Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart D. ENVIRONMENTAL HEALTH AND SAFETY

ARTICLE VI. GENERAL HEALTH AND SAFETY

CHAPTER 245. ADMINISTRATION OF THE STORAGE TANK AND SPILL PREVENTION PROGRAM

Subchapter A. GENERAL PROVISIONS

GENERAL

§ 245.1. Definitions.

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

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

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

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

(i) Storage tank inspector certification categories:

(A) IAF-Inspection of aboveground field constructed and aboveground manufactured storage tank systems and facilities.

(B) IAM-Inspection of aboveground manufactured storage tank systems and facilities.

(C) IUM-Inspection of underground storage tank systems and facilities.

(ii) Storage tank installer certification categories:

(A) [~~ACVI~~] ACVL-Aboveground storage tank SYSTEM civil installation and modification.

(B) AFMX-Aboveground field constructed metallic storage tank installation, modification and removal, and aboveground manufactured metallic storage tank modification.

(C) **AFR-Aboveground field constructed storage tank SYSTEM removal.**

(D) **AMEX-Aboveground storage tank SYSTEM mechanical installation, modification and removal.**

(E) **AMMX-Aboveground manufactured metallic storage tank SYSTEM installation and modification.**

(F) **AMNX-Aboveground nonmetallic storage tank SYSTEM installation and modification.**

(G) **[~~MTR-Manufactured~~] AMR-ABOVEGROUND MANUFACTURED storage tank SYSTEM removal.**

(H) **TL-Storage tank liner installation and modification, AND UNDERGROUND STORAGE TANK LINER EVALUATION.**

(I) **UMX-Underground storage tank system installation and modification.**

(J) **UTT-Underground storage tank SYSTEM tightness tester**

(K) **UMR-UNDERGROUND STORAGE TANK SYSTEM REMOVAL.**

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

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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.

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Hazardous substance storage tank system–

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

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

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[*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.")]

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

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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.

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

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

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

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Regulated substance –

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

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

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

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

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

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

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

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

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

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Underground storage tank – One or a combination of tanks (including underground pipes connected thereto) which are used**, were used or will be used** to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is 10% or more beneath the surface of the ground. **THE TERM INCLUDES TANKS BEING CONSTRUCTED OR INSTALLED FOR REGULATED USE.** The term does not include:

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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.**

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TIGHTNESS TESTING ACTIVITIES

§ 245.31. Underground storage tank tightness testing requirements.

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

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

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

* * * * *

(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) **[(relating to methods of release detection for tanks] or § 245.445(2) (RELATING TO METHODS OF RELEASE DETECTION FOR PIPING),** and sufficient test data, which were used to conclude that the tank passed or failed the tightness test, shall be included in the test report.

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

(g) TIGHTNESS TESTING OF THE UNDERGROUND STORAGE TANK

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

TANK REGISTRATION AND FEES

§ 245.41. Tank registration requirements.

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

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

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

(1) Tank owner, operator and contact information.

(2) General facility, site and location information.

(3) Specific tank description and usage information, INCLUDING REGULATED SUBSTANCE OR SUBSTANCES THAT WILL BE STORED IN EACH TANK.

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

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

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

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

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

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

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

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

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

(1) Removal or relocation of a storage tank to a new facility.

(2) Temporary or permanent closure or removal from service of a storage tank.

(3) Change in use of a storage tank to or from regulated or nonregulated status, for example, changing a storage tank to use as a process vessel.

(4) Change in substance OR SUBSTANCES stored in the tank, unless otherwise agreed upon by the Department.

(5) Change of ownership or change of operator – new and previous owner.

(6) Change of contact, mailing address or telephone number.

(7) Installation of a new or replacement storage tank at an existing facility.

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

§ 245.42. Tank registration fees.

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

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

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

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

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

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

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

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

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

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

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

§ 245.43. Failure to pay registration fee.

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

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

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

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

GENERAL CERTIFICATION REQUIREMENTS

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§ 245.102. Requirement for certification.

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

* * * * *

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

* * * * *

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

* * * * *

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

* * * * *

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

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

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

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

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

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

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

§ 245.104. Application for installer or inspector certification.

(a) The applicant shall be a natural person.

(b) An application for installer or inspector certification shall be submitted to the Department on **current** forms provided by the Department and **[shall]** **must** contain the following information:

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(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.

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(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 **[employe]** **employee** of the tank owner **[~~or~~]** **, the tank owner OR OPERATOR**.

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§ 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**.

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

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

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

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

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(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:

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

requirements).

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§ 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**.

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§ 245.110. Certification of installers.

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

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

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

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

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

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

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

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

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

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

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

§ 245.111. Certified installer experience and qualifications.

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

Category	***[Total]*** *Experience* ***[or]*** *, Education, [plus Experience] [~~And~~] Training OR CERTIFICATION*	*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 **TECHNICAL TRAINING**	**[~~15~~]** 6 removals
UTT	Department approved training with testing equipment manufacturer's certification	**None**

~~[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 **TECHNICAL TRAINING** or UMR Certification or AFR Certification	**[~~15~~]** 6 removals None 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 (10 installations and 10 modifications]** **12 installations or modifications (at least 6 installations)**
ACVL	3 years, or college degree and 2 years **Technical training**	**[20 (10 installations and 10 modifications)]** **12 installations or 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~~] THE technical training required by subsection (a) shall be completed during the experience interval [~~unless otherwise determined by the Department~~] AND SHALL BE DEMONSTRATED THROUGH THE SUBMISSION OF PROOF OF SUCCESSFUL COMPLETION OF A CATEGORY-SPECIFIC TRAINING COURSE APPROVED BY THE DEPARTMENT IN ACCORDANCE WITH § 245.141. SUCCESSFUL COMPLETION MEANS ATTENDANCE AT ALL SESSIONS OF THE TRAINING AND ATTAINMENT OF THE MINIMUM PASSING GRADE FOR THE APPROVED COURSE. The requirement for category-specific technical training is effective _____ (*Editor's Note:* The blank refers to a date 1 year after the effective date of adoption of this regulation.).

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

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

§ 245.112. Certification of inspectors.

* * * * *

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

* * * * *

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

§ 245.113. Certified inspector experience and qualifications.

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

[Total] Experience, EDUCATION, TRAINING OR CERTIFICATION [~~and Qualification~~]	*Total Number of*

Category	***[or Education plus Experience]***	*Activities Completed*
IUM	**[1.]** 4 years, or college degree and 2 years **[2.]** Department approved tank tightness testing familiarization course or UTT certification	**[20 (10 installations and 10 major modifications) or (20 operations inspections for certification renewal applicants)]** **None**
	[or]	
	[IAM certification and Department approved tank tightness testing familiarization course or UTT certification] **UMX certification** **Corrosion protection training**	**[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 (which may be any combination of installations, major modifications or inspections under API 653 standards)]** **12 integrity or construction inspections**

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

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

* * * * *

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

* * * * *

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

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

§ 245.114. Renewal and amendment of certification.

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

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

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

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

Category	*Training*	*Total Number of Activities Completed (Renewal by activities to be phased out* (*Editor's note:* The blank refers to A DATE 2 YEARS AFTER the effective date OF ADOPTION of this regulation)

UMR	EXAMINATION OR TECHNICAL TRAINING ADMINISTRATIVE TRAINING	6 REMOVALS
UMX	Examination or Technical Training Administrative Training	[~~12~~] 9 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~~] 9 installations or major modifications
AMNX	Examination or Technical Training Administrative Training	[~~12~~] 9 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
AMR	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~~] 9 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** **Department Inspector Training**

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

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

application submission.

(1) Administrative training will be provided by the Department. ADMINISTRATIVE TRAINING IN SUBSECTION (c) IS REQUIRED AFTER _____ (*EDITOR'S NOTE:* THE BLANK REFERS TO A DATE 2 YEARS AFTER THE EFFECTIVE DATE OF ADOPTION OF THIS REGULATION.).

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

(g) An applicant for renewal shall:

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

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

[(2)] (3) ***

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

[(b)] (h) ***

* * * * *

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

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

COMPANY CERTIFICATION

§ 245.121. Certification of companies.

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

§ 245.122. Applications for company certification.

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

* * * * *

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

* * * * *

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

(1) The company is found to be in violation of the act or this chapter.

(2) The company certification was previously revoked under § 245.124.

(3) An officer of the company has had their individual certification revoked under §245.109.

(4) An officer of the company was an officer in a company whose company certification was revoked under §245.124 at the time the conduct resulting in

revocation occurred.

§ 245.123. Suspension of company certification.

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

* * * * *

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

* * * * *

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

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

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

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

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

* * * * *

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

§ 245.124. Revocation of company certification.

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

* * * * *

(4) Willfully submitting false information to the Department.

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

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

§ 245.125. Renewal and amendment of company certification.

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

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

STANDARDS FOR PERFORMANCE

* * * * *

§ 245.132. Standards of performance.

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

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

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

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

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

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

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

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

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

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

(iv) (2) Complete and **[file with]** **submit TO THE DEPARTMENT, within 60 days of the INSPECTION activity OR 30 DAYS OF A TANK HANDLING ACTIVITY, [~~to the Department~~ [~~on~~]** a **DEPARTMENT APPROVED** form[,] [~~provided by the Department,~~] **[a certification]** **certifying** that the tank handling activity or inspection activity conducted by the certified installer or certified inspector meets the requirements of the act and this **[part]** **chapter and accurately describes the conditions of the storage tank system and facility**. **FOR TANK HANDLING ACTIVITIES INVOLVING MULTIPLE CERTIFIED INDIVIDUALS AND CERTIFICATION CATEGORIES, THE TANK HANDLING REPORT SHALL BE SUBMITTED WITHIN 30 DAYS OF THE COMPLETION OF ALL PROJECT TANK HANDLING AND INSPECTION ACTIVITIES.**

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

* * * * *

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

* * * * *

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

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

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

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

(C) The tank is suitable for operational service.

* * * * *

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

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

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

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

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

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

TRAINING APPROVAL

§ 245.141. Training approval.

* * * * *

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

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

§ 245.142. TRAINING COURSES.

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

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

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

GENERAL

* * * * *

§ 245.203. General requirements for permits.

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

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

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

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

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

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

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

* * * * *

GENERAL OPERATING PERMITS

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

§ 245.222. Application requirements.

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

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

(i) The storage tank system is properly registered.

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

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

* * * * *

SITE SPECIFIC INSTALLATION PERMITS

§ 245.231. Scope.

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

reconstruction or installation of one or more of the following:

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

(2) New large aboveground storage tank facilities.

(3) New highly hazardous substance tank systems.

(4) New underground field constructed storage tank systems.

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

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

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

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

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

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

§ 245.232. General requirements.

* * * * *

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

* * * * *

§245.234. Siting requirements.

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

installation permit if:

* * * * *

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

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

* * * * *

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

§ 245.235. Environmental assessment.

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

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

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

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

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

* * * * *

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

* * * * *

§ 245.311. Remedial action plan.

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

(1) A brief summary of the site characterization report conclusions.

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

* * * * *

Subchapter E. TECHNICAL STANDARDS FOR UNDERGROUND STORAGE TANKS

GENERAL

* * * * *

§ 245.403. Applicability.

* * * * *

(c) *Temporary exclusions.* Existing tanks that become regulated due to the addition of new regulated substances in § 245.1 ((relating to definitions) (See the definition of "regulated substance" (i)(C)(I) [~~—(III)~~] AND (II))) are subject to this [~~subsection~~] CHAPTER and shall be registered with the Department by _____ (*Editors Note:* The blank refers to a date 60 days after the effective date of adoption of this regulation.). In addition, these tanks are temporarily excluded from the requirements of §§ 245.421, 245.422, 245.431, 245.432 and 245.441 – 446, [~~respectively,~~] until _____ (*Editors Note:* The blank refers to a date three years after the effective date of adoption of this regulation.).

§ 245.404. Variances.

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

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

technical standards that fully protect human health and the environment.

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

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

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

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

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

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

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

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

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

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

§ 245.405. Codes and standards.

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

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

(1) American Concrete Institute (ACI)

(2) American National Standards Institute (ANSI)

(3) American Petroleum Institute (API)

(4) American Society for Testing and Materials (ASTM)

(5) Association of Composite Tanks (ACT)

(6) Fiberglass Petroleum Tank and Pipe Institute

(7) NACE International – The Corrosion Society (NACE)

(8) National Fire Protection Association (NFPA)

(9) National Leak Prevention Association (NLPA)

(10) Petroleum Equipment Institute (PEI)

(11) Steel Tank Institute (STI)

(12) Underwriters Laboratory (UL)

(b) The most current or latest edition of the codes and standard shall be applied when used to meet the technical standards and requirements of this subchapter. Other Nationally recognized associations and their codes and standards not referenced in this part may also be used to comply with this subchapter, when ~~[appropriate]~~ APPROVED BY THE DEPARTMENT.

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

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

FACILITY INSPECTIONS

§ 245.411. Inspection frequency.

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

(b) *Initial inspections.*

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

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

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

(c) *Subsequent **routine** facility inspections.*

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

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

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

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

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

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

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

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

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

(a) *New underground storage tank systems.*

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(i) The piping **or component** is constructed of **nonmetallic material such as** fiberglass reinforced plastic or other noncorrodible **and UL listed** material.

(ii) The piping **or component** is constructed of **[steel] metal** and cathodically protected in the following manner:

(A) The piping is coated with a suitable dielectric material. **The wrapping of piping with tape or similar material alone does not meet this requirement.**

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

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

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

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

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

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

(3) *Spill and overfill prevention equipment.*

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

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

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

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

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

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

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

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

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

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

(4) *Installation.*

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

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

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

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

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

§ 245.422. Upgrading of existing underground storage tank systems.

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

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

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

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

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

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

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

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

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

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

* * * * *

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

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

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

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

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

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

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

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

[~~(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 a date 2 years following the effective date of adoption of this proposal.).~~

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

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

§ 245.423. Registration requirements.

* * * * *

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

[(1) Change of tank ownership–new owner only.

(2) Installation of a new tank.

(3) Closure of a tank system or component.

(4) Change in tank system service such as, but not limited to, temporary closure or change to an unregulated substance.]

* * * * *

§ 245.425. Reuse of removed tanks.

A storage tank removed from the ground may be reused as a regulated underground storage tank under the following circumstances:

(1) **[The tank is installed by a certified installer.**

(2)] The tank **[has been]** **was** properly closed in accordance with § 245.452 (relating to permanent closure and changes-in-service) **at the site where previously used**.

(2) The tank is installed at the new site by a certified installer.

(3) The **new** installation meets the requirements of **§ [245.422 (relating to the upgrading of existing underground storage tank systems)]** **245.421 (relating to performance standards for underground storage tank systems)**.

* * * * *

(5) Either the manufacturer, a person certified by the manufacturer or a registered professional engineer warrants that the tank meets the requirements of § 245.421**(b)**(1)**[~~(a)~~]** **[(relating to performance standards for new underground storage tank systems)]**.

GENERAL OPERATING REQUIREMENTS

§ 245.432. Operation and maintenance including corrosion protection.

(a) Owners and operators of steel underground storage tank systems with corrosion protection shall comply with the following requirements to ensure that releases due to corrosion are prevented for as long as the underground storage tank system is used to store regulated substances:

* * * * *

(3) Underground storage tank systems with impressed current cathodic protection systems shall be inspected **or checked [~~by the operator~~]** every 60 days to ensure the equipment is running properly. **As a minimum, the operator OR PERSON CONDUCTING THE 60-DAY CHECK shall document the date checked, annotate the system's functioning status, and for systems equipped with a direct current readout meter, record the amount of current indicated on the meter.**

(4) For underground storage tank systems using cathodic protection, records of the operation of the cathodic protection shall be maintained, in accordance with § 245.435 (relating to reporting and recordkeeping) to demonstrate compliance with the performance standards in this section. These records shall provide the following:

(i) The results of the last three inspections required in paragraph (3).

(ii) The results of testing from the last two inspections required in paragraph (2).

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

[(6) Line] (c) Required equipment, including [~~but not limited to,~~] line leak detectors, product sensors and probes, dispenser pans, containment sumps, measuring devices (including gauge sticks), gauges, corrosion protection, spill prevention, 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) Tanks which have been lined and have not had corrosion protection added in accordance with §245.422(b)(2) shall have the lining evaluated BY, OR under the direct onsite supervision of, a TL certified tank installer or by a professional engineer.

(1) Evaluations shall adhere to an evaluation process developed by a National association identified in §245.405 (relating to codes and standards) (SEE API 1631 AND NLPA 631) as follows:

(i)) Ten years after lining installation.

(ii) Every 5 years after the preceding evaluation.

(2) Each evaluation finding shall be documented on a form approved by the Department and shall be maintained at the facility for the duration of the tank's operating life.

(e) Lined tank systems that do not meet original design specifications or have not been evaluated as required in subsection (d) (1) and (2) shall be emptied [~~immediately~~], removed from service and permanently closed in accordance with §§ 245.451 and 245.452 (relating to temporary closure, and permanent closure and changes-in-service).

(f) Primary and secondary containment structure must be maintained in a leak free condition. If infiltration or a release is detected [~~in an interstice~~] WITHIN THE

SECONDARY CONTAINMENT, the defective component shall be repaired in accordance with § 245.434 (relating to repairs allowed). Repairs, including those performed to stop infiltration, shall be tested in accordance with § 245.434(5).

(g) A check for water in petroleum tanks shall be performed monthly and excess water shall be promptly removed as necessary. Water may not exceed the tank manufacturer's recommendations, PRODUCT SUPPLIER'S GUIDELINES, or [~~more than~~] 2 inches of accumulation in the bottom of the tank, whichever is less. NO AMOUNT OF WATER IS DESIRABLE IN GASOLINE CONTAINING ETHANOL. THEREFORE, WATER SHOULD NOT BE ALLOWED TO ACCUMULATE IN TANKS CONTAINING ETHANOL. Excess water shall be properly [~~disposed~~] MANAGED in accordance with applicable State and Federal requirements, SUCH AS CHAPTER 299 (RELATING TO STORAGE AND TRANSPORTATION OF RESIDUAL WASTE), 40 CFR 261 Subpart B (RELATING TO HAZARDOUS WASTE IDENTIFICATION) AND 29 CFR 1910 (RELATING TO OCCUPATIONAL SAFETY AND HEALTH STANDARDS).

* * * * *

§ 245.434. Repairs allowed.

Owners and operators of underground storage tank systems shall ensure that repairs will prevent releases due to structural failure or corrosion as long as the underground storage tank system is used to store regulated substances. The repairs **[shall] must** meet the following requirements:

* * * * *

(5) Tanks**, containment sumps,** and piping repaired in response to a release shall be

tightness tested in accordance with §§ 245.444(3), **245.421(b)(4)(ii)** and 245.445(2) (relating to methods of release detection for tanks; **performance standards for underground storage tank systems** and methods of release detection for piping), **respectively,** prior to placing the system back into service except as provided as follows:

(i) The repaired tank is internally inspected in accordance with a code of practice developed by a Nationally recognized association or an independent testing laboratory.

(ii) The repaired portion of the underground storage tank system is monitored monthly for releases in accordance with a method specified in § 245.444(4)–(9).

(iii) Another test method is used that is determined by the Department to be at least as protective of human health and the environment as those listed in subparagraphs (i) and (ii).

(6) Within 6 months following the repair of a cathodically protected underground storage tank system, the cathodic protection system shall be tested in accordance with §245.432**(a)**(2) and (3) (relating to operation and maintenance including corrosion protection) to ensure that it is operating properly.

(7) Underground storage tank system owners and operators shall maintain records of each repair **including those** in response to a release, for the remaining operating life of the underground storage tank system. **[that demonstrate compliance with this section.]**

§ 245.435. Reporting and recordkeeping.

(a) Owners and operators of underground storage tank systems shall cooperate fully

with inspections, monitoring and testing conducted by the Department, certified installers or certified inspectors, as well as requests for document submission, testing and monitoring by the owner or operator under section 107(c) of the act (35 P. S. § 6201.107(c)).

(b) Owners and operators shall maintain required records EITHER ONSITE AT THE UNDERGROUND STORAGE TANK FACILITY OR AT A READILY AVAILABLE ALTERNATIVE SITE. RECORDS MAINTAINED AT THE UNDERGROUND STORAGE TANK FACILITY SHALL BE IMMEDIATELY AVAILABLE FOR INSPECTION BY THE DEPARTMENT AND CERTIFIED INSPECTORS. If records are maintained offsite, the records shall be easily obtained and provided FOR INSPECTION OR FOR REVIEW BY THE DEPARTMENT upon request.

(1) *Reporting.* Owners and operators shall submit the following applicable information to the Department:

(i) Notification **in accordance with § 245.41 (relating to tank registration requirements)** for underground storage tank systems **[(§ 245.423 (relating to registration requirements)), which includes], including [~~but not limited to,~~] change of ownership, closure of a tank system, change of substance stored and change of tank status, and** certification of installation for new underground storage tank systems (§ 245.421 **[(5)]** **(c)** (relating to performance standards for **[new]** underground storage tank systems)).

(ii) Reports of confirmed, reportable releases (§ 245.305(d) (relating to reporting releases)).

(iii) A site characterization report (§ 245.310 (relating to site characterization report)).

(iv) Remedial action plans (§ 245.311 (relating to remedial action plan)), remedial action progress reports (§ 245.312 (relating to remedial action)) and remedial action completion reports (§ 245.313 (relating to remedial action completion report)).

(v) A notification before **INSTALLATION,** permanent closure or change-in-service **OF A STORAGE TANK OR STORAGE TANK SYSTEM (§ 245.421(a)(2) AND** (§ 245.452(a) (relating to permanent closure and changes-in-service)).

(vi) In the case of permanent closure, closure records to the Department when requested.

(2) **[*Recordkeeping*]** ***Permanent recordkeeping***. Owners and operators shall maintain **records for new systems and available records for existing systems for the operational life of the tank system and retain the records for a minimum of 1 year after the tank system has been removed. Permanent records include** the following **[information]**:

(i) A corrosion expert's analysis of site corrosion potential if corrosion protection equipment is not used (§ 245.421**(b)**(1)(iv) and (2)(iii) **and § 422(b)(2)(iv) and (c)(3) (relating to upgrading of existing underground storage tank systems)).**

(ii) **The corrosion expert's design of an impressed current system OR FIELD-INSTALLED CATHODIC PROTECTION SYSTEM OR SIMILAR INFORMATION [~~in accordance~~] THAT DEMONSTRATES COMPLIANCE with §§ 245.421(b)(2)(ii)(B) and 245.422(b)(2) and (c)(2).**

(iii) Documentation of tank system installation, system modification and tank upgrade activities.

(iv) Tank system assessment records prior to upgrading in accordance with §245.422(b).

(v) Documentation of **[operation of corrosion protection equipment] the installation testing and commissioning reports required for corrosion protection systems by manufacturers and National standards in accordance with** [(] § 245.432 (relating to operation and maintenance including corrosion protection) **[)]**.

[(iii)] (vi) Documentation of underground storage tank system repairs **including those** in response to a release (§ 245.434(6) (relating to repairs allowed)).

(vii) [~~Documentation to demonstrate that containment sumps and dispenser pans installed or repaired after _____ (*Editor's Note:* The blank refers to the effective date of adoption of this proposal) were tested and verified to be liquid tight in accordance with § 245.421(b)(4) and § 245.434 (5).~~]

[~~(viii)~~] Tank lining evaluation reports (§ 245.432(d) (relating to lining evaluations)).

[~~(ix)~~] (viii) Documentation showing Department approval for a variance or alternate leak detection method (§§ 245.404 and 245.443 (relating to variances and hazardous substance underground storage tank systems)).

(3) Temporary records shall be maintained as follows:

(i) The current Storage Tank Registration/Permit Certificate.

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

investigations of suspected releases (§§ 245.446 **and 245.304** (relating to release detection recordkeeping **and investigation of suspected releases**)).

(iii) The last annual check/testing, and maintenance records of leak detection equipment including probes, monitors, line leak detectors, and automatic tank gauges that verify they are working properly and tested as required by the equipment manufacturers.

(iv) Documentation of the last two impressed current cathodic protection system inspection checks for each 60 day test period (§ 245.432 (relating to operation and maintenance including corrosion protection)).

(v) The last cathodic protection survey, done at 3-year intervals, on impressed current and galvanic cathodic protection systems in accordance with (§ 245.432).

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

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

(viii) DOCUMENTATION OF THE LAST TEST THAT DEMONSTRATES EACH CONTAINMENT SUMP, DISPENSER PAN AND SPILL CONTAINMENT BUCKET INSTALLED OR REPAIRED AFTER (*Editor's Note:* The blank refers to the effective date of adoption of this regulation.) WERE TESTED AND VERIFIED TO BE LIQUID-TIGHT IN ACCORDANCE WITH §§ 245.421(b)(4) AND 245.434 (5).

[(3) ***Availability of records.*** **Owners and operators shall keep the records required at one of the following:**

(i) At the underground storage tank site and immediately available for inspection by the Department and certified inspectors.

(ii) At a readily available alternative site and be provided for inspection to the Department upon request.]

RELEASE DETECTION

§ 245.441. General requirements for underground storage tank systems.

* * * * *

(c) Owners and operators of underground storage tank systems shall comply with the release detection requirements of this **[subpart by December 22 of the year listed in the following table:]** **subchapter.**

[SCHEDULE FOR PHASE-IN 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]** **must immediately EMPTY THE TANK AND** complete the closure procedures in §§ 245.451–245.455 (relating to out-of-service underground storage tank systems and closure) **[by the date on which release detection is required for that underground storage tank system under subsection (c)]**.

(e) For existing tank systems equipped with double-walled PRESSURIZED piping that routinely contains regulated substance, and containment sumps at the piping junctures and dispensers, the containment sumps [,] AND dispenser pan sumps [~~and piping interstices~~] of these systems shall be monitored monthly [~~where practicable~~] BEGINNING _____ (*Editor's Note*: The blank refers to a date 2

years after the effective date of adoption of this regulation.) and monthly MONITORING records maintained for the last 12 months of monitoring.

MONITORING SHALL BE ACCOMPLISHED BY ONE OF THE FOLLOWING METHODS:

(1) MONTHLY VISUAL CHECK OF THE SUMPS.

(2) INTERSTITIAL MONITORING UNDER § 245.444(7) (RELATING TO METHODS OF RELEASE DETECTION FOR TANKS) (ALSO SEE SECONDARY CONTAINMENT – LIQUID SUMP SENSORS IN PEI RP 100).

§ 245.442. Requirements for petroleum underground storage tank systems.

(a) Owners and operators of underground storage tank systems installed after _____ (*Editor's Note*: The blank refers to the effective date of adoption of this regulation.) shall perform interstitial monitoring, at least once every 30 days, in accordance with § 245.444(7) (relating to methods of release detection for tanks) of both the tank and underground piping that routinely contains a product (regulated substance). In addition, pressurized piping for these systems must be equipped and operated with an automatic line leak detector with an automatic pump shut off device in accordance with § 245.445(1) (relating to methods of release detection for piping).

(b) Owners and operators of petroleum underground storage tank systems **installed on or before _____ (*Editor's Note*: The blank refers to the effective date of adoption of this regulation.)** shall provide release detection for tanks and piping as follows:

(1) *Tanks.* Tanks shall be monitored at least every 30 days for releases using one of

the methods listed in § 245.444(4)–(9) **[(relating to methods of release detection for tanks)]** except that:

(i) Underground storage tank systems that meet the performance standards in § 245.421 **[or § 245.422]** (relating to performance standards for **[new]** underground storage tank systems **[; and upgrading of existing underground storage tank systems]), [and the]** **may use** monthly inventory control requirements in § 245.444(1) or (2), **[may use]** **and** tank tightness testing (conducted in accordance with § 245.444(3)) **[at least every 5 years until December 22, 1998, or]** until 10 years after the tank **[is]** **was first** installed or upgraded under § 245.422(b), **[whichever is later]** **but not later than December 22, 2008**.

(ii) Underground storage tank systems **[that do not meet the performance standards in § 245.421 or § 245.422 may use monthly inventory controls (conducted in accordance with § 245.444(1) or (2)) and annual tank tightness testing (conducted in accordance with § 245.444(3)) until December 22, 1998, when the tank shall be upgraded under § 245.422 or permanently closed under § 245.452 (relating to permanent closure and changes-in-service).]** **with a capacity of 1001 to 2,000 gallons may use manual tank gauging, conducted in accordance § 245.444(2) with and a tank tightness test at least every 5 years until_____ (*Editor's Note*: The blank refers to a date 10 years from the effective date of adoption of this regulation.).**

(iii) Tanks with a capacity of 550 gallons or less may use manual tank gauging, conducted in accordance with § 245.444(2) **as long as they continue to meet requirements of this subchapter**.

(iv) Tanks with a capacity of 551 to 1,000 gallons using the longer test times specified may use manual tank gauging, conducted in accordance with § 245.444(2) **as long as they continue to meet requirements of this subchapter**.

[~~(v) Tank systems must meet the upgrade requirements of § 245.422(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 AN INDEPENDENT THIRD PARTY VERIFYING THE GAUGE'S ABILITY TO DETECT THE LEAK RATE IN SUBPARAGRAPH (i) FOLLOWING EPA EVALUATION PROTOCOL BY _____ (*Editor's Note*: The blank refers to a date 1 year after the effective date of adoption of this regulation.).**

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

* * * * *

(vi) In the underground storage tank excavation zone, the site is evaluated **by a LICENCED professional [~~geologist~~] UNDER THE ENGINEER, LAND SURVEYOR AND GEOLOGIST LAW (63 P.S. §§ 148-158.2)** to ensure compliance with **[the requirements in]** subparagraphs (i)– (iv) and to establish the number and positioning of monitoring wells that will detect releases within the excavation zone from any portion of the tank that routinely contains product. **The written site evaluation report authenticated by the person completing the evaluation must be maintained at the facility for the duration of the leak detection method.**

(6) *Groundwater monitoring.* Testing or monitoring for liquids on the groundwater **[shall] must** meet the following requirements:

(i) The regulated substance stored is immiscible in water and has a specific gravity of less than one.

(ii) Groundwater is never more than 20 feet from the ground surface and the hydraulic conductivity of the soils between the underground storage tank system and the

monitoring wells or devices is not less than 0.01 cm/sec—for example, the soil should consist of gravels, coarse to medium sands, coarse silts or other permeable materials.

(iii) The slotted portion of the monitoring well casing shall be designed to prevent migration of natural soils or filter pack into the well and to allow entry of regulated substances on the water table into the well under both high and low groundwater conditions.

(iv) Monitoring wells shall be sealed from the ground surface to the top of the filter pack.

(v) Monitoring wells or devices intercept the excavation zone or are as close to it as is technically feasible.

(vi) The continuous monitoring devices or manual methods used can detect the presence of at least 1/8 of an inch of free product on top of the groundwater in the monitoring wells.

(vii) Within and immediately below the underground storage tank system excavation zone, the site is evaluated **by a LICENCED professional [~~geologist~~] UNDER THE ENGINEER, LAND SURVEYOR AND GEOLOGIST LAW** to ensure compliance with subparagraphs (i)–(v) and to establish the number and positioning of monitoring wells or devices that will detect releases from any portion of the tank that routinely contains product. **The written site evaluation report authenticated by the person completing the evaluation must be maintained at the facility for the duration of the leak detection method.**

(viii) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering in accordance with § 245.432**[(~~5~~)] (b)**.

(7) *Interstitial monitoring.* Interstitial monitoring between the underground storage tank system and a secondary barrier immediately around or beneath it may be used, but only if the system is designed, constructed and installed to detect a leak from any portion of the tank that routinely contains product and also meets one of the following requirements:

* * * * *

§ 245.445. Methods of release detection for piping.

Each method of release detection for piping used to meet the requirements of § 245.442 (relating to requirements for petroleum underground storage tank systems) shall be conducted in accordance with the following:

(1) *Automatic line leak detectors.* Methods which alert the operator to the presence of a leak by restricting or **automatically** shutting off the flow of regulated substances through piping or triggering an audible or visual alarm may be used only if they detect leaks of 3 gallons per hour at 10 pounds per square inch line pressure within 1 hour. An annual test of the operation of the leak detector shall be conducted in accordance with the manufacturer's requirements. **[~~Systems~~] UNDERGROUND STORAGE TANK SYSTEMS installed OR REPLACED after_____ (*Editor's Note*: The blank refers to the effective date of adoption of this regulation.) must [~~meet this requirement at installation. Systems installed on or before_____ (*Editor's Note*: The blank refers to the effective date of adoption of this proposal) that do not meet this requirement shall upgrade to~~] HAVE line leak detectors with an automatic pump shut-off device THAT SHUTS OFF THE FLOW OF REGULATED SUBSTANCES THROUGH PRESSURIZED PIPING THAT ROUTINELY CONTAINS AND CONVEYS PRODUCT FROM THE TANK [~~within the time frame specified in § 245.422(c) (relating to upgrading of existing underground storage tank systems)~~] (SEE § 245.421(a)(1) (RELATING TO PERFORMANCE STANDARDS FOR UNDERGROUND STORAGE TANK SYSTEMS)).**

* * * * *

OUT-OF-SERVICE UNDERGROUND STORAGE TANK SYSTEMS AND CLOSURE

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

(a) When an underground storage tank system is temporarily closed **[, owners] (out-of-service), the owner shall complete and submit an amended registration form to the Department within 30 days in accordance with §245.41 (tank registration requirements).**

(b) Owners and operators shall continue operation and maintenance of corrosion protection in accordance with § 245.432 (relating to operation and maintenance including corrosion protection), **WHILE THE TANK IS TEMPORARILY OUT-OF-SERVICE,** and release detection in accordance with §§ 245.441–245.446 (relating to release detection) **UNTIL THE TANK IS EMPTY. [Subchapter D (relating to corrective action process for owners and operators of storage tanks and storage tank facilities and other responsible parties) shall be complied with if a release is suspected or confirmed.] [~~while the tank system is temporarily out-of-service.~~] Records shall continue to be kept in accordance with § 245.435 (relating to REPORTING AND recordkeeping).**

(c) Owners and operators shall [~~immediately~~] empty a tank being placed temporarily out-of-service WITHIN 30 DAYS OR PRIOR TO SUBMISSION OF THE REGISTRATION FORM TO THE DEPARTMENT, WHICHEVER OCCURS FIRST, UNLESS DIRECTED OTHERWISE BY THE DEPARTMENT. Removed contents shall be reused, treated or disposed of in accordance with State

and Federal requirements, SUCH AS CHAPTER 299 (RELATING TO STORAGE AND TRANSPORTATION OF RESIDUAL WASTE) AND 29 CFR 1910 (RELATING TO OCCUPATIONAL SAFETY AND HEALTH STANDARDS). Release detection is not required as long as the underground storage tank system is empty. The underground storage tank system is empty when all materials have been removed using commonly employed practices so that no more than 2.5 centimeters (1 inch) of residue, or 0.3% by weight of the total capacity of the underground storage tank system, remain in the system. **Owners and operators shall maintain release detection records [~~in accordance with~~] REQUIRED UNDER § 245.446(2) (relating to release detection recordkeeping) for the most recent 12-month period of active operation.**

(d) Subchapter D (relating to corrective action process for owners and operators of storage tanks and storage tank facilities and other responsible parties) shall be complied with if a release is suspected or confirmed.

(e) [~~Inspection~~] ROUTINE FACILITY INSPECTION requirements [~~shall be maintained as specified~~] AT 3-YEAR INTERVALS in § 245.411(c) (relating to inspection frequency) MAY BE DELAYED FOR A STORAGE TANK FACILITY WITH ALL TANK SYSTEMS TEMPORARILY CLOSED, UNLESS NOTIFIED OTHERWISE BY THE DEPARTMENT UNDER § 245.21(c) AND (d) (RELATING TO TANK HANDLING AND INSPECTION REQUIREMENTS). A DELAYED INSPECTION MUST BE PERFORMED ON A STORAGE TANK SYSTEM OR FACILITY IN TEMPORARY CLOSURE WHEN RETURNING THE TANK SYSTEM TO OPERATING STATUS.

[(b)] (f) When an underground storage tank system is temporarily closed for 3 months

or more, owners and operators shall also comply with the following requirements:

(1) Vent lines shall be open and functioning.

(2) All other lines, pumps, manways and ancillary equipment shall be capped and secure.

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

(1) **Permanently** close the underground storage tank system if it does not meet either performance standards in § 245.421 (relating to performance standards for **[~~new~~]** underground storage tank systems) for new underground storage tank systems or the upgrading requirements in § 245.422 (relating to upgrading of existing underground storage tank systems), except that the spill and overfill equipment requirements do not have to be met.

(2) Owners and operators shall permanently close the substandard underground storage tank systems at the end of this 12-month period in accordance with §§ 245.452–245.455, unless the Department provides an extension of the 12-month temporary closure period.

(3) Owners and operators shall complete a site assessment in accordance with § 245.453 (relating to assessing the site at closure or change-in-service) before an extension may be applied for.

(h) Underground storage tank systems that meet performance standards in § 245.421 (relating to performance standards for underground storage tank systems) or the upgrading requirements in § 245.422 (relating to upgrading of existing underground storage tank systems) shall be permanently closed within 3 years of

being placed temporarily out-of-service OR BY _____ (*Editor's Note*: The blank refers to a date 3 years after the effective date of adoption of this regulation.), WHICHEVER IS GREATER, unless the Department grants an extension to this temporary closure period. THE DEPARTMENT MAY ESTABLISH CONDITIONS AND REQUIRE SUBMISSION OF DOCUMENTATION ASSOCIATED WITH EXTENSION OF THE TEMPORARY CLOSURE PERIOD, SUCH AS THE FOLLOWING:

(1) REQUIREMENTS FOR INSPECTION UNDER § 245.21 AND § 245.411.

(2) VERIFICATION AND TESTING OF CATHODIC PROTECTION SYSTEMS UNDER § 245.432.

(3) SITE ASSESSMENT UNDER § 245.453.

(4) OTHER CONSIDERATIONS DETERMINED BY THE DEPARTMENT.

* * * * *

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

(a) Before permanent closure or a change-in-service is completed, owners and operators shall measure for the presence of a release where contamination is most likely to be present at the underground storage tank site. Owners and operators shall sample for releases. **SAMPLING MAY BE ACCOMPLISHED** in a manner consistent with the Department, technical document entitled "*Closure Requirements for Underground Storage Tank Systems*" **OR IN A MANNER AT LEAST AS PROTECTIVE OF PUBLIC HEALTH AND SAFETY AND THE ENVIRONMENT AND WHICH MEETS ALL STATUTORY AND REGULATORY REQUIREMENTS.**

(b) If contaminated soils, contaminated groundwater or free product as a liquid or vapor is discovered under subsection (a), or by another manner, owners and operators shall begin corrective action in accordance with Subchapter D (relating to corrective action process for owners and operators of storage tanks and storage tank facilities and other responsible parties).

Subchapter F. TECHNICAL STANDARDS FOR ABOVEGROUND STORAGE TANKS AND FACILITIES

GENERAL

* * * * *

§ 245.503. Variances.

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

(1) A variance may only be granted if the storage tank system meets alternative technical standards that fully protect human health and the environment.

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

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

(ii) Specific sections of this subchapter from which the variance is sought.

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

(iv) Evidence, including data, plans, specifications and test results, which supports an alternative design, practice, schedule or method as being at least as protective of human health and the environment as the requirement of the sections identified in subparagraph (ii).

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

[(3)] (4) The Department will not grant a variance which would result in regulatory controls less stringent than other applicable Federal or State regulations, such as 37 Pa. Code Part I, Subpart B (relating to flammable and combustible liquids) and 40 CFR Part 112 (relating to oil pollution prevention).

[(4)] (5) When granting the variance, the Department may impose specific conditions necessary to assure that the variance will adequately protect the public health, safety or welfare and the environment.

[(5)] (6) The Department will provide to the applicant a written notice of approval, approval with conditions or denial.

§ 245.504. Referenced organizations.

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

(1) American Concrete Institute (ACI).

(2) American National Standards Institute (ANSI).

(3) American Petroleum Institute (API).

(4) American Society of Mechanical Engineers (ASME).

(5) American Society for Nondestructive Testing (ASNT).

(6) American Society for Testing and Materials (ASTM).

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

(8) National Fire Protection Association (NFPA).

(9) Petroleum Equipment Institute (PEI).

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

(11) Steel Tank Institute (STI).

(12) Underwriters Laboratory (UL).

(b) Nationally recognized codes and standards shall be used in conjunction with manufacturer's specifications to comply with this subchapter. When used to meet the technical standards and requirements of this subchapter, the most current or latest edition of the codes and standards shall be applied. Other Nationally recognized codes and standards, not referenced in this part, may also be used to comply with this subchapter, when **[~~appropriate~~]** **APPROVED BY THE DEPARTMENT**.

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

(d) REGULATORY REQUIREMENTS SHALL PREVAIL OVER NATIONALLY RECOGNIZED CODES AND STANDARDS WHENEVER THERE IS A CONFLICT.

§ 245.505. Applicability.

Existing tanks that [~~became~~] BECOME regulated due to the addition of new

regulated substances as defined in § 245.1 ((relating to definitions) (See definition of "regulated substance" (i)(C)(I) [– ~~(III)~~] AND (II)), and the regulation of aboveground tanks greater than 30,000 gallons capacity, storing heating oil that is consumed on the premises (See definition of "consumptive use" in § 245.1) are subject to the requirements of this [~~subsection~~] CHAPTER and shall be registered with the Department by _____ (*Editor's Note:* The blank refers to a date 60 days after the effective date of adoption of this regulation.). In addition, these tanks are temporarily excluded from the following requirements:

(1) Monitoring requirements in § 245.541(c) (relating to overfill prevention requirements) until _____ (*Editors Note:* The blank refers to a date 3 years after the effective date of adoption of this regulation.).

(2) In-service inspection requirements in § 245.552 (relating to in-service inspections) until within 5 years of the date of construction or the date of the last inspection or by _____ (*Editors Note:* The blank refers to a date 3 years after the effective date of adoption of this regulation.) whichever is greater.

(3) Out-of-service inspection requirements in § 245.553 (relating to out-of-service inspections) until _____ (*Editors Note:* The blank refers to a date three years after the effective date of adoption of this regulation.) for tanks not previously inspected or 10 years after construction for tanks without known corrosion rates, whichever is greater, or within projected inspection intervals based on corrosion rates determined at the last out-of-service inspection, but not to exceed 20 years from the date of the last inspection.

OPERATIONS AND MAINTENANCE

§ 245.514. Security.

An owner/operator is responsible to assure that appropriate security measures and procedures based on the facility location are established and implemented to protect the environment and the public. These security measures and procedures may include, but are not limited to **monitoring**, fencing, lighting, access control, locked entrances and securing of valves and dispensers.

DESIGN, CONSTRUCTION AND INSTALLATION

§ 245.522. New aboveground tank installations and reconstructions.

(a) Tanks **[shall] must** be designed and constructed in accordance with an appropriate current code of practice developed by Nationally recognized associations such as UL, ACI, API, ASME, ASTM**, STI** or NACE **and will follow applicable engineering specifications**.

(b) Tanks shall have a stable foundation, capable of supporting the total weight of the tank when full of product without movement, rolling or unacceptable settling. The foundation shall minimize corrosion of the tank bottom and meet or exceed the specifications of the tank manufacturer. The foundation design and construction shall be based on sound engineering practices.

(c) Tanks shall be tested for tightness in accordance with current codes of practice developed by Nationally recognized associations and manufacturer's specifications. If a pneumatic test is used for manufactured (shop built) tanks, the fittings, welds, joints and connections shall be coated with a soap solution and checked for leaks. Aboveground field constructed storage tanks shall be hydrostatically tested. Deficiencies shall be remedied prior to tanks being placed into service. Hydrostatic test fluids shall be

discharged or disposed of in accordance with State and Federal requirements.

(d) Reconstruction of tanks **[shall]** **must** follow the current codes of practice developed by Nationally recognized associations **and be accomplished in accordance with sound engineering practices**. Reconstructed tanks **[shall]** **must** be inspected and hydrostatically tested before being placed into service. Reconstructed tanks **[shall]** **must** meet or exceed requirements specified in § 245.521 (relating to performance standards for aboveground storage tanks). Hydrostatic test fluids shall be discharged or disposed of in accordance with State and Federal requirements.

(e) Aboveground manufactured storage tanks that are relocated to another service site shall meet the performance requirements for aboveground storage tanks and shall be tested according to industry standards and inspected before being put back in service.

(f) The Department may require the tank owner to submit documentation of construction design criteria and engineering specifications for review.

§ 245.523. Aboveground storage tanks in underground vaults.

The following requirements shall be met when an owner or operator chooses to install an aboveground storage tank in an underground vault.

* * * * *

(11) Underground piping distribution systems for each tank system used to dispense class I or class II motor fuels for resale must be provided with release detection equivalent to underground piping release detection addressed at § 245.445 (relating to methods of release detection for piping) and [~~be appropriately~~]

monitored AS REQUIRED IN PARAGRAPH (7) WITH MONITORING RECORDS RETAINED FOR 12 MONTHS AS REQUIRED UNDER § 245.516 OR § 245.615 (RELATING TO RECORDKEEPING REQUIREMENTS).

§ 245.524. Aboveground tank modifications.

(a) Modifications shall be designed and implemented in accordance with current codes of practice developed by Nationally recognized associations such as API, ACI, ASME, ASTM**, NACE, STI** or UL.

(b) Modifications shall be performed in accordance with Nationally recognized codes and manufacturer's specifications or a professional engineer's design requirements.

(c) Aboveground tanks which are modified shall be inspected and tested according to industry standards before being put in service when a major modification has been performed on the tank shell, tank roof or tank bottom. Deficiencies shall be remedied before being returned to service.

(d) The Department may require the tank owner to submit documentation of construction modification design criteria and engineering specifications for review.

CORROSION AND DETERIORATION PREVENTION

§ 245.534. Interior linings and coatings.

(a) Coating or lining systems may be used to protect tank interiors from corrosion. The coating or lining system shall be designed in accordance with current codes of practices such as API 652 or associations such as NACE. Any appropriate coating which is bonded firmly to the interior surfaces may be used to protect a tank from corrosion.

(b) Specific requirements are as follows:

(1) Coatings and linings shall be chemically compatible with the substance to be stored.

(2) Coating material shall be applied and cured in strict accordance with manufacturer's specifications.

(3) Surfaces shall be prepared and inspected in accordance with applicable nationally recognized codes and standards.

(4) Coatings used to protect the bottom of a tank shall extend up the side of the tank a minimum of 18 inches, while some forms of lining may cover the entire tank interior.

(5) Coatings shall be examined for blisters and air pockets, and tested for pinholes. The coating thickness shall be checked to assure compliance with manufacturer's specifications.

(6) Defects in coating or lining systems shall be repaired or corrected prior to putting the tank or system into service.

(c) Interior linings or coatings shall be inspected by a third-party, Department certified, aboveground storage tank inspector at installation, when undergoing a major modification, and at least every 10 years or as warranted or recommended by the manufacturer or design engineer.

RELEASE PREVENTION AND LEAK DETECTION

§ 245.541. Overfill prevention requirements.

(a) **[Owner/operators]** **An owner/operator** shall ensure that releases from overfills do not occur. Transfer of stored substance may not exceed the volume available in the receiving tank and the transfer shall be adequately monitored. Immediate action shall be taken to stop the flow of regulated substance prior to exceeding tank capacity or in the event that an equipment failure occurs.

(b) Tanks **[installed after October 11, 1997, shall]** **must** be installed with the following:

(1) A gauge or monitoring device which accurately indicates the level or volume in the tank and is visible to the individual responsible for the transfer of product. The monitoring device shall be installed, calibrated and maintained in accordance with manufacturer's specifications.

(2) A high-level alarm **[and]** **with** an automatic high-level cut-off device or a high-level alarm **[and]** **with** a manned operator shutdown procedure in operation.

(c) Existing tanks shall have a gauge or monitoring device installed by October 11, 2000.

(d) An existing tank system which is taken out of service to perform a scheduled out-of-service inspection or a major modification to the tank shall be upgraded with a high-level alarm **[and]** **with a** cut-off device or a high-level alarm **[and]** **with** a manned operator shutdown procedure prior to being put back in service.

(e) An existing tank system which has not been required to be taken out of service to perform a scheduled inspection or modification must [~~be upgraded with a~~

~~high-level alarm with a cut-off device or a high-level alarm with a manned operator shutdown procedure~~] HAVE OVERFILL PROTECTION CONSISTENT WITH NATIONAL INDUSTRY STANDARDS, SUCH AS API 2350, NFPA 30 OR PEI RP 200 by _____ (*Editor's Note*: **The blank refers to a date 3 years after the effective date of adoption of this regulation).**

§ 245.542. Containment requirements for aboveground storage tank systems.

(a) Containment structures shall be compatible with the substance stored and minimize deterioration to the storage tank system.

(b) Containment areas shall be designed, maintained and constructed in accordance with sound engineering practices adhering to Nationally recognized codes of practice such as NFPA, NACE, ACI or API and in compliance with State and Federal requirements.

(c) Secondary containment under the tank bottom and around underground piping **[shall]** **must** be designed to direct any release to a monitoring point to meet leak detection requirements. Secondary containment shall be provided on a new tank at installation, and shall be provided on an existing tank at reconstruction or relocation of the tank or when the tank floor is replaced **(SEE API 650 APPENDIX I)**. Permeability of the secondary containment **[shall]** **must** be less than **[1x10-7]** **1×10^{-7}** cm/sec at anticipated hydrostatic head and shall be verified at the time of installation.

(d) Aboveground tanks **[shall]** **must** have emergency containment structures, such as dike fields, curbing and containment collection systems, which contain releases from overfills, leaks and spills, when a new tank system is installed or at the next out-of-

service inspection for existing tank systems as established in § 245.553(d) (relating to out-of-service inspections) **or by _____ (*Editor's Note*: The blank refers to a date 3 years after the effective date of adoption of this regulation.), whichever occurs first.**

(1) Permeability of **[new] newly installed or replacement** emergency containment structures **[installed after October 11, 1997, shall] must** be less than 1 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 3 years after the effective date of adoption of this regulation.) or** at the next out-of-service inspection, prior to the tank being placed back into service**, whichever occurs first**.

(i) The standards for new emergency containment structures for aboveground storage tanks in paragraph (1).

(ii) Verification by a professional engineer that the emergency containment structure, coupled with the tank monitoring program and response plan, is capable of detecting and recovering a release and is designed to prevent contamination of the waters of this Commonwealth. **Verification [~~shall~~] MAY be conducted in a manner consistent with the Department's technical document entitled "Verification of Emergency Containment Structures for Aboveground Storage Tanks" [~~and~~] OR IN A MANNER AT LEAST AS PROTECTIVE OF PUBLIC HEALTH AND SAFETY AND THE**

ENVIRONMENT AND WHICH MEETS ALL STATUTORY AND REGULATORY REQUIREMENTS. VERIFICATION OF EARTHEN STRUCTURES should include determination of the containment structure permeability FOLLOWING NATIONALLY RECOGNIZED TESTING METHODS SUCH AS ASTM METHODS AND ENGINEERING STANDARDS LISTED IN API PUBLICATION 351.

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

(4) All transfers of regulated substances to a tank within the emergency containment shall be monitored by designated personnel for the duration of the transfer.

* * * * *

§ 245.543. Leak detection requirements.

(a) Aboveground tank systems **[installed after October 11, 1997,]** shall **[provide] be provided** a method of leak detection **at installation that is** capable of detecting a release. The leak detection method shall be monitored at least monthly and shall be installed, calibrated, operated and maintained in accordance with industry practices and manufacturer's specifications.

* * * * *

(c) Existing aboveground storage tanks without secondary containment under the bottom of the tank that are in contact with the soil, such as vertical flat bottom tanks, and do not have cathodic protection or an internal lining shall be **[~~tested for tightness~~]** **LEAK TESTED** at the next scheduled **IN**-service inspection **[after October 11, 1997,]**

consistent with subsection (d) and continue [~~testing for tightness~~] TO BE LEAK TESTED at each IN-service inspection thereafter, until the tank is upgraded.

(d) Tank [~~test for tightness~~] LEAK TEST shall [~~be based on~~] FOLLOW a [~~scientific or statistical method and~~] NATIONALLY RECOGNIZED procedure [~~. The test~~] THAT IS BASED ON A VOLUMETRIC/MASS MEASUREMENT, AN ACOUSTIC MEASUREMENT, OR A SOIL-VAPOR MONITORING method [~~and procedure shall be third-party certified with a specific leak detection rate or a method and procedure that is recognized by a National association~~], such as THOSE ADDRESSED IN API Publication 334 "Guide to Leak Detection in Aboveground Storage Tanks." The test shall be performed by a third-party [~~expert qualified in the test procedure~~] INSPECTOR OR A TECHNICIAN WHO HAS EXPERIENCE WITH THE SELECTED METHOD AND IS QUALIFIED BY THE TEST EQUIPMENT MANUFACTURER OR CERTIFIED BY THE RELEVANT INDUSTRY ASSOCIATION SUCH AS ASNT (SEE RECOMMENDED PRACTICE NO. SNT-TC-1A) and IS not an employee of the tank owner.

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

ABOVEGROUND STORAGE TANK INSPECTIONS

§ 245.552. In-service inspections.

(a) The in-service inspection shall follow the guidelines of a Nationally recognized association such as API 653 [**and**], API 570 **and applicable engineering criteria (SEE § 245.524(b), § 245.542(d)(2) AND § 245.543(d))**.

(b) The in-service inspection shall evaluate the following:

(1) Containment areas.

(2) Foundation.

(3) Tank shell.

(4) Tank roof.

(5) Appurtenances.

(6) Ancillary equipment including piping.

(7) Leak detection method.

(8) Cathodic protection system, if installed.

(9) Tank system integrity and suitability for service.

(c) Inspection information shall be submitted to the Department on a form provided by the Department and shall include the results of the evaluation in subsection (b) and the following:

(1) A determination of the corrosion rate of the shell and piping.

(2) A calculation of the life of the tank shell and piping based on corrosion rate.

(3) The next inspection schedule based on **the API 653 calculated service life method or** 1/4 of the corrosion rate life with a maximum of 5 years **BETWEEN INSPECTIONS. Other site specific conditions, for example, maintenance practices, previous repairs, the nature of the substance stored or soil conditions that may affect corrosion rate life or tank system integrity and should be considered when projecting tank service life and the next inspection interval.**

(4) The recommendations for maintaining tank system integrity.

(d) Inspection intervals for in-service inspections are as follows:

(1) Aboveground tanks installed after October 11, 1997, shall be initially inspected within 5 years of installation.

(2) Existing tanks shall be initially inspected as follows:

(i) Tanks over 5 years old without a previous inspection shall be inspected by October 11, 1999.

(ii) Tanks with an inspection more than 3 years prior to October 11, 1997, shall be inspected by October 11, 2000.

(iii) Tanks with an inspection within 3 years prior to October 11, 1997, shall be inspected within 6 years of the previous inspection.

(3) Tanks shall have an in-service inspection within 1/4 of the corrosion rate life with a maximum of 5 years from the previous inspection or installation.

(4) An out-of-service inspection may replace an in-service inspection.

(5) AN IN-SERVICE INSPECTION INTERVAL MAY BE DELAYED UNDER § 245.562 (RELATING TO TEMPORARY REMOVAL-FROM-SERVICE) FOR A TANK THAT IS TEMPORARILY REMOVED FROM SERVICE. THE DELAYED INSPECTION MUST BE CONDUCTED PRIOR TO PLACING REGULATED SUBSTANCE IN A TANK AND RETURNING THE TANK TO OPERATING STATUS. DEFICIENCIES NOTED DURING INSPECTION SHALL BE ADDRESSED AND REMEDIED AND AN AMENDED REGISTRATION FORM SUBMITTED TO THE DEPARTMENT PRIOR TO RETURNING THE TANK TO OPERATING STATUS.

(e) Inspection recommendations shall be addressed **and DEFICIENCIES remedied [~~as appropriate~~]. When substantial modifications are necessary to correct deficiencies, they shall be made in accordance with manufacturer's specifications and engineering design criteria (SEE § 245.522(a) AND (b), § 245.524(b)(2), § 245.532(b) AND (c) AND § 245.534(c)). The Department may require submission and review of all documentation relating to these remedies. Required tank handling activities are reported to the Department by the certified installer. Tank handling activities involving major modifications shall also be inspected by a certified aboveground storage tank inspector and reported to the Department.**

(f) The complete inspection report shall be kept at the facility until the next out-of-service inspection is completed.

§ 245.553. Out-of-service inspections.

(a) Inspections shall follow the guidelines of a Nationally recognized association such as API 653, API 570 or ASME **and applicable engineering criteria (SEE § 245.524(b), § 245.534(c), § 245.542(d)(2) AND § 245.543(d))**.

(b) The out-of-service inspection shall evaluate the following:

(1) Containment areas.

(2) Foundation and supports.

(3) Tank shell.

(4) Tank roof.

(5) Tank bottom.

(6) Appurtenances.

(7) Ancillary equipment including piping.

(8) Leak detection method.

(9) Cathodic protection system, if installed.

(10) Internal linings and coatings, if installed.

(11) Tank system integrity and suitability for service.

(c) **The tank bottom evaluation OF METALLIC FLOORS shall be based on [~~a scientific or statistical procedure encompassing appropriate methods~~] ULTRASONIC TESTING AND VISUAL EXAMINATION AND MUST INCLUDE AT LEAST ONE OTHER METHOD of nondestructive examination SUCH AS MAGNETIC FLUX TESTS OR VACUUM TESTS OF BOTTOM LAP WELDS (SEE API 653 and ASTM METALLOGRAPHY- NONDESTRUCTIVE TESTING Vol. 03.03). The ULTRASONIC evaluation must be STATISTICALLY representative of the whole floor [~~when practicable~~] , excluding THE RELEASE PREVENTION BARRIER OR SECONDARY CONTAINMENT ON DOUBLE BOTTOM TANKS [~~removal of liners, heating coils or other appurtenances~~].**

(d) Inspection information shall be submitted to the Department on a form provided by the Department and shall include the results of subsection (b) and the following:

(1) A determination of the corrosion rate for tank shell, bottom plates and piping.

(2) A calculation of the tank life and piping life based on the corrosion rate.

(3) The schedule for next out-of-service inspection, based on **the API 653 calculated service life method or** 1/2 of the corrosion rate life, with a maximum of 20 years between inspections. **Other site specific conditions, for example, maintenance practices, previous repairs, internal linings, the nature of the substance stored or soil conditions that may affect corrosion rate life and should be considered when projecting tank service life and the next inspection interval.**

(4) The recommendations for maintaining tank system integrity and meeting performance standards.

[(d)] (e) Inspection intervals for out-of-service inspections are as follows:

(1) Tanks installed after October 11, 1997, shall be initially inspected based on measured or similar service corrosion rates. When the corrosion rate is unknown the tanks actual bottom thickness shall be determined by inspection within 10 years of installation to determine the corrosion rate.

(2) Existing tanks shall be initially inspected as follows:

(i) If corrosion rates are not known, tanks shall be inspected within 10 years of installation or by October 11, 2000, whichever is later.

(ii) If corrosion rates can be determined or are known, tanks shall be inspected at **their API 653 calculated service life method or** 1/2 the corrosion rate life, from installation or previous out-of-service inspection or by October 11, 2000, whichever is later.

(3) Tanks shall have an out-of-service inspection at **their API 653 calculated service life method or** 1/2 of the corrosion rate life, with a maximum of 20 years from

the last out-of-service inspection.

(4) AN OUT-OF-SERVICE INSPECTION INTERVAL MAY BE DELAYED UNDER § 245.562 (RELATING TO TEMPORARY REMOVAL-FROM-SERVICE) FOR A TANK THAT IS TEMPORARILY REMOVED FROM SERVICE. THE DELAYED INSPECTION MUST BE CONDUCTED PRIOR TO PLACING REGULATED SUBSTANCE IN A TANK AND RETURNING THE TANK TO OPERATING STATUS. DEFICIENCIES NOTED DURING INSPECTION SHALL BE ADDRESSED AND REMEDIED AND AN AMENDED REGISTRATION FORM SUBMITTED TO THE DEPARTMENT PRIOR TO RETURNING THE TANK TO OPERATING STATUS.

[(e)] **(f)** Deficiencies shall be remedied before the tank is returned to service. **When substantial modifications are necessary to correct deficiencies, they shall be made in accordance with manufacturer's specifications [~~and engineering~~] OR AN ENGINEER'S design criteria (SEE § 245.522(a) AND (b), § 245.524(b)(2) AND § 245.532(b) AND (c)). The Department may require submission and review documentation relating to these remedies. Required tank handling activities are reported to the Department by the certified installer. Tank handling activities involving major modifications shall also be inspected by a certified aboveground storage tank inspector and reported to the Department.**

[(f)] **(g)** Aboveground storage tanks which can be completely examined from the exterior are exempt from out-of-service inspections except for tanks that are internally

lined.

[(g)] **(h)** The completed inspection report for out-of-service inspections shall be kept with the facility records under § 245.516 (relating to record keeping requirements).

§ 245.554. Installation and modification inspections.

(a) Aboveground storage tank systems shall be inspected by a Department certified inspector at the time of installation in accordance with § 245.522 (relating to new aboveground tank installations and reconstructions), and current Nationally recognized association's code of practice and manufacturer's specifications. The inspection report shall be kept for the operational life of the tank.

(b) Major modifications shall be inspected by a Department certified inspector at the time of modification under § 245.524 (relating to aboveground tank modifications) and a current codes of practice developed by Nationally recognized associations prior to being put back in service. The inspection report shall be kept for the operational life of the tank. **When substantial modifications are made to the tank floor, the next inspection date projections shall be determined based on the condition of the [~~floor~~] TANK subsequent to those modifications and reported to the Department by the certified inspector on the appropriate inspection form provided by the Department. Other site specific conditions, for example, maintenance practices, previous repairs, the nature of the substance stored or soil conditions that may affect corrosion rate life or tank system integrity should be considered when projecting tank service life and the next inspection interval.**

(c) Tanks which are relocated or reconstructed shall be inspected by a Department certified inspector and tested for tightness in accordance with § 245.522 and current codes of practice developed by Nationally recognized associations prior to being put in service. The inspection report shall be kept for the operational life of the tank.

CLOSURE AND REMOVAL FROM SERVICE REQUIREMENTS

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

Before permanent closure or change-in-service is completed, **the** owner/operator shall comply with the following:

* * * * *

(3) The **[owner/operators] owner/operator** shall complete a site assessment to measure for the presence of any release from the storage tank system and a closure report. The assessment of the site shall be made after the notification **to the Department and [~~shall~~] MAY be conducted in a manner consistent with the Department's technical document entitled "Closure Requirements for Aboveground Storage Tank Systems" [~~unless otherwise agreed upon or waived by the Department~~] OR IN A MANNER AT LEAST AS PROTECTIVE OF PUBLIC HEALTH AND SAFETY AND THE ENVIRONMENT AND WHICH MEETS ALL STATUTORY AND REGULATORY REQUIREMENTS**. The results of the site assessment and the closure report shall be retained for 3 years.

* * * * *

(6) Tank systems shall be cleaned, rendered free of hazardous vapors and ventilated if left onsite or tank systems shall be emptied and removed from the site in a

manner consistent with current industry practices and Bureau of **[Land Recycling and]** Waste Management requirements such as Chapters **[263]** **263a** and 299 (relating to **[reserved]** **transporters of hazardous waste**; and storage and transportation of residual waste).

* * * * *

(8) The **[State Fire Marshal]** **appropriate state agency, county and local jurisdiction** shall be notified if the tank is under a fire marshal**, flammable and combustible liquids or other State agency, county or local jurisdiction** permit.

* * * * *

§ 245.562. Temporary removal-from-service.

(a) The owner/operator shall complete and submit an amended registration form to the Department within 30 days after the change in tank status.

(b) A tank system shall be emptied and regulated substances and contents shall be reused, treated or disposed of in accordance with State and Federal requirements.

(c) A tank shall be secured against unauthorized entry and all piping entering or **[~~existing~~]** **EXITING** the tank, excluding vents, shall be capped or blinded.

(d) Tank integrity shall be maintained throughout the temporary removal-from-service time and the tank shall be protected against flotation.

(e) Inspection requirements shall be maintained as specified in § § 245.551—245.554 (relating to aboveground storage tank inspections). **IN-SERVICE AND OUT-OF-SERVICE INSPECTION INTERVALS MAY BE DELAYED FOR A TANK THAT**

IS TEMPORARILY REMOVED FROM SERVICE. THE DELAYED INSPECTIONS MUST BE CONDUCTED PRIOR TO PLACING REGULATED SUBSTANCE IN A TANK AND RETURNING THE TANK TO OPERATING STATUS. DEFICIENCIES NOTED DURING INSPECTION SHALL BE ADDRESSED AND REMEDIED AND AN AMENDED REGISTRATION FORM SUBMITTED TO THE DEPARTMENT PRIOR TO RETURNING THE TANK TO OPERATING STATUS.

(f) Tanks which are temporarily removed-from-service for 5 years or longer shall meet the requirements for permanent closure**, UNLESS THE TIME FRAME FOR RETAINING THE TANK OR TANKS IN TEMPORARY REMOVAL-FROM-SERVICE STATUS IS EXTENDED UNDER § 245.503 (RELATING TO VARIANCES)**.

Subchapter G. SIMPLIFIED PROGRAM FOR SMALL ABOVEGROUND STORAGE TANKS

GENERAL

§245.604. Referenced organizations.

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

(1) American National Standards Institute (ANSI).

(2) American Petroleum Institute (API).

(3) American Society of Mechanical Engineers (ASME).

(4) American Society for Testing and Materials (ASTM).

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

(6) National Fire Protection Association (NFPA).

(7) Petroleum Equipment Institute (PEI).

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

(9) Steel Tank Institute (STI).

(10) Underwriters Laboratory (UL).

(b) Nationally recognized codes and standards shall be used in conjunction with manufacturer's specifications to comply with this subchapter. When used to meet the technical standards and requirements of this subchapter, the most current or latest edition of the codes and standards shall be applied. Other Nationally recognized codes and standards, not referenced in this part, may also be used to comply with this subchapter, when **[~~appropriate~~]** **APPROVED BY THE DEPARTMENT**.

(c) When Nationally recognized codes and standards are updated, facilities or storage tank systems installed to previously existing standards prior to the update will not

automatically be required to be upgraded to meet the new standard, **UNLESS SPECIFICALLY REQUIRED IN THE REVISED STANDARDS OR BY THE DEPARTMENT**.

(d) REGULATORY REQUIREMENTS SHALL PREVAIL OVER NATIONALLY RECOGNIZED CODES AND STANDARDS WHENEVER THERE IS A CONFLICT.

§ 245.605. Applicability.

Existing tanks that become regulated due to the addition of new regulated substances as defined in § 245.1 ((relating to definitions) (See "*regulated substance*" (i)(C)(I) [– ~~(III)~~] AND (II)) are subject to the requirements of this [~~subsection~~] CHAPTER and shall be registered with the Department by _____ (*Editor's Note:* The blank refers to a date 60 days after the effective date of adoption of this regulation.). In addition, these tanks are temporarily excluded from the following technical requirements:

(1) Emergency and secondary containment requirements in § 245.612(e) (relating to performance and design standards.) until _____ (*Editors Note:* The blank refers to a date 3 years after the effective date of adoption of this regulation).

(2) A method of leak detection as required in § 245.613(a) (relating to monitoring standards) until _____ (*Editors Note:* The blank refers to a date 1 year after the effective date of adoption of this regulation.).

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

§ 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]~~ OR PREVENTION device or MONITORING GAUGE AND shut down procedure.

(3) Block valves on product lines.

(4) Solenoid valve or anti-siphon device, if appropriate (SEE PEI RP 200).

(e) Existing tanks which do not meet the requirements specified in subsection (d) shall be upgraded with secondary containment by October 11, 2007, and emergency containment by October 11, 2000.

(f) Tanks installed in underground vaults after October 11, 1997, and used for dispensing Class I and Class II motor fuels shall comply with § 245.523 (relating to aboveground storage tanks in underground vaults).

(g) The exterior of the tank system shall be protected by an appropriate coating or paint which shall be maintained throughout the entire operational life of the tank system.

(h) Tanks which are internally lined shall comply with § 245.534 (relating to interior linings and coatings).

(i) Tanks shall be labeled or marked in a manner consistent with industry standards and which provides for identifying the regulated substance stored from outside the containment area.

* * * * *

§ 245.614. Requirements for closure.

(a) Tank systems shall be cleaned, rendered free from hazardous vapors and ventilated if left onsite or shall be emptied and removed from the site in a manner consistent with current industry practices and Bureau of **[Land Recycling and]** Waste Management requirements such as Chapters **[263]** **263a** and 299 (relating to **[reserved]** **transporters of hazardous waste**; and storage and transportation of residual waste). **Piping shall be removed or capped and fill ports shall be secured, capped or dismantled.**

(b) The owner shall conduct a visual examination of the surface, soil and area surrounding and underlying the storage tank system for obvious indications or evidence of a release of regulated substance.

(1) If a release is suspected, it shall be investigated in accordance with § 245.304 (relating to investigation of suspected releases).

(2) If a release is confirmed, it shall be reported to the appropriate Department regional office responsible for the county in which the tank is located in accordance with § 245.305 (relating to reporting releases).

(c) The owner shall complete and submit an amended tank registration form to the Department within 30 days of:

(1) The completion of permanent closure.

(2) Change-in-service status of the tank.

(3) Temporary removal from service.

(d) Temporary removal from service requires that the owner/operator empty the tank system of regulated substances and conduct a visual examination of the area surrounding the tank as required in subsection (b), excluding the surface and soil underlying any tank bottom in contact with the ground. A tank may be considered to be in a temporary removal from service status when the tank is emptied and intended to remain out of use for 1 year or more.

(1) Temporary removal from service may not exceed 5 years**, UNLESS THE OWNER CAN DEMONSTRATE AN OPERATIONAL NEED TO RETAIN THE TANK IN TEMPORARY REMOVAL-FROM-SERVICE BEYOND 5 YEARS AND THE DEPARTMENT AGREES TO EXTEND THIS TIME FRAME**.

(2) Monitoring standards in § 245.613 (relating to monitoring standards) are not required when a tank is reported to the Department as temporarily removed from service.

(3) Inspection of tanks temporarily removed from service shall be performed in accordance with § 245.616 (relating to inspection requirements). **IN-SERVICE INSPECTION INTERVAL MAY BE DELAYED FOR A TANK THAT IS TEMPORARILY REMOVED-FROM-SERVICE. THE DELAYED INSPECTION MUST BE CONDUCTED PRIOR TO PLACING REGULATED SUBSTANCE IN A TANK AND RETURNING THE TANK TO OPERATING STATUS. DEFICIENCIES NOTED DURING INSPECTION SHALL BE ADDRESSED AND REMEDIED AND AN AMENDED REGISTRATION FORM SUBMITTED TO THE DEPARTMENT PRIOR TO RETURNING A TANK TO OPERATING STATUS.**

* * * * *

§ 245.616. Inspection requirements.

(a) Required inspections of small aboveground storage tanks shall be conducted by Department certified aboveground storage tank inspectors according to a current Nationally recognized association's code of practice such as API **[and], STI or** ASME

[and] **or** according to manufacturer's specifications **and applicable engineering criteria (SEE § 245.612. RELATING TO PERFORMANCE AND DESIGN STANDARDS)**. Deficiencies noted during the inspection shall be addressed **and remedied [~~as appropriate~~]. When substantial modifications are necessary to correct deficiencies, they shall be made in accordance with manufacturer's specifications and applicable engineering design criteria. The Department may require submission and review of documentation relating to these remedies. The associated tank handling activities are reported to the Department by a certified installer.**

(b) **[After October 11, 1997, small]** **Small** aboveground field constructed storage tanks shall be inspected at installation, reconstruction or relocation and when a major modification activity is performed on the tank shell or the tank bottom plates.

(c) The owner/operator of small aboveground storage tanks storing regulated substances with a capacity greater than 5,000 gallons and owner/operator of small aboveground storage tanks storing highly hazardous substances with a capacity greater than 1,100 gallons shall have in-service inspections conducted every 10 years or **[at 1/4 of the]** **more often when** corrosion **[rate life with a maximum of 10 years between inspections], deterioration or other specific conditions necessitate**. **Other specific conditions may include [~~, but are not limited to,~~] maintenance practices, previous repairs, the nature of the substance stored and coatings or linings that should be considered when projecting tank service life and the next inspection interval. Internally lined tanks and flat bottom tanks without an interstice or external access to the tank bottom may require further evaluation or internal examination.** Inspections shall be phased in for tanks without a previous inspection as follows:

(1) New tanks shall be initially inspected within 10 years of installation.

(2) Existing tanks, less than 10 years old without a previous inspection, shall be inspected by October 13, 2003, or 10 years from the date of installation, whichever is later.

(3) Existing tanks over 10 years old, without a previous inspection, shall be inspected by October 11, 2002.

(4) WHEN AN INSPECTION IS DELAYED UNDER § 245.614(d)(3) (RELATING TO REQUIREMENTS FOR CLOSURE) FOR A TANK IN TEMPORARY REMOVAL-FROM-SERVICE STATUS, THE INSPECTION MUST BE COMPLETED AND DEFICIENCIES REMEDIED PRIOR TO RETURNING THE TANK TO OPERATIONAL SERVICE.

(d) In-service inspections shall evaluate the following:

(1) Containment areas.

(2) Foundation and tank supports.

(3) Tank shell and tank roof, where a roof exists.

(4) Appurtenances.

(5) Ancillary equipment including piping.

(6) Leak detection method, including monthly leak detection records and maintenance checklists.

(7) Cathodic protection system, if installed.

(8) Coatