Regulatory Analysis Form

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INDEPENDENT REGULATORY REVIEW COMMISSION

IRRC Number: 2532

(1) Agency
Department of Environmental Protection

(2) I.D. Number (Governor's Office Use)
7-395

(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: Marge Hughes, 783-6395
Secondary Contact: Michele Tate, 783-8227

(6) Type of Rulemaking (Check One)

_X_ Proposed Rulemaking
____ Final Order Adopting Regulation
____ Final Order, Proposed Rulemaking Omitted

(7) Is a 120-Day Emergency Certification Attached?

_X_ No
___ Yes: By the Attorney General
___ Yes: By the Governor

(8) Briefly explain the regulation in clear and nontechnical language.

The proposed 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 proposed for storage tank permitting and technical requirements. These changes include simplified permit applications, 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.

(9) State the statutory authority for the regulation and any relevant state or federal court decisions.

The proposed 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 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 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 authorized 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.

(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, several sections of the Storage Tank Act direct 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. The Storage Tank Act does not require any of the proposed rulemaking changes to be final by any specific date.

There is a companion federal regulation relating to underground storage tanks 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 underground storage tank program in Pennsylvania. The federal storage tank regulations governing state program approval are codified at 40 CFR Part 281. The Department must update the SPA application with EPA upon final-form adoption of the proposed rulemaking.

(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 from contamination. While the number of releases has declined and the severity of the extent of contamination has lessened over recent years, this proposed 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 Storage 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 Storage Tank Act requires the Department and the Board to adopt rules and regulations to accomplish the purposes and carry out the provisions of the Storage 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 25,860 underground storage tanks (UST) and 17,480 aboveground storage tanks (AST) registered with the Department and regulated under the Storage Tank Act. The provisions of this proposed 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 370 companies, employing nearly 900 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 proposed rulemaking.

(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 over 7,900 owners of regulated storage tanks in the Commonwealth. Approximately 5,100 of these own or operate USTs. These owners will be affected by the proposed increased inspection frequency for USTs and many will be affected by the release detection and line-leak detector upgrade requirements. About 60 to 70 UST owners who install new or replace existing UST systems annually will be affected by the proposed requirement to install only total secondary contained (double-wall) UST systems. 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, 900 certified installers and inspectors, and 370 certified companies that will be required to comply with the regulation. At the current time, there are over 43,000 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 where involved, if applicable.

The Department worked closely with advisory subcommittees, as well as the STAC, during development of these proposals. 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 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, STAC has been given the opportunity to review and comment on this proposed 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. At the December 7, 2004 meeting, STAC voted on the proposals and the chairperson subsequently prepared a written report to the Board on the proposed rulemaking. STAC supported all portions of the proposed rulemaking, except for proposed registration fee increases. As a result of recent amendments to the Storage Tank Act prohibiting the Department from adjusting registration fees until January 1, 2010, the fee increases were removed from the proposed rulemaking. A list of STAC members may be obtained from the agency contacts noted in (5), above.

Regulatory Analysis Form

(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 proposed total secondary (double-wall) containment requirements for new or replacement UST systems that may be installed after the proposed rulemaking is adopted in final-form. Additionally, more frequent UST facility operations inspections (every 3 years as opposed to every 5 or 10 years) are proposed at an approximate cost of $300 to $350 per facility inspection. Some UST owners may also incur a one time cost of $100 to $500 to upgrade existing line-leak-detectors that only slow the flow of product or alert the operator through an alarm to line-leak-detectors 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 proposed 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 for any new or replacement UST systems that may be installed, and costs associated with upgrades of line-leak-detectors and more frequent UST facility inspections noted in the answer to (17), above.

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 proposed total secondary containment requirements if they install new or replacement UST systems or upgrade line-leak-detectors 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.

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 proposal.

Regulatory Analysis Form

(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.

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 proposed to be re-regulated by this rulemaking. Tank owners, through their registration fees, will pay these costs.

	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	**0**	**50**	**100**	**100**	**100**	**100**
Local Government						
State Government						
Total Costs	**0**	**50**	**100**	**100**	**100**	**100**
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.

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 proposed 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 installed each year.

More frequent UST facility inspections are required every 3 years under the proposed rulemaking at an average cost of approximately $300 to $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 02/03	FY 03/04	FY 04/05	Current FY
Storage Tank Fund – General Operations (210-20073)	$8,708	$8,914	$6,025	$9,309

NOTE: Figures are in thousands of dollars.

(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. 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. For the most part, the Department has established technical requirements for storage tanks in previous rulemakings and is establishing requirements in this proposal that set performance standards and rely on accepted industry codes and practices to meet those standards.

(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 proposed UST facility inspection frequencies at § 245.411 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. UST third-party inspection goals are also addressed in our Federal Grant Agreement with EPA. The Storage Tank Act also mandates a certified inspection program established by regulation for UST facilities. Proposed requirements for total secondary (double-wall) containment systems at § 245.421 for new or replacement UST installs is more stringent than federal requirements at 40 CFR 280.20, which allows for single-wall UST systems. 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 proposal to upgrade UST systems at § 245.422 with line-leak-detectors that shut-off the pump when triggered by a release of product in distribution piping is 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 the proposed 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 requirements. 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 and reduce releases of regulated substances. 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 proposed 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 or informational meetings are currently planned.

Regulatory Analysis Form

(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 proposed 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 Storage Tank Act, and are now being codified in new § 245.41. The proposal 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 (though sometimes not very clearly) 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 as early as August 2006. Owners of tanks that become newly regulated due to proposed 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 proposed 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: Amy M. Elliott
(Deputy Attorney General)

MAR 30 2006

DATE OF APPROVAL

☐ Check if applicable
Copy not approved. Objections attached.

Copy below is hereby certified to be true and correct copy of a document issued, prescribed or promulgated by:

DEPARTMENT OF ENVIRONMENTAL PROTECTION

(AGENCY)

DOCUMENT/FISCAL NOTE NO. 7-395

DATE OF ADOPTION: 12/20/05

BY Kathleen A McGinty

TITLE KATHLEEN A MCGINTY
CHAIRPERSON

EXECUTIVE OFFICER CHAIRMAN OR SECRETARY

Copy below is hereby approved as to form and legality Executive or ~~Independent Agencies~~

BY ANDREW C. CLARK

FEB 16 2006

DATE OF APPROVAL

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

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

NOTICE OF PROPOSED RULEMAKING

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Storage Tank Program Amendment

25 *Pa. Code*, Chapter 245

ENVIRONMENTAL QUALITY BOARD
[25 Pa. Code Ch. 245]

Administration of the Storage Tank and Spill Prevention Act

PREAMBLE

The Environmental Quality Board (Board) proposes to amend Chapter 245 (relating to administration of the storage tank and spill prevention program). The proposed rulemaking represents both comprehensive and minor editorial changes to the Department's existing regulations in Chapter 245, which includes Subchapters A, B, C, D, E, F, G and H. With the exception of Subchapter D, this proposal represents the first major changes to Chapter 245 since the final rulemaking adopted on October 11, 1997, which significantly amended Subchapter A, and initially established permitting and technical requirements in Subchapters C, E, F and G.

This order was adopted by the Board at its meeting of December 20, 2005.

A. Effective Date

The proposed rulemaking will go into effect upon final-form publication in the *Pennsylvania Bulletin.*

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. Information regarding submitting comments on this proposal appears in Section J of this Preamble. 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

The proposed 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 and Purpose

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 (General provisions) and Subchapter B (Certification program for installers and inspectors of storage tanks and storage tank facilities), which was adopted on September 20, 1991. In that initial rulemaking, federal requirements at 40 CFR Part 280 (relating to Technical standards and corrective action requirements for owners and operators of underground storage tanks (USTs)) 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 on 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 and since the last substantial amendments of Subchapter B in 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 proposals in Subchapter A would add one new definitional term, change several existing terms and delete one term that is no longer needed. The proposals 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 storing heating oil that is consumed on the premises. These tanks pose the same risk as other large aboveground storage tanks and were unintentionally exempted when definitional terms from the UST requirements in 40 CFR Part 280 were previously codified in the Commonwealth's current rules. The Department wants to correct this and re-regulate these large aboveground heating oil tanks. The regulated substance changes include the addition of several non-petroleum oils, bio-diesel, synthetic fluids, gasoline additives and other hazardous substances that should be properly managed in regulated storage tank systems. The proposed changes add clarity to existing tank handling and tightness testing provisions in Subchapter A, as well as record keeping, reporting requirements and appropriate release detection references. The proposal also adds comprehensive storage tank registration provisions and references the statutory registration fees in Subchapter A. The registration procedures are representative of long-standing Department policy on storage tank registration.

The proposals in Subchapter B include changes to tank installer, inspector and company certification provisions. These changes pertain to qualifications, training, testing, education and renewal of certification. The changes would 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 changes 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 the Commonwealth. Certified companies already incur technical and safety training costs for their certified employees and should be able to use that training to meet the proposed certification requirements. Also, the Department provides administrative training and seminars at minimal or no cost.

The proposals would change permitting provisions in Subchapter C, 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 proposal would 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 proposal is needed to further clarify this requirement and does not place a new burden or cost on the tank owner or SSIP applicant.

