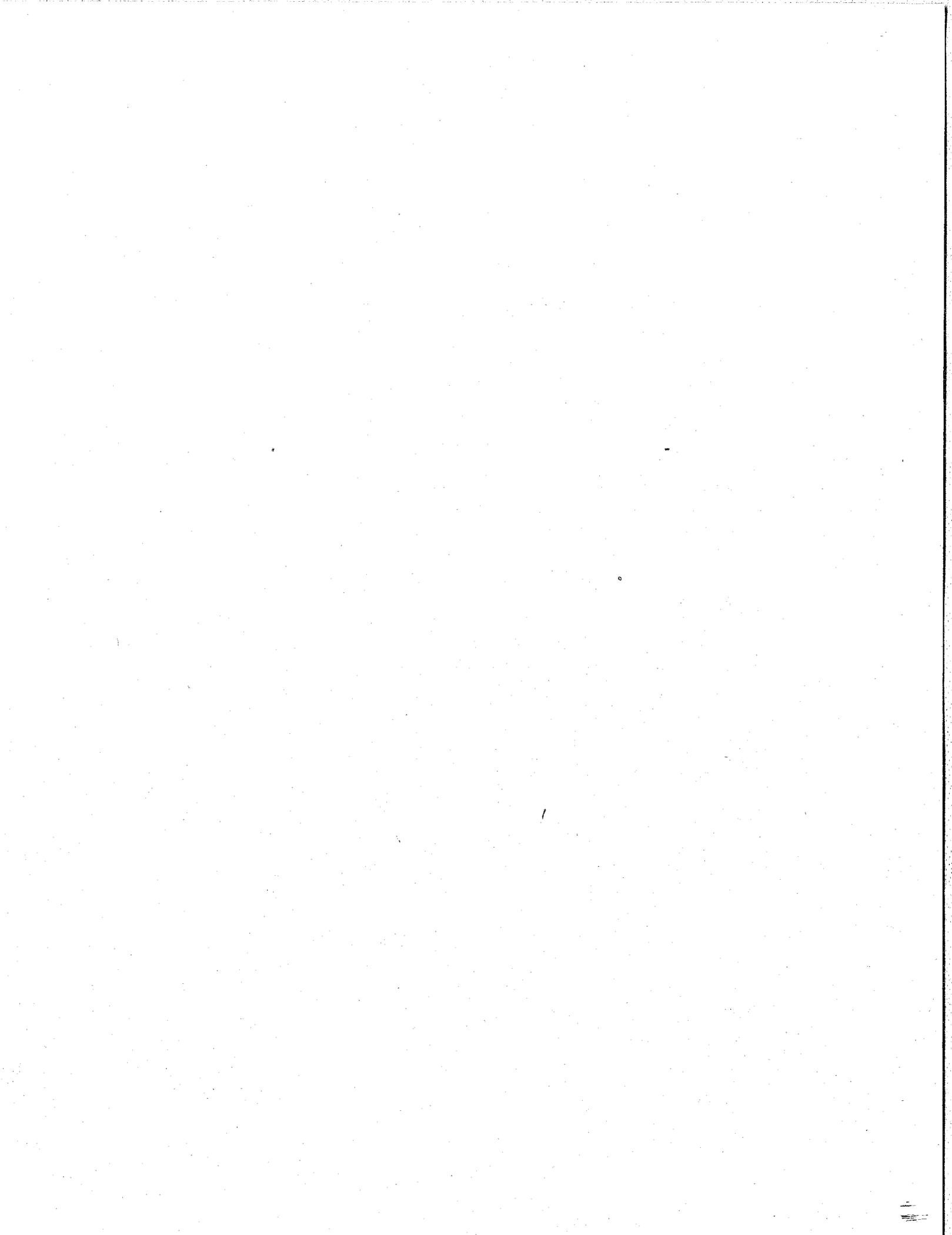
Number of tanks	Amount of required coverage
1-6	1 x USTIF deductible
7-12	2 x USTIF deductible
13-18	3 x USTIF deductible
19-24	4 x USTIF deductible
25-30	5 x USTIF deductible
31-36	6 x USTIF deductible
37-42	7 x USTIF deductible
43-48	8 x USTIF deductible
49-60	9 x USTIF deductible

61-100	10 x USTIF deductible
101-200	11 x USTIF deductible
201-300	12 x USTIF deductible
301-600	13 x USTIF deductible
over 600	14 x USTIF deductible

(2) *For third party liability:*

Number of tanks	Amount of required coverage
1-100	1 x USTIF deductible
over [101] <u>100</u>	2 x USTIF deductible

* * * * *





Pennsylvania Department of Environmental Protection

Rachel Carson State Office Building
P.O. Box 2063
Harrisburg, PA 17105-2063
July 27, 2007

Policy Office

717-783-8727

Kim Kaufman, Executive Director
Independent Regulatory Review Commission
333 Market Street, 14th Floor
Harrisburg, PA 17101

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INDEPENDENT REGULATORY
REVIEW COMMISSION

Re: Final-Form Rulemaking – Storage Tank Amendments (#7-395)

Dear Mr. Kaufman:

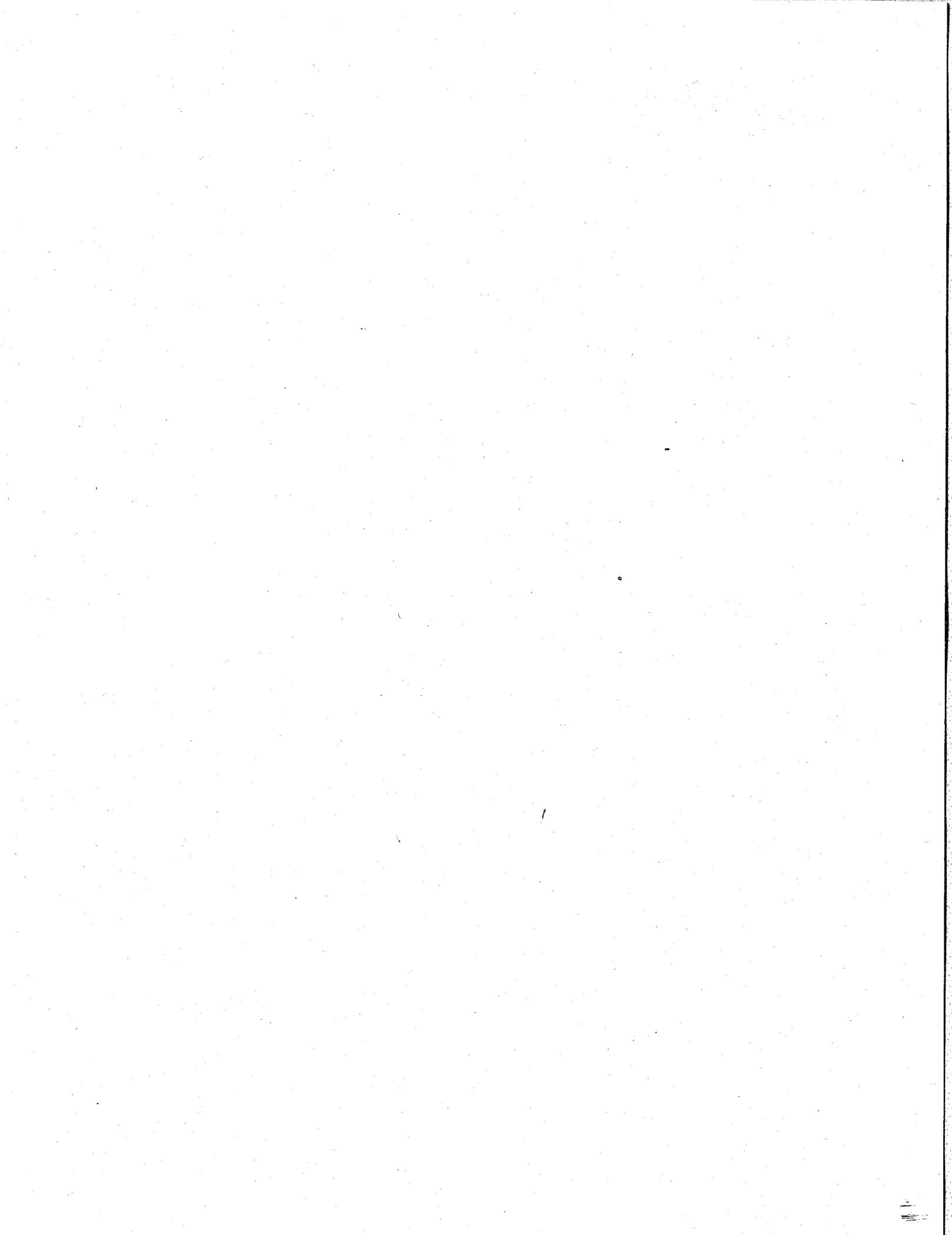
Pursuant to Section 5.1(a) of the Regulatory Review Act, please find enclosed a copy of a final-form rulemaking for review and comment by the Independent Regulatory Review Commission. The Environmental Quality Board (EQB) approved this final-form rulemaking at its June 19, 2007, meeting.

This final-form rulemaking includes comprehensive and minor editorial changes to the Department of Environmental Protection's existing Storage Tank Program regulations contained in Chapter 245, Subchapters A-H. These changes include new and revised definitional terms, new comprehensive tank registration provisions, re-regulation of previously de-regulated large aboveground storage tanks (AST) storing heating oil for on-site consumptive use, and additional training/qualifications/standards of performance provisions for certified tank installers, inspectors, and their companies. Several changes are also included for storage tank permitting and technical requirements, including simplified permit applications for most tanks, routine withdrawal of operating permits for tanks in temporary closure, phase-in provisions for newly regulated tanks, additional leak detection provisions, and requirements for total secondary containment systems for new and replacement underground storage tank systems (UST). Record keeping and inspection provisions are also amended with third-party UST facility inspection intervals increased from every 5 or 10 years to once every 3 years. The total secondary containment and 3-year inspection interval for USTs correlate with UST compliance provisions in the Federal Energy Policy Act of 2005.

The proposed regulation was adopted by the EQB on December 20, 2005, and published in the *Pennsylvania Bulletin* on April 22, 2006, at 36 *Pa.B.* 1851. During the 60-day public comment period on the proposed rulemaking, 21 commentators provided the EQB with over 100 comments. Several commentators supported many of the proposed changes; however, considerable concern was expressed over the proposal to expand the definition of "Regulated substance" and to require release (leak) detection upgrades for existing tanks. These areas of concern were resolved in the final-form rulemaking.

The Storage Tank Advisory Committee (STAC) was involved in the development and review of this rulemaking, including review of the comments received on the proposal. On February 20, 2007, the STAC voted unanimously to approve the rulemaking for consideration, as final, by the EQB.





July 27, 2007

The Storage Tank Advisory Committee (STAC) was involved in the development and review of this rulemaking, including review of the comments received on the proposal. On February 20, 2007, the STAC voted unanimously to approve the rulemaking for consideration, as final, by the EQB.

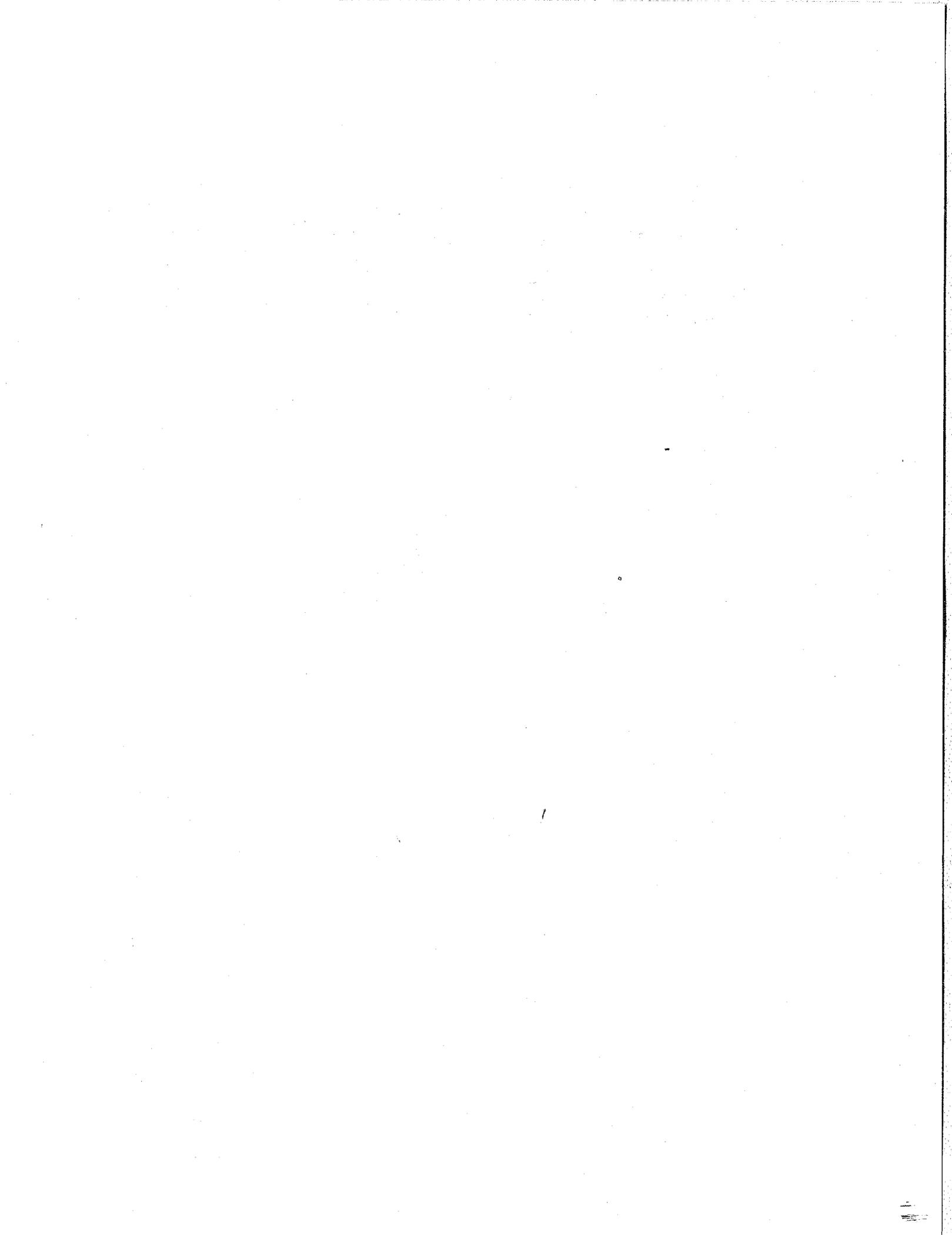
The Department will provide assistance as necessary to facilitate the Commission's review of this final-form rulemaking under Section 5.1(e) of the Regulatory Review Act. Please contact me at the number above if you have any questions or need additional information.

Sincerely,

A handwritten signature in cursive script that reads "Michele L. Tate".

Michele L. Tate
Regulatory Coordinator

Enclosures





**TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO
THE REGULATORY REVIEW ACT**

I.D. NUMBER: 7-395
SUBJECT: Storage Tank Program Amendments (25 Pa. Code, Chapter 245)
AGENCY: DEPARTMENT OF ENVIRONMENTAL PROTECTION

TYPE OF REGULATION

- Proposed Regulation
- Final Regulation
- Final Regulation with Notice of Proposed Rulemaking Omitted
- 120-day Emergency Certification of the Attorney General
- 120-day Emergency Certification of the Governor
- Delivery of Tolled Regulation
 - a. With Revisions
 - b. Without Revisions

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 REVIEW COMMISSION

FILING OF REGULATION

DATE	SIGNATURE	DESIGNATION
7/27/07	<i>Rhonda Campbell</i>	Majority Chair, HOUSE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
7/27/07	<i>Jessica B. Paine</i>	Minority Chair, HOUSE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
7/27/07	<i>Robert A. Castelli</i>	Majority Chair, SENATE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
7-27-07	<i>A. Rybarczyk</i>	Minority Chair, SENATE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
7/27/07	<i>Cheryl John</i>	INDEPENDENT REGULATORY REVIEW COMMISSION
_____	_____	ATTORNEY GENERAL (for Final Omitted only)
_____	_____	LEGISLATIVE REFERENCE BUREAU (for Proposed only)