The proposal would also amend technical standards for UST systems in Subchapter E. 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 proposals 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. The proposal 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 are not clearly stated in the current rules. The proposal also contains provisions that preclude future UST internal lining, and requires removal of UST systems with failed linings. These changes 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 proposal would also provide 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 Section 245.1 (relating to definitions). Changes proposed to UST variance provisions would allow for additional variances and promote the development and implementation of new technologies.

The proposals would also amend technical standards for aboveground storage tank (AST) systems and facilities in Subchapter F and requirements for small AST systems in Subchapter G. The proposals provide 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 Section 245.1. The proposal 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. Changes proposed to AST variance provisions would allow for additional variances and encourage the development and implementation of new technologies.

Lastly, the proposal to amend Subchapter H clarifies financial responsibility requirements established in the Storage Tank Act for appropriate methods of meeting the underground storage tank indemnification fund deductible coverage and would correct other minor errors in this subchapter.

The Department worked closely with informal technical workgroups and advisory subcommittees, as well as the Storage Tank Advisory Committee (STAC), during development of these proposals. 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) - state association. 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, STAC has been given the opportunity to review and comment on this proposed rulemaking. At meetings on February 5, 2002, June 4, 2002, June 3, 2003, December 9, 2003, and December 7, 2004, STAC reviewed and discussed the proposal. At the December 7, 2004 meeting, STAC voted on the proposal, and the chairperson subsequently prepared a written report on the proposed rulemaking for presentation to the Board. STAC supported all portions of the proposed rulemaking, except for the proposal to increase registration fees. The fee increases have subsequently been removed from this proposed rulemaking. A listing of STAC members and minutes of STAC meetings are available on the PA PowerPort at //www.state.pa.us// 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 Regulatory Requirements

A brief description of the proposed amendments follows:

Subchapter A. General Provisions

1. *Section 245.1. Definitions.*

This section is proposed to be amended by adding a new definitional term, by amending several existing definitional terms and by deleting a definitional term that is no longer needed.

The term "non-tank handling project activities" is being added to correlate with proposed standards of performance changes in Section 245.132 and to clarify that certified companies are responsible for all of the work that their employees perform while conducting tank handling or inspection activities on a storage tank project, including the work on the project that does not constitute tank handling and may be performed by non-certified employees.

The term "pipeline facilities" is being amended to clarify which tanks located along coastal, interstate or intrastate pipelines are exempted and to clarify that storage tanks that may serve dual functions at complex facilities are to be regulated under Chapter 245.

The terms "aboveground storage tank," "certified company," "hazardous substance storage tank system," "person," "underground storage tank" and "tightness testing activities" are being amended to provide clarity and to correct errors in the existing definitions. For example, the current definition of "tightness testing activities" implies that such activities only apply to underground storage tanks. The proposed amendment clarifies that the term applies to entire underground storage tank systems, which would include both tanks and piping.

The definition of "consumptive use" is being amended to re-establish Department regulation of large aboveground storage tanks greater than 30,000 gallons in capacity and storing heating oil that is consumed on the premises. These large aboveground storage tanks were inadvertently exempted when federal underground storage tank regulations and definitional terms (found at 40 CFR Part 280) were codified in Chapter 245 in 1997.

The definition of "regulated substance" is also being amended to provide clarity and to bring under regulation several non-petroleum oils, bio-diesel, synthetic oils, silicone fluids, gasoline additives (such as ethanol and other oxygenates) and non-petroleum substances listed in 34 Pa. Code (Labor and Industry), Chapter 323 (Hazardous Substance List). These are substances that present health, safety or environmental hazards and are not currently found on the hazardous substance list from section 101(14) of CERCLA or are not currently regulated as a petroleum substance.

Lastly, the term "new underground storage tank system" is to be deleted. This term was adopted in 1997 from the federal definitions (found in 40 CFR Part 280) and was applicable to the December 22, 1998, deadline for upgrade or removal of then existing underground storage tanks. Since that date has passed and the proposed amendments in Subchapter E refer to new underground storage tank systems in a different context, the current regulatory term is not applicable or needed.

2. *Section 245.21. Tank handling and inspection requirements.*

The proposed amendment clarifies that certified installers must either perform tank handling activities or provide direct onsite supervision and control of these activities. The amendment adds clarity to this section and correlates with standards of performance requirements in Section 245.132.

3. *Section 245.31. Underground storage tank tightness testing requirements.*

The proposed changes in this section correlate with changes in the referred sections of Subchapter E and add clarity to this section. The changes also prescribe a specific timeframe (20 days) for providing a complete report and test results that correspond with other leak detection reports by third parties, such as completed statistical inventory reconciliation reports (Section 245.444(8)(ii)(A)), and establishes a 10-year period for tank tightness testers to retain records of the tightness testing activities they perform. This record retention period correlates with record keeping requirements for tank handling and inspection activities performed by other certified installers and inspectors (Section 245.132(a)(3)).

4. *Section 245.41. Tank registration requirements.*

This entire section is being proposed as an addition to Subchapter A. This section provides tank owners with the necessary information to properly register each regulated storage tank. These proposed requirements have been program policy for several years.

Subsection (a) states that proper tank registration consists of meeting the requirements of this section (245.41) and paying the appropriate registration fee in accordance with section 245.42 (relating to tank registration fees, also a new section).

Subsection (b) requires tank owners to register each storage tank, on a form provided by the Department, within 30 days after installation or taking ownership of a storage tank. The registration form is available through the Department's website (www.dep.state.pa.us, DEP Keyword: storage tanks). A regulated substance is not to be placed in a storage tank, nor is a storage tank to be operated, until an operating permit is received.

The information that must be provided by tank owners for complete registration is listed in subsection (c).

Subsection (d) indicates that a registration form also serves as an application for an operating permit. The Department may register a tank and not issue an operating permit for the reasons cited in this subsection. Certain classes of storage tanks require a site-specific installation permit prior to beginning construction. These requirements are provided in Subchapter C of Chapter 245. The registration form discussed in this section does not serve as an application for a site-specific installation permit.

Subsection (e) sets forth registration requirements for combination tanks operating as a single unit and compartmental tanks.

Subsection (f) provides instances when tank owners need to submit an amended registration form to the Department. The registration form needs to be submitted within 30 days of the change in previously submitted information.

The final proposed subsection, subsection (g), provides that the Department may require supporting documentation in order to exempt or exclude a tank from regulation.

5. *Section 245.42. Tank Registration Fees.*

This entire section is being proposed as an addition to Subchapter A. This section provides tank owners with current tank registration fees, billing information and related procedures. Subsections (c)-(g) represent existing program policy being codified into regulation.

Subsections (a) and (b) reference the statutory tank registration fees that were established in sections 302(a) and 502(a) of the Storage Tank Act (35 P.S. §§ 6021.302(a) and 6021.502(a)) and became effective on August 5, 1989. No changes or increases are proposed in the fee amounts.

Subsection (c) provides that the Department will issue an invoice to a tank owner upon receipt of a complete registration form.

Under proposed subsection (d), registration expiration dates for storage tanks will be established on a facility basis. Upon initial registration of a storage tank, the Department will prorate the registration fee based upon the percentage of time remaining in the registration year. For example, if a storage tank is registered two-thirds of the way through a registration year, the invoice will reflect payment for one-third of the registration fee for that year. If a storage tank is permanently closed or exempted after the appropriate registration fee has been paid for the registration year, the Department will not refund any registration fees.

Subsection (e) states that the Department will issue a certificate of registration to the tank owner upon payment of the required registration fee. The current, valid certificate of registration must be made available for inspection by the Department, a certified individual or product distributor. At retail facilities, the certificate of registration is to be displayed so that the public can see the certificate.

In accordance with subsection (f), the Department will issue an invoice to the tank owner for the annual registration renewal of the tanks at each facility. The invoice will be issued once per year, at least 60 days prior to the expiration date of the current certificate of registration.

Subsection (g) states that registration fees are payable no later than 60 days after the invoice date, and will be delinquent 90 days after the invoice date. Since a certificate of registration (which also serves as the operating permit) will not be issued by the

Department until payment of the registration fee is received, the Department highly recommends that payment be made at least three (3) weeks prior to the expiration date of the current certificate. This will allow the Department to verify that sufficient funds are available to cover the payment and issue a renewal certificate prior to expiration of the current certificate.

6. *Section 245.43. Failure to Pay Registration Fee.*

   This entirely new section proposes that Commonwealth policy and guidelines will be implemented to collect delinquent registration fees. Subsections (b) and (c) state that operating permits for storage tanks may be withheld, denied or revoked for failure to pay registration fees.

Subchapter B. Certification program for installers and inspectors of storage tanks and storage tank facilities.

1. *Section 245.102. Requirement for certification.*

   The proposed amendments to this section incorporate editorial changes resulting from the proposed deletion of subsections (a)-(c) of Section 245.103 and the proposed transfer of subsection 245.103(d) to this section as subsection (e).

   The proposed amendments to subsections (a)(4) and (b)(4) allow the Department to not issue certification if the applicant is in violation of the Storage Tank Act or Chapter 245. Currently, this section requires the revocation of the applicant's certification by the Department under section 245.109. Revocation is not appropriate for new applicants or applicants currently certified and under investigation for violations. The Department may withhold action on a certification application until an investigation is complete or violations are resolved.

2. *Section 245.103. Phase-in from interim certification.*

   This section is proposed to be reserved. Subsections (a)-(c) are proposed for deletion, since these sections are no longer relevant to the certification process. Subsection (d) is proposed to be added to Section 245.102 as subsection (e) and modified slightly.

3. *Section 245.104. Application for installer or inspector certification.*

   The proposed amendments to this section include clarification that the applicant must use the current application form, editorial changes resulting from the proposed changes to Section 245.103, and decreasing (from 120 to 60) the number of days an application must be submitted prior to the date of the certification examination.

4. *Section 245.105. Certification examinations.*

The proposed amendment to subsection (c) clarifies the examination eligibility interval and is consistent with current information provided to the applicant.
The proposed amendment to subsection (d) reduces the passing score for the technical examination modules to 80%. This creates similar passing scores for both the administrative and technical examination modules and correlates related industry training/testing requirements.

The proposed amendments to subsection (e) eliminate the requirement that an applicant who fails an examination module twice must complete a training program and establish an eligibility interval or timeframe for retaking the examination.

5. *Section 245.106. Conflict of interest.*

The proposed amendment to this section clarifies that tank owners may not inspect their own tanks.

6. *Section 245.108. Suspension of certification.*

The proposed amendments to this section include editorial changes and provisions that violations of the Air Pollution Control Act or failure to perform underground tightness testing activities in accordance with requirements can result in suspension of certification.

7. *Section 245.109. Revocation of certification.*

The proposed amendments to this section are editorial changes resulting in the consistent use of terms.

8. *Section 245.110. Certification of installers.*

The proposed amendments to this section combine the individual certification categories for underground storage tank removal (UMR) (subsection (b)(2)) and aboveground manufactured storage tank removal (AMR)(subsection (b)(6)) into a new manufactured storage tank removal category (MTR). The Department believes that the tank removal activities are similar, thereby allowing the certified individual to remove both underground and manufactured aboveground storage tank systems.

Proposed amendments to subsection (b)(7) allow individuals certified in the aboveground field constructed metallic storage tank installation, modification and removal category (AFMX) to modify tank components of aboveground manufactured storage tank systems. Individuals certified on field constructed aboveground storage tanks have the qualifications and experience to modify manufactured aboveground storage tanks.

Amendments proposed for subsection (b)(8) allow an individual certified in the aboveground field constructed storage tank removal category (AFR) to remove manufactured aboveground storage tanks.

Proposed amendments to subsection (b)(11) clarify that an individual certified in the storage tank liner category (TL) can install and modify internal linings for underground and aboveground storage tanks and evaluate underground storage tank linings.

9. *Section 245.111. Certified installer experience and qualifications.*

The proposed amendments to this section place a greater emphasis on technical and safety training as a requirement for initial category certification. The total number of required activities is proposed to be reduced based on the decrease in the overall number of tank handling activities occurring in the industry. The proposed numbers are sufficient to verify that the applicant is experienced and competent in the category. Subsection (b) is proposed to be amended to reduce the period in which activities are completed from 7 to 3 years immediately prior to the application submission.

10. *Section 245.112. Certification of inspectors.*

Proposed amendments to subsection (b)(3) allow an inspector certified in the aboveground field constructed category (IAF) to also inspect manufactured aboveground storage tank systems.

11. *Section 245.113. Certified inspector experience and qualifications.*

The proposed amendments to this section change the requirements for initial inspector certification categories. Applicants will need to document safety training appropriate for the certification category. Aboveground storage tank system inspectors will be required to have appropriate industry inspection certification such as API or STI inspection certification. Underground storage tank system inspectors will be required to have underground storage tank installation and modification certification (UMX) and corrosion protection training. Proposed subsection (h) clarifies that underground inspectors must complete Department inspector training prior to conducting facility operation inspections.

12. *Section 245.114. Renewal and amendment of certification.*

The proposed amendments to this section create a uniform expiration date for all categories held by an installer/inspector and phase out certification category renewal based on the number of activities completed. Certification renewal will be based on appropriate technical and safety training or passing the category specific examination and/or industry certification. The Department will maintain the certification examination and provide administrative and inspector training.

Proposed amendments to subsection (g) clarify the time period in which certification renewal application must be submitted. Renewal applications received more than 60 days after the expiration date of the category must meet the initial application requirements in Sections 245.111 or 245.113.

13. *Section 245.121. Certification of companies.*

The proposed amendments to this section clarify that a company that employs certified installers/inspectors, including underground tightness testers, must be certified by the Department.

14. *Section 245.122. Applications for company certification.*

This section is proposed to be amended to prevent the Department from issuing company certification to a company that is to be found in violation of the Storage Tank Act or Chapter 245, or that has an officer who was involved in an individual or company certification revocation.

15. *Section 245.123. Suspension of company certification.*

The proposed amendments to this section broaden the reasons for suspension of company certification and provide consistency between the reasons for individual suspension (Section 245.108) and company certification suspension.

16. *Section 245.124. Revocation of company certification.*

The proposed amendments to this section broaden the reasons for revocation of company certification and provide consistency between the reasons for individual revocation (Section 245.109) and company certification revocation.

17. *Section 245.125. Renewal and amendment of company certification.*

This section is proposed to be amended by reducing the number of days, from 120 to 60 prior to the company certification expiration date, that a renewal application must be submitted. The proposed change in subsection (b) provides that a company certification amendment form must be submitted within 14 days of the change in information.

18. *Section 245.132. Standards of performance.*

The proposed amendments to subsection (a)(1) remove the list of referenced organizations, which are found in Subchapters E, F, and G of Chapter 245.

The other proposed amendments to this section provide editorial changes and codifies the current expectations and requests made by the Department in reference letters, reporting form instructions and guidance documents.

19. *Section 245.141. Training approval.*

The proposed amendments to this section reduce the number of days, from 120 to 60 prior to the expiration date, that a renewal application must be submitted. The proposal also allows the Department to approve industry-recognized training without the submission of an application.

Subchapter C. Permitting of underground and aboveground storage tank systems and facilities.

1. *Section 245.203. General requirements for permits.*

   The proposal amends this section by adding appropriate references to the new registration requirements in Subchapter A and adding provisions allowing the Department to preclude submission of general operating permit application and to deem approval of operating permits for existing tanks that meet permitting requirements.

2. *Section 245.222. Application requirements.*

   The proposal amends this section by adding to the existing references the appropriate references to administrative and technical requirements in Subchapters A and G. These referenced sections have always been applicable to storage tank owners and operators, but were inadvertently left out of the general operating permit provisions in the previous rulemaking.

3. *Section 245.231. Scope.*

   The proposal adds clarity to this section, and simplifies the site-specific installation permit (SSIP) application process and specific requirements for installation of storage tanks at existing facilities, for replacement storage tanks or tanks located on the footprint of previous tanks, and for small aboveground storage tanks that constitute a new storage tank facility with greater than 21,000 gallon aggregate storage capacity. The amendment also provides for excluding certain newly regulated large aboveground heating oil tanks from the SSIP process when the owner or operator has entered into contractual agreements for construction of such tanks or facilities prior to the effective date of this proposal.

4. *Section 245.232. General requirements.*

   The proposal to add subsection (c) to this section refers permit applicants to the appropriate permit fee sections in the Storage Tank Act that have been applicable to SSIP applications since Subchapter C was adopted in 1997.

5. *Section 245.234. Siting requirements.*

   The proposal would add subsections that provide for submission of appropriate construction design criteria and engineering specifications when it is necessary to mitigate certain conditions at the site. The Department will not issue an SSIP if it determines that such plans are not adequate or do not mitigate the site conditions, such as potential excessive settlement or unstable support for the tank system proposed in the permit application.

6. *Section 245.235. Environmental assessment.*

The proposed amendment adds clarity to this subsection as to the Department's role in consulting with appropriate government agencies and potentially affected persons concerning potential environmental harm addressed in the environmental assessment associated with an SSIP application.

Subchapter D. Corrective action process for owners and operators of storage tanks and storage tank facilities and other responsible parties.

Section 245.311. Remedial action plan.

The proposal to amend this section is to correct a minor editorial error in the reference to remedial action plans that may differ from prior plans submitted with the site characterization report under Section 245.310(a)(25).

Subchapter E. Technical standards for underground storage tanks.

Throughout this subchapter, the proposal updates references that the proposal would change as appropriate. Certain terms are proposed to be modified in this subchapter for consistency with the definitions in Subchapter A. It is also proposed to correct minor typographical errors.

1. *Section 245.403. Applicability.*

   The proposed amendment to Section 245.403 allows owners of existing UST systems that become regulated because of definition changes, 60 days to register their tank systems and three (3) years to complete any applicable upgrades to meet the technical requirements of Subchapter E.

2. *Section 245.404. Variances.*

   Changes to Section 245.404 are proposed to allow variances in situations where application of the technical regulations may be impractical. The Department is also proposing to clarify the status of new technologies. New technologies properly documented by a professional engineer (PE) may be considered by the Department when making the decision to grant a variance under this section.

3. *Section 245.405. Codes and standards.*

   Amendments to Section 245.405 are proposed to name sources of codes and practices that may be used for meeting the requirements of Subchapter E, to add requirements that parallel Subchapter A and to clarify that these regulations take precedence over industry standards when there is a conflict.

4. *Section 245.411. Inspection frequency.*

This section is proposed to be amended to change the routine facility inspection frequency from 5 or 10 years to three (3) years for all UST systems. This change is consistent with proposed federal legislation. It has been generally found that more frequent inspections lead to higher compliance rates and fewer releases to the environment. In addition, the U.S. General Accounting Office (GAO) report to Congress in May 2001, titled "Environmental Protection - Improved Inspections and Enforcement Would Better Ensure the Safety of Underground Storage Tanks" addressed the effectiveness of the federal UST program, state agencies' implementation and inspection frequencies. The GAO reported that ideally USTs and facility operations should be physically inspected on an annual basis to ensure that problems are being identified and resolved quickly. Where a state or region lacks resources, all tanks should be inspected no less frequently than once every 3 years to confirm tanks are being properly operated and maintained. Federal requirements at 40 CFR 280.21 and 280.31 (relating to upgrading of existing UST systems, and operation and maintenance of corrosion protection) only establish inspection requirements or frequencies for internally lined UST systems and for corrosion protection systems. However, in its formal agreements with the Commonwealth, EPA has requested that additional UST facility operations inspections be conducted by Department certified third-party inspectors. Also, section 501(c) of the Storage Tank Act (35 P.S. § 6021.501(c)), directs the Department to establish a certified inspector program and inspection frequencies for USTs.

Also proposed is excluding the first 6 months of ownership from the time period during which a new owner may have their UST facility inspected. A large portion of the facility inspection is the examination of the operation of critical systems such as release detection equipment. It is desirable that a minimum of 6 months of operating history be accumulated to adequately assess this part of the owner's responsibilities. To simplify the language of this paragraph, it is proposed that the date that this provision becomes effective be replaced by the term, "newly installed."

The proposed rulemaking strengthens the requirements for additional inspections and adds requirements for mandatory operator training under appropriate circumstances. A proposed wording change should eliminate the occasional misinterpretation that the Department cannot compel additional inspections. Owners and operators that have noncompliant inspection results often express the need for training to better understand their responsibilities. Mandatory training is proposed as one remedy to help the owner and operator come into and maintain their compliance with Chapter 245 regulations.

5. *Section 245.421. Performance standards for underground storage tank systems.*

A change to this section is proposed to mandate total secondary containment (double-wall) systems and an upgraded form of line leak detection for new UST systems. Federal requirements at 40 CFR 280.20 (relating to performance standards for new UST systems) allow for single-wall UST systems. However, 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. The additional containment will aid in early release detection and keeping releases from reaching the environment.

To aid the Department in overseeing installers, the proposal adds a requirement to notify the Department thirty (30) days prior to commencing installation activities. The Department may agree to another, reasonable time frame. This is similar to the current 30-day notice requirement for UST system closure or removals in subsection 245.452(a).

Changing a tank system from unregulated to regulated service is considered an installation. A certified installer may not have installed such a system. The Board proposes to modify this section to clarify what is required of the owner when the owner plans to change an unregulated system to regulated use.

Many of the technical requirements for new and previously installed UST systems are the same. The proposal incorporates the redundant portions of Section 245.422 into this section.

The Board proposes to amend this section to clarify corrosion protection requirements for tanks, piping and other metallic components (not just steel), including ancillary equipment when it routinely contains product. Proposed changes would also clarify that wrapping with tape or similar material alone does not constitute corrosion protection. Proposed changes would clarify that a corrosion expert must design impressed current systems.

To help ensure older systems do not become a source of new releases, it is proposed that whenever more than 30 percent of a piping system is replaced, the entire piping portion of the system be upgraded to total secondary containment. The proposal clarifies the extent of the piping system as including joints and flexible connectors.

In order to ensure UST systems are adequately designed and safe for intended use, the proposal requires piping and related components to be approved by Underwriters Laboratory (UL listed).

A common problem is for containment sumps to collect storm water or groundwater and not be able to perform their required function. The proposal requires containment sumps to be liquid tight. The proposal should not be interpreted to mean vapor tight or requiring a totally sealed lid. Rather, the sump needs to be capable of holding and retaining liquids should a release of regulated substance occur. The sump must prevent groundwater from entering or substantial surface water from routinely accumulating in the sump. The proposal also requires testing of containment systems at installation to demonstrate tightness. These changes would help ensure that product that was caught by a containment sump would be identified through leak detection and would not enter the environment. The proposal is consistent with manufacturer's recommendations for installation and maintenance of containment sumps.

Current regulations require devices to prevent overfilling of UST systems. Inspections have found inoperative devices and devices that do not work as intended. The Board proposes to amend this section to restrict the use of certain overfill devices to systems

that can function properly. In addition, the proposal requires testing of the required overfill device at installation.

6. *Section 245.422. Upgrading of existing underground storage tank systems.*

Upgrading UST systems has not been as successful as originally intended. The Board proposes that lining and lining combined with corrosion protection no longer be allowed to meet corrosion protection standards. The proposal allows systems that currently use these methodologies to continue to use them as long as they are operated and maintained properly. Federal requirements at 40 CFR 280.21 (relating to upgrading of existing UST systems) allowed this method of corrosion protection to meet the 1998 upgrade deadline. The upgrade deadline has since passed, and existing UST systems should already meet corrosion protection requirements.

Tanks that were upgraded by lining alone are required to be periodically inspected. The Board proposes to codify policy contained in DEP guidance #257-3120-001 (relating to evaluation of underground storage tank liners) into this section. This policy states that evaluations are to be done by a certified tank liner (TL) or qualified professional engineer (PE); results of the evaluation are to be submitted to the Department on the form attached to the guidance document; after a lined system fails to meet required design criteria, the tank system can no longer be used for regulated storage.

To help detect releases on older tank systems, the Board proposes that tanks over 3,000 gallons capacity must upgrade to automatic tank gauging when release detection equipment is modified or replaced and the owner is not using interstitial monitoring. The proposal also requires that line leak detection equipment must shut off the product delivery pump. Existing systems with interstitial monitors or electronic line leak detectors will be given 2 years to meet this requirement; systems over 3,000 gallons capacity that use a mechanical line leak detector will be given 5 years to meet this requirement. Federal requirements at 40 CFR 280.44 (relating to methods of release detection for piping) also allow for line leak detectors that may only alert the operator by restricting (or slowing) the flow of regulated substances or by triggering an alarm. In many instances, these options have been ineffective and have not prevented ongoing substance releases as intended.

7. *Section 245.423. Registration requirements.*

The proposed amendments move the majority of this section to Subchapter A to clarify the requirement to register all regulated storage tank systems. See proposed Section 245.41 for additional information.

8. *Section 245.425. Reuse of removed tanks.*

Changes to this section are proposed to reflect changes in other portions of this subchapter and improve clarity and readability.

9. *Section 245.432. Operation and maintenance including corrosion protection.*

The proposal renumbers paragraphs as subsections to more clearly differentiate among the listed maintenance activities.

The proposal also amends this section to clarify maintenance and operational requirements for owners. Clarification is proposed concerning what needs to be inspected on impressed current systems and what equipment is required to be properly maintained.

Subsection additions are proposed to detail maintenance of tank linings and system containment structures. Also proposed is an addition concerning the proper maintenance of water-free petroleum products to prevent corrosion problems with the tank system and to protect the product user. The proposal is consistent with nationally recognized association and equipment manufacturer's standards.

10. *Section 245.434. Repairs allowed.*

Changes to this section are proposed to include containment systems in the portion of the tank system that must be tested after a repair and to expand the recordkeeping requirements to all repairs.

11. *Section 245.435. Reporting and recordkeeping.*

The proposal renumbers and rearranges subsections to clearly differentiate between records that must be maintained for the operational life of a storage tank system (permanent records) and those that are required to be maintained for a limited time (temporary records). The proposal includes extending the maintenance of permanent records to one (1) year beyond permanent system closure.

The proposal includes adding the current registration certificate as a temporary record. Further, it proposes to clarify corrosion protection operation recordkeeping requirements by splitting the entry into two detailed paragraphs. The proposal also adds paragraphs for temporary records that were found in other parts of the Subchapter, but not in this section. Specifically, these temporary records are release detection certifications, performance claims and maintenance records. It is also proposed that records of suspected release investigations be added to the temporary record category, to be maintained for twelve (12) months.

12. *Sections 245.441 and 245.442. General requirements for underground storage tank systems and requirements for petroleum underground storage tank systems.*

These sections contain provisions for the phase-in of release detection requirements for older UST systems. The deadlines for upgrading have all passed. It is proposed that these sections be updated to remove the phase-in information, and eliminate inventory control by 2008 and manual tank gauging for tanks greater than 1,000 gallons capacity within ten (10) years of the effective date of the final rule.

In addition, a requirement is proposed to monitor interstitial spaces for releases at least once every 30 days, when practical for older systems and for all new systems, and maintain records of such monitoring results for twelve (12) months.

13. *Section 245.444. Methods of release detection for tanks.*

This section is proposed to be amended to clarify the meaning of "portions of the tank that routinely contain product," for tightness tests performed by an automatic tank gauge, as that portion of the tank up to the overfill set point.

The proposed amendments also require the replacement or certification of automatic tank gauges that do not currently have a valid third-party certification.

To meet the requirements of the Engineer, Land Survey and Geologist Registration Law, the proposed amendments add requirements for professional geologists to perform site evaluations related to release detection methods. It is further proposed that when site evaluations are required for release detection, that the evaluation be maintained for the entire time that method is in use at the site.

14. *Section 245.445. Methods of release detection for piping.*

This section is proposed to be amended to be consistent with the upgrade requirements of Section 245.422. For new and upgraded systems, the line leak detection device must shut off the flow of regulated substance when a release is detected. Federal requirements at 40 CFR 280.44 also allow for line leak detectors that may only alert the operator by restricting (or slowing) the flow of regulated substances or by triggering an alarm. In many instances, these options have been ineffective and have not prevented ongoing regulated substance releases as intended.

15. *Section 245.451. Temporary closure.*

This section is proposed to be amended to include the more familiar industry term, "temporary out-of-service," and narrow the definition of "temporary closure" to tanks that are empty.

Further, the proposed amendments clarify the inspection, reporting and recordkeeping requirements when an UST system is in temporary closure: corrosion protection records must be maintained as for an in-use system; suspected release investigation and release reporting must be performed as for an in-use system; facilities must continue to be inspected as for an in-use facility; and the most recent twelve (12) months of operating release detection records must be maintained.

Finally, the proposal limits the period of temporary closure for fully compliant UST systems to three (3) years, after which the system must be permanently closed (unless the Department grants an extension).

Subchapter F. Technical standards for aboveground storage tanks and facilities.

1. *Section 245.503. Variances.*

   The proposed amendments to this section are intended to allow variances in situations where application of the technical regulations may be impractical. The Department is also proposing to clarify the status of new technologies. New technologies properly documented by a professional engineer (PE), may be considered by the Department when making the decision to grant a variance under this section.

2. *Section 245.504. Referenced organizations.*

   The proposal to amend this section reflects editorial changes to referenced organization names (titles) in subsection (a), which changed since this subchapter was originally adopted in 1997, and adds manufacturer's specifications to the nationally recognized codes and standards referenced in subsection (c).

3. *Section 245.505. Applicability.*

   This new section is intended to provide temporary exclusions for existing tanks that become regulated due to the addition of newly regulated substances or certain re-regulated heating oil tanks due to changes in the "Consumptive use" and "Regulated substance" terms in Section 245.1. The temporary exclusions will provide phase-in periods to comply with monitoring requirements and inspection schedules that are similar to the phase-in periods provided for other existing tanks when this Subchapter was originally adopted in 1997.

4. *Section 245.514. Security.*

   The proposal adds monitoring as an element of security that the tank owner or operator may include in appropriate security measures.

5. *Section 245.522. New aboveground tank installations and reconstructions.*

   The proposal adds references to Steel Tank Institute practices or applicable engineering specifications and sound engineering practices during design, construct or reconstruction of tanks. Additional language provides that the Department may require the tank owner to submit documentation of construction design criteria and engineering specifications for review.

6. *Section 245.523. Aboveground storage tanks in underground vaults.*

   The proposed new addition to Section 245.523 would require that underground piping distribution systems (such as piping from the tank to the product dispenser) for certain aboveground tanks in underground vaults be provided with release detection equivalent

to methods of release detection provided for piping associated with underground storage tank systems in Subchapter E.

7. *Section 245.524. Aboveground tank modifications.*

The proposal adds two (2) additional references to Nationally recognized associations for tank modification design and the authority for the Department to require the tank owner to submit documentation of design criteria and engineering specifications for review.

8. *Section 245.534. Interior linings and coatings.*

The proposal contains a new subsection (c) addressing inspection requirements for tank interior linings or coatings, which correlate with the lining manufacturer or design engineer recommendations.

9. *Section 245.541. Overfill prevention requirements.*

The proposal contains minor edits and provisions for upgrading existing tanks with high-level alarms within 3 years of the effective date of the final rulemaking. This change is necessary because the current rules only require upgrades when tanks are taken out of service for inspection or major modification and many tanks that need high-level alarms do not require these out-of-service activities.

10. *Section 245.542. Containment requirements for aboveground tanks.*

The proposal contains minor edits, clarifications and a deadline for upgrading or meeting requirements for emergency containment structures. Reference to the Department's technical document for verification of emergency containment structures, and information on how long verification of the containment structure is valid, are also being added.

11. *Section 245.543. Leak detection requirements.*

The proposal contains clarifications and a new subsection (d) that addresses requirements for third-party tank test for tightness methods and procedures consistent with industry practices and applicable national associations.

12. *Sections 245.552 and 245.553. In-service inspections, and Out-of-service inspections.*

The proposal adds the requirement that appropriate engineering criteria and the current referenced national association standards must be followed when conducting inspections, and includes evaluation of tank system integrity and suitability for service during inspections. Additional language is proposed for determining tank service life and projecting the next inspection interval. This information specifically identifies the factors that most frequently affect service life and should, therefore, be considered when projecting the next inspection interval. Also, language is proposed to appropriately

remedy inspection recommendations or findings, as well as clarification on documenting and reporting tank system modifications necessary to correct deficiencies. Additionally, a new subsection 245.553(c) is proposed to address evaluation of the tank bottom during out-of-service inspections.

13. *Section 245.554. Installation and modification inspections.*

The proposal to amend Section 245.554 contains similar language as is proposed to be added to subsections 245.552(e) and 245.553(f), with the same intention of clarifying actions that must be taken in response to inspection findings involving modification inspections.

14. *Section 245.561. Permanent closure or change in service.*

The proposal added to subsection 245.561(3) is intended to assist owners in the closure notification process by directing them to follow the process outlined in the Department's technical document titled "Closure Requirements for Aboveground Storage Tank Systems." This is similar to the current reference in Subchapter E for underground storage tank closure requirements. Paragraphs (6) and (8) have new language intended to provide clarification to existing wording and require notification to other agencies or jurisdictions when removing tanks when they have permit jurisdiction.

Subchapter G. Simplified program for small aboveground storage tanks.

1. *Sections 245.604, 245.611 and 245.614. Referenced organizations, Testing requirements for new and substantially modified small aboveground storage tanks and Requirements for closure.*

The proposals to these sections reflect minor editorial changes or referenced title changes since this Subchapter was originally adopted in 1997 and specific requirements for closure of piping systems.

2. *Section 245.605. Applicability.*

This newly proposed section is intended to provide temporary exclusions for existing tanks that become regulated due to the addition of new regulated substances in Section 245.1. The temporary exclusions will provide phase-in periods to comply with containment requirements, leak detection and inspection schedules that are similar to the phase-in periods provided for other existing tanks when this subchapter was originally adopted in 1997.

3. *Section 245.612. Performance and design standards.*

The proposals to this section are in response to frequent misunderstandings of the current rules by the regulated community. The proposal addresses the requirement to use certified installers to accomplish tank handling activities on small aboveground storage

tanks and provides direction consistent with industry standards and U.S. Environmental Protection Agency guidelines on the use of double-walled tanks to satisfy containment requirements.

4. *Section 245.616. Inspection requirements.*

The proposals for this section provide additional clarity on inspection standards, determining future inspection intervals, remedies to correct deficiencies noted during inspection, and reporting to the Department on corrections of deficiencies found during inspection.

Subchapter H. Financial responsibility requirements for owners and operators of underground storage tanks and storage tank facilities.

Sections 245.704 and 245.707. General requirements and Coverage amounts for financial responsibility.

The proposed amendments to these sections make editorial corrections and clarify appropriate methods for meeting the Underground Storage Tank Indemnification Fund (USTIF) deductible coverage for owners and operators of USTs.

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 hazardous and non-petroleum 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 bio-diesel, synthetic fuels and potential additives such as ethanol, which may be used to replace oxygenates, such as methyl-tertiary-butyl-ether (MTBE), and could pose some risks similar to MTBE. 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.

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 current and proposed 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. 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 the proposed rulemaking, rather than every five years or ten years under the current inspection frequencies. The cost of installation of total secondary containment (double-wall) UST systems is approximately 15 to 30 percent greater than the cost of installation 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 on existing piping systems already using an interstitial monitor or an electronic line leak detector within 2 years, and UST systems with a capacity greater than 3,000 gallons within 5 years of the effective date of the proposed rulemaking or when a line leak detector is replaced.

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 proposed 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 proposed 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 proposed 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 the *Storage Tank Monitor* (a periodic newsletter); 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 when the proposed rulemaking is adopted in final-form.

The Department expects these efforts to continue and to intensify after adoption of this 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 the proposed 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 proposal precludes two separate applications. Additionally, the proposed 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, includes a shortened application and less paperwork.

The certification proposals in Subchapter B will slightly reduce the application requirements for underground storage tank removers and aboveground manufactured storage tank removers, by consolidating the requirements into a single certification category. The proposals also 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 proposals will 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 the proposed 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 proposed 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 at all. The programs set out in this proposed 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 proposed rulemaking package, 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

These regulations will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulations effectively fulfill the goals for which they were intended.

I. Regulatory Review

Under § 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on _____, the Department submitted a copy of this proposed rulemaking and a copy of a Regulatory Analysis Form to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the House and Senate Environmental Resources and Energy Committees. A copy of this material is available to the public upon request.

Under § 5(g) of the Regulatory Review Act, IRRC may convey any comments, recommendations, or objections on the proposed rulemaking within 30 days of the close of public comment period. The comments, recommendations, or objections shall specify the regulatory review criteria that have not been met. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the rulemaking, by the Department, the General Assembly and the Governor of comments, recommendations or objections raised.

J. Public Comments

Written Comments--Interested persons are invited to submit comments, suggestions or objections regarding the proposed amendments to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477 (express mail: Rachel Carson State Office Building, 15th Floor, 400 Market Street, Harrisburg, PA 17101-2301). Comments submitted by facsimile will not be accepted. Comments, suggestions or objections must be received by the Board by _____ (within 60 days of publication in the Pennsylvania Bulletin). Interested persons may also submit a summary of their comments to the Board. The summary may not exceed one page in length and must also be received by _____ (within 60 days following publication in the Pennsylvania Bulletin). The one-page summary will be provided to each member of the Board in the agenda packet distributed prior to the meeting at which the final regulation will be considered.

Electronic Comments--Comments may be submitted electronically to the Board at RegComments@state.pa.us and must also be received by the Board by _____ (within 60 days following publication in the Pennsylvania Bulletin). A subject heading of the proposal and a return name and address must be included in each transmission. If an acknowledgement of

electronic comments is not received by the sender within 2 working days, the comments should be retransmitted to ensure receipt.

Kathleen A. McGinty
Chairperson
Environmental Quality Board

Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart D. ENVIRONMENTAL HEALTH AND SAFETY

ARTICAL 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. The term does not include the following, or pipes connected thereto:

* * * * *

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

* * * * *

Non-tank handling project activities **– Activities performed by a certified company or employee of a certified company on a project that may not be tank handling activities.**

but are part of the certified 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 or the Natural Gas Pipeline Safety Act which may include coastal, interstate or intrastate pipelines and 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 does not include dual purpose tanks 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 (245) 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 (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, 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:**

(1) Non-petroleum 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. Where requirements between hazardous and

petroleum substances differ, the requirements for petroleum tanks shall apply for this group of substances.

(2) Compounds for use as additives in gasoline and not already found on the list from section 101(14) of CERCLA. The requirements for hazardous substances shall apply to this group of compounds in their unblended condition, and the requirements for petroleum tanks shall apply after blending with gasoline reduces their concentration to less than 15% by volume of the stored substance.

(3) Non-petroleum 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 shall 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 tests on underground storage tank**[s]** **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 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 tightness testing (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(1) and 245.443(1) (relating to requirements for petroleum underground storage tank system; and requirements for hazardous substance underground storage tank systems)]** **444(3) and 245.445(2) (relating to methods of release detection for piping).**

* * * * *

(e) 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) **or 245.445(2)** **[(relating to methods of release detection for tanks]** 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 tightness testing (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).

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 shall 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 must provide the following:

(1) Tank owner, operator and contact information.

(2) General facility, site and location information.

(3) Specific tank description and usage information.

(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.

(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. 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 non-regulated status, for example, changing a storage tank to use as a process vessel.

(4) Change in substance 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 non-regulated status.

§ 245.42. Tank Registration Fees.

(a) Annual registration fees to be paid by owners of aboveground storage tanks are established by section 302 of the act 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 by section 502 of the act 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 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 shall 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),]** **[i]**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,]** **[i]**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 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 of the tank owner **or the tank owner**.

* * * * *

§ 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**.

(iii) Submit reports of inspection activities to the Department within 60 days of conducting the inspection activities.

(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 days of conducting the tank handling 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.

(a) An installer certification authorizes the person to whom it is issued to conduct tank handling activities or tightness testing activities pertaining to storage tank systems or storage tank facilities in one or more of the categories in subsection (b).

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

(1) *Underground storage tank system-installation and modification {UMX}.* Installation and modification of underground storage tanks and storage tank systems including, but not limited to, the tank and all associated ancillary equipment, appurtenances, corrosion protection systems, structural components and foundations. This category also includes conducting preinstallation air pressure tests for underground storage tank systems.

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

[(3)](2) *Underground storage tank-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.]

[(7)] (6) *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.**

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

[(9)] (8) *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 overfill prevention systems that are components of an aboveground storage tank system or storage tank facility.

[(10)] (9) *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.

[(11)] **(10)** *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** requirements**[, or both,]** and have completed the required number of activities in the appropriate category for an **initial** installer **category** certification:

Category	**[Total]** Experience , **[or]** Education **and Training** **[plus Experience]**	Total Number of Activities Completed
UMX	2 years, or college degree and 1 year **Technical training**	**[15]** **9** installations
[UMR	**2 years, or college degree and 1 year**	**15 removals]**
UTT	Department approved training with	**None**

	testing equipment manufacturer's certification	
MTR	**2 years, or college degree and 1 year Technical training**	**6 removals**
AMMX	2 years, or college degree and 1 year **Technical training** or UMX Certification **Technical training** or AFMX Certification	**[15] 9** installations None None
AMNX	2 years, or college degree and 1 year **Technical training** **or** **AMMX certification**	**[15] 9** which may be installations or major modifications **6 AST installations**
[AMR	**2 years, or college degree and 1 year or UMR certification or**	**15 removals None**

	AFR Certification	**None]**
AFMX	3 years, or college degree and 2 years **Technical training**	**[20]** 12 which may be installations or major modifications
AFR	2 years, or college degree and 1 year **Technical training**	**[15]** 6 removals
AMEX	3 years, or college degree and 2 years **Technical training**	**[20]** 12 **installations or modifications ([10 installations and 10 modifications]** at least 6 installations)
ACVL	3 years, or college degree and 2 years **Technical training**	**[20]** 12 **installations or modifications ([10 installations and 10 modifications]** at least 6 installations)
TL	2 years **Manufacturer's certification**	**[15]** 9 tank linings

(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 technical training required by subsection (a) shall be completed during the experience interval unless otherwise determined by the Department. 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 proposal).**

(h) The applicant shall document current 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:

(1) IUM underground storage tank systems and storage tank facilities.

(2) IAM aboveground manufactured storage tank systems and storage tank facilities.

(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 **[or education requirements,] and qualifications [or both,]** and have completed the required number of activities in the appropriate category of an inspector **category** certification:

Category	**[Total]** Experience and Qualification **[or Education] [plus Experience]**	Total Number of Activities Completed
IUM	**[1.]** 4 years, or college degree and 2 years **[2.]** Department approved tank tightness testing familiarization course or UTT certification **UMX certification** **Corrosion protection training** **[or]**	**[20 (10 installations and 10 major modifications) or (20 operations inspections for certification renewal applicants)]** None

	[IAM certification and Department approved tank tightness testing familiarization course or UTT certification]	**[None]**
IAM	**[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 aboveground tank inspector training course or]** API 653 Certification **or**	**[20 (which may be any combination of installations, major modifications or service inspections)]** **None**
	[IAF Certification] **STI Inspector Certification** **or** **Department approved aboveground tank inspector certification**	**[None]**

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] 12 [(which may be any combination of installations, major modifications or inspections under API 653 standards)] 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.

(c) A college degree being substituted for experience shall be in civil engineering, mechanical engineering, environmental engineering, petroleum engineering, chemical engineering, structural engineering, geotechnical engineering, hydrology, geology or

environmental studies.

(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 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) must complete Department 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 adoption of this proposal.) 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 the effective date of adoption of this proposal.).

(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:

Category	Training	Total Number of Activities Completed (Renewal by activities to be phased out in two years from effective date)
UMX	Examination or Technical Training Administrative Training	12 installations or major modifications
UTT	Testing equipment manufacturer's certification Administrative Training	None

MTR	Examination or Technical Training Administrative Training	6 removals
AMMX	Examination or Technical Training Administrative Training	12 installations or major modifications
AMNX	Examination or Technical Training Administrative Training	12 installations or major modifications
AFMX	Examination or Technical Training Administrative Training	12 installations or major modifications
AFR	Examination or Technical Training Administrative Training	6 removals
AMEX	Examination or Technical Training Administrative Training	12 installations or major modifications
ACVL	Examination or Technical Training Administrative Training	12 installations or major modifications
TL	Manufacturer's certification Administrative Training	12 tank linings

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

Category	Qualifications and Training
IUM	Department Inspector Training
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

(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 proposal).

(f) Technical and administrative training shall be obtained within 2 years prior to application submission. Administrative training will be provided by the Department.

(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 and 245.105 (relating to certified installer experience and qualifications; certified inspector experience and qualifications; and certification examinations).**

(2) The applicant shall document current 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) Successfully complete training programs which may be required by the

Department. 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 course.

[(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)** A certified installer or certified inspector shall notify the Department and seek amendment of the certification from the Department whenever:

* * * * *

[(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 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 to the requirements of the act and this chapter. The following information shall be included:

(1) The full name, address and telephone number of the company.

(2) The names held by the company within the previous 7 years.

(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:

(i) Causes pollution, causes a threat of pollution or causes harm to the public health, safety or welfare.

(ii) Occurs while conducting activities related to the installation, modification, removal from service or inspection of storage tank systems.

(5) Withholding from a certified installer or certified inspector, individual correspondence or certification documents issued by the Department.

(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.

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

(1) The certified company and certified installers and certified inspectors employed by the certified company are competent to execute the duties and responsibilities for which certification was issued.

(2) The cause for the suspension has been removed.

[(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. **Nationally recognized organizations are identified in §§ 245.405, 245.505 and 245.604 (relating to codes and standards; applicability; and referenced organizations). [This material is available from the following sources:**

(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.]

(2) Complete and **[file with]** **submit, within 60 days of the activity, to** the Department **[on]** a 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**.

(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, such that the inspector can reliably determine that industry standards and project specifications were followed throughout the tank handling activity, that appropriate testing and non-destructive examinations were properly conducted, and that 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 non-tank 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 non-tank 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]** **their 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).

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 that the tank system is deemed permitted**.

(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**.

* * * * *

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 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 permit**[s]** **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 general requirements; and 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] or before _____ ,(*Editor's Note:* The blank refers to the effective date of adoption of this proposal)** 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 the owner/operator has entered into contractual agreements for construction of a new storage tank or facility covered by this section]**, 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 system(s) 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 system(s).

§ 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 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 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)]**<u>**(25)**</u>.

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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 "*Regulated substance* (i)(C)(1) – (3)")) are subject to the requirements of this subsection and shall be registered with the Department by _____ (*Editors Note:* The blank refers to 60 days after the effective date of adoption of this proposal). 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 three years after the effective date of adoption of this proposal).**

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

(5) [(4)] 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) [(5)] The Department may not grant any variance which would result in regulatory controls less stringent than other applicable Federal or State regulations.

§ 245.405. Codes and standards.

(a) The following listed 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)

[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.]

(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.

(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.

(d) Regulatory requirements shall prevail over 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) **Storage** [T] tank facilities with tank systems installed prior to December 1989, shall be inspected prior to October 11, 1999 **[whichever date is later]**.

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

(3) 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 facility inspections shall be conducted at least once every **3 [5]** years **(36 months)** commencing after the last inspection**. [, except as provided 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.]

(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 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 when related violations are documented through an**

inspection.

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 after _____ *(Editor's Note:* The blank refers to the date of adoption of this proposal) must have total secondary containment, which shall consist of double-walled tanks, double-walled piping and liquid-tight containment sumps, tank manway riser sumps, and dispenser pan sumps that shall allow for release detection monitoring of the system. Also tank systems installed with pressurized piping systems shall be equipped with automatic line leak detectors 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 tank or a new underground storage tank system, 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) *Change to regulated service.* An owner or operator of a tank system changing from unregulated to regulated service must provide certification or documentation that the tank system meets new tank system requirements.

(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 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 **by a corrosion expert and [to]** allow determination of current operating status as required in § 245.432(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 contain**[s]** regulated substances shall be protected from **corrosion and** deterioration. **New piping that routinely contains regulated substances shall be double walled with liquid tight containment sumps and dispenser pan sumps installed in accordance with paragraph (4)(ii) below. Whenever more than 30% of the system piping is replaced, the entire piping for the tank system shall be replaced meeting the requirements of this subsection. The portions of the [P]**piping **system, including joints, flexible connectors and ancillary equipment** that **[is] are** in contact with the ground shall 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 **non-metallic 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(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 **(iv)** **[(iii)]**, 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 shall 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)[(iii)] 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 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 testing procedure.

(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.

(c) [(5)] *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.

* * * * *

(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 **prior to**

***(Editor's Note:* The blank refers to the date of adoption of this proposal)**

The following conditions **[are] of existing lined tanks must 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** 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 must 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 date of adoption of this proposal) 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) **(relating to the performance standards for underground storage tank systems)**.

(c) *Piping upgrading requirements.* Metal piping and fittings that routinely contain

regulated substances and are in contact with the ground shall 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 comply with new underground storage tank system spill and overfill prevention equipment requirements in §**[**§**]** 245.421**(b)**(3) **and (4)**.

(e) *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 two years following the 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 five years following the date of adoption of this proposal).

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§ 245.423. Registration requirements.

* * * * *

(f) Every owner, including a new owner of an existing tank system, shall **comply with tank registration requirements in Subchapter A (relating to general provisions).[complete an amended registration form, provided by the Department, when one or more of the following conditions occur.**

(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)] **(1)** The tank **was** **[has been]** 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)] 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**[(1)]****(a)** (relating to performance standards for **[new]** underground storage tank systems).

§ 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 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).

(b) **[(5)]** Monitoring and observation wells shall be clearly identified using industry codes and standards, and caps shall be secured to prevent unauthorized or accidental access.

(c) **[(6)]** **Required equipment, including but not limited to, l** **[L]**ine leak detectors, **product sensors and probes, dispenser pans, containment** sumps, measuring devices (including gauge sticks), gauges, corrosion protection, spill prevention, overfill 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) ***Lining evaluations.*** **Tanks which have been lined and have not had corrosion protection added in accordance with §245.422(b)(2) shall have the lining evaluated under**

the direct, on-site supervision of a TL certified tank installer or by a professional engineer. Evaluations shall adhere to an evaluation process developed by a national association identified in §245.405 (relating to codes and standards) as follows:

(1) Ten (10) years after lining installation.

(2) Every 5 years after the preceding evaluation.

(3) 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.

(4) Lined tank systems that do not meet original design specifications or have not been evaluated as required in (1)-(3) above must 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).

(e) Primary and secondary containment structure must be maintained in a leak free condition. If infiltration or a release is detected in an interstice, 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).

(f) 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 or more than two inches of accumulation in the bottom of the tank, whichever is less. Excess water shall be properly disposed in accordance with applicable State and Federal requirements.

§ 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 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(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. If records are maintained offsite, the records shall be easily obtained and provided 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**, including but not limited to change of ownership, closure of a tank system, change of substance stored and change of tank status, [(§ 245.423 (relating to registration requirements)), which includes]** **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 permanent closure or change-in-service (§ 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) ***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) **, 422(b)(2)(iv) and 422(c)(3) (relating to performance standards for underground storage tank systems and upgrading of existing underground storage tank systems)).**

(ii) The corrosion expert's design of an impressed current system in accordance with (§§ 245.421(b)(2)(ii)(B), 422(b)(2) and 422(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) **[ii]** 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)).

(vi) **[(iii)]** 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 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) 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.

(ii)[(iv) Current compliance with] Tank and pipe release detection records[requirements] for the past 12 months, including written certifications or performance claims for the release detections method(s) in use and documentation of investigation(s) 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 manufacturer(s).

(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 three year intervals, on impressed current and galvanic cathodic protection systems in accordance with (§ 245.432).

(vi) [v] Results of the site investigation conducted at permanent closure or change-in-service (§ 245.455 (relating to closure records)).

(vii) [vi] A properly completed closure report **required under** § 245.452(f).

[(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 **subchapter.** **[subpart by December 22 of the year listed in the following table:**

SCHEDULE FOR PHASE-IN RELASE 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 **immediately** 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 piping that routinely contains regulated substance, and containment sumps at the piping junctures and dispensers, the containment sumps, dispenser pan sumps and piping interstices of these systems shall be monitored monthly where practicable and monthly records maintained for the last 12 months of monitoring.

§ 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 date of adoption of this proposal) shall perform interstitial monitoring, at least once every 30 days, in accordance with § 245.444(7) (relating to interstitial monitoring) of both the tank and underground piping that routinely contains a product (regulated substance). In addition, pressurized piping for these systems shall 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 date of adoption of this proposal)** 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 five years until** ***(Editor's Note*:**

The blank refers to a date 10 years from the date of adoption of this proposal).

(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(e) 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 _____ (*Editor's Note*: The blank refers to one year after the date of adoption of this proposal).**

(5) *Vapor monitoring.* Testing or monitoring for vapors within the soil gas of the excavation zone shall meet the following requirements:

* * * * *

(vi) In the underground storage tank excavation zone, the site is evaluated **by a professional geologist** 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.**

* * * * *

(vii) Within and immediately below the underground storage tank system

excavation zone, the site is evaluated **by a professional geologist** 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) **(relating to operation and maintenance)**.

(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 installed after _____ (*Editor's Note*: The blank refers to the date of adoption of this proposal) shall meet this requirement at installation. Systems installed on or before _____ (*Editor's Note*: The blank refers to the date of adoption of this proposal) that do not meet this requirement shall upgrade to line leak detectors with an automatic pump shut-off device within the time frame specified at § 245.422(e) (relating to upgrading of existing 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 **(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 system is temporarily out-of-service. Records shall continue to be kept in accordance with § 245.435 (relating to record keeping).**

(c) Owners and operators shall immediately empty a tank being placed temporarily out-of-service. Removed contents shall be reused, treated or disposed of in accordance with State and Federal requirements. [, and release detection in accordance with §§ 245.441–245.446 (relating to release detection). 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.] 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 § 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 requirements shall be maintained as specified in § 245.411 (relating to inspection frequency).

(f) [(b)] 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.

(g) [c]When an underground storage tank system is temporarily closed for more than 12 months, owners and operators shall:

(1) [p]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 unless the Department grants an extension to this temporary closure period.

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 must be reviewed and appropriately documented by a professional engineer and documentation provided to the Department with the variance request.

(4)[(3)] 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).

(5)[(4)] 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.

(6)[(5)] 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:

* * * * *

(7) **[National Association of Corrosion Engineers] NACE International – The Corrosion Society** (NACE).

* * * * *

(10) **[Steel Structures Painting Council] SSPC – The Society for Protective Coatings** (SSPC).

* * * * *

(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.

* * * * *

§ 245.505. Applicability.

Temporary exclusions. **Existing tanks that became regulated due to the addition of new regulated substances in § 245.1 ((relating to definitions) (See "*Regulated substance*" (i)(C)(1) – (3)), and the regulation of aboveground tanks greater than 30,000 gallons capacity, storing heating oil that is consumed on the premises (See "*Consumptive use*" definition at § 245.1) are subject to the requirements of this subsection and shall be registered with the Department by (*Editor's Note:* The blank refers to 60 days after the effective date of adoption of this proposal. In addition, these tanks are temporarily excluded from requirements shown in (1) – (3) below:**

(1) Monitoring requirements at § 245.541(c) (relating to overfill prevention requirements) until (*Editors Note:* The blank refers to three years after the effective date of adoption of this proposal).

(2) In-service inspection requirements at § 245.552 (relating to in-service inspections) until within five years of the date of construction or the date of the last inspection or by (*Editors Note:* The blank refers to three years after the effective date of adoption of this proposal) whichever is greater.

(3) Out-of-service inspection requirements at § 245.553 (relating to out-of-service inspections) until _____ (*Editors Note:* The blank refers to three years after the effective date of adoption of this proposal) for tanks not previously inspected or 10 years after construction for tanks without known corrosion rates, whichever is greater, or within projected inspection interval 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.

§ 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.

§ 245.522. New aboveground tank installations and reconstructions.

(a) Tanks shall 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 follow the current codes of practice developed by Nationally recognized associations **and shall be accomplished in accordance with sound engineering practices**. Reconstructed tanks shall be inspected and hydrostatically tested before being placed into service. Reconstructed tanks shall 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 shall be provided with release detection equivalent to underground piping release detection addressed at § 245.445 (*Relating to methods of release detection for piping*) and shall be appropriately monitored.

§ 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.

§ 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 ten years or as warranted or recommended by the manufacturer or design engineer.

RELEASE PREVENTION AND LEAK DETECTION

§ 245.541. Overfill prevention requirements.

(a) **An [O]**owner/operator**[s]** 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 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 by _____ (*Editor's Note*: The blank refers to a date three years after the effective date of adoption of this proposal).

§ 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 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. Permeability of the secondary containment shall be less than **[1x10-7]** **1x 10^{-7}** cm/sec at anticipated hydrostatic head and shall be verified at the time of installation.

(d) Aboveground tanks shall 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 three years after the effective date of adoption of this proposal), whichever occurs first.**

(1) Permeability of newly **installed or replacement** emergency containment structures **[installed after October 11, 1997,]** shall be less than 1 x 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 three years after the effective date of adoption of this proposal) 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 be conducted in a manner consistent with the Department's technical document entitled *"Verification of Emergency Containment Structures for Aboveground Storage Tanks"* and should include determination of the containment structure permeability.**

(3) Verification of the containment structure is valid until conditions at the site, monitoring program, response plan or procedures change.

[(3)](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 **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 at the next scheduled service inspection **[after October 11, 1997,]** **consistent with subsection (d)** and continue testing for tightness at each service inspection thereafter, until the tank is upgraded.

(d) Tank test for tightness shall be based on a scientific or statistical method and procedure. The test 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 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 and not an employee of the tank owner.

[(d)] **(e)** Aboveground piping shall be visually checked for leaks in accordance with the facility operations and maintenance plan.

§ 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**.

(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. **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.

(e) Inspection recommendations 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 engineering design criteria. 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 must 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**.

(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 shall be based on a scientific or statistical procedure encompassing appropriate methods of nondestructive examination. The evaluation must be representative of the whole floor when practicable, excluding removal of liners, heating coils or other appurtenances.

[c]**(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.

[(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 design criteria. 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 must 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 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, owner/operator shall comply with

the following:

* * * * *

(3) The owner/operator**[s]** 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 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**. 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.

* * * * *

Subchapter G. SIMPLIFIED PROGRAM FOR SMALL ABOVEGROUND STORAGE TANKS

* * * * *

§245.604. Referenced organizations.

(a) Nationally recognized associations which are referenced throughout this subchapter are as follows:

* * * * *

(5) **[National Association of Corrosion Engineers]** **NACE International – The Corrosion Society** (NACE).

* * * * *

(8) **[Steel Structures Painting Council]** **SSPC – The Society for Protective Coatings** (SSPC).

* * * * *

§ 245.605. Applicability.

Temporary exclusions. **Existing tanks that become regulated due to the addition of new regulated substances in § 245.1 ((relating to definitions) (See "*Regulated substance*" (i)(C)(1) – (3)) are subject to the requirements of this subsection and shall be registered with the Department by _____ (*Editor's Note:* The blank refers to 60 days after the effective date of adoption of this proposal). In addition, these tanks are temporarily excluded from certain technical requirements shown in paragraphs (1) – (3) below:**

(1) Emergency and secondary containment requirements at § 245.612(e) (relating to performance standards) until _____ (*Editors Note:* The blank refers to three years after the effective date of adoption of this proposal).

(2) A method of leak detection as required at § 245.613(a) (relating to monitoring standards) until _____ (*Editors Note:* The blank refers to one year after the effective date of adoption of this proposal).

(3) In-service inspections required at § 245.616(c)(3) (relating to inspection requirements) until _____ (*Editors Note:* The blank refers to three years after the effective date of adoption of this proposal).

§ 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 overfill 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 device or shut down procedure.**

(3) **Block valves on product lines.**

(4) **Solenoid valve or anti-siphon device, if appropriate.**

(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.**

* * * * *

§ 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**, STI or** **[and]** ASME **[and]** **or** according to manufacturer's specifications **and applicable engineering criteria**. 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, s]** **S**mall 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**, deterioration or other specific conditions necessitate** **[rate life with a maximum of 10 years between inspections]. 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.

(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 REGUIREMENTS 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 shall be in a method approved 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, standby trust fund, or other method approved by the Department.**

(c) **The owner or operator shall have written documentation of the USTIF deductible coverage readily available and provide this documentation to the Department upon request** **[Upon request of the Department, an owner or operator of an underground storage tank shall submit a written certification or provide other written evidence] 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 100	2 x USTIF deductible
[over 101]	

* * * * *

Pennsylvania Department of Environmental Protection

Rachel Carson State Office Building
P.O. Box 2063
Harrisburg, PA 17105-2063
April 7, 2006

Policy Office 717-783-8727

Kim Kaufman, Executive Director
Independent Regulatory Review Commission
14th Floor, Harristown #2
333 Market Street
Harrisburg, PA 17120

Re: Proposed Rulemaking – Storage Tanks Amendments (#7-395)

Dear Mr. Kaufman:

Enclosed is a copy of a proposed regulation for review and comment by the Independent Regulatory Review Commission pursuant to Section 5(a) of the Regulatory Review Act. This proposal is scheduled for publication as a proposed rulemaking in the *Pennsylvania Bulletin* on April 22, 2006 with a 60-day public comment period. The Environmental Quality Board adopted this proposal at its December 20, 2005 meeting.

This proposal includes comprehensive and minor editorial changes to Chapter 245, Storage Tank and Spill Prevention Program. The Pennsylvania Storage Tank and Spill Prevention Act, 35 P.S. § 6021.101–2104 (Storage Tank Act) provides for the regulation of storage tanks and facilities, and confers responsibility to the Environmental Quality Board (Board) to adopt rules and regulations of the Department to accomplish the purposes of this act. The Board established storage tank program regulations at Chapter 245, Subchapters A–H. Subchapter D was amended on December 1, 2002. With the exception of Subchapter D, these regulations have been in use without any significant changes since they became final in 1997.

The Department will provide the Commission with assistance to review this proposal. Section 5(g) of this Regulatory Review Act provides that the Commission may, within 30 days of the close of the comment period, convey to the agency its comments, recommendations and objections to the proposed regulation. The Department will consider any comments, recommendations or suggestions received by the Commission, as well as the Committees and public commentators, prior to final adoption of the regulation.

For additional information, please contact Michele Tate or me at 783-8727.

Sincerely,

Marjorie L. Hughes
Regulatory Coordinator
Policy Office

Enclosures

TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO THE REGULATORY REVIEW ACT

I.D. NUMBER:	7-395
SUBJECT:	Storage Tank Program Amendment
AGENCY:	DEPARTMENT OF ENVIRONMENTAL PROTECTION #2532

TYPE OF REGULATION

X 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

RECEIVED
2006 APR -7 PM 1:18
INDEPENDENT REGULATORY REVIEW COMMISSION

FILING OF REGULATION

DATE	SIGNATURE	DESIGNATION
4/7/06	D. Newth	HOUSE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
4/7/06	J. Jahn	
	Andrea Valella Donie Casella	SENATE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
4/7/06	Kathy Cooper	INDEPENDENT REGULATORY REVIEW COMMISSION
		ATTORNEY GENERAL (for Final Omitted only)
		LEGISLATIVE REFERENCE BUREAU (for Proposed only)

April 3, 2006

TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO THE REGULATORY REVIEW ACT

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AGENCY:	DEPARTMENT OF ENVIRONMENTAL PROTECTION

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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

RECEIVED
2006 APR -7 PM 1:24
INDEPENDENT REGULATORY REVIEW COMMISSION

FILING OF REGULATION

DATE	SIGNATURE	DESIGNATION
4/7/06	D. Newth	HOUSE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
4/7/06	J. Jackson	
	Andrea Valella Donie Castello	SENATE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
4/7/06	Kathy Cooper	INDEPENDENT REGULATORY REVIEW COMMISSION
		ATTORNEY GENERAL (for Final Omitted only)
4/7/06	Mayra Garces	LEGISLATIVE REFERENCE BUREAU (for Proposed only)

April 3, 2006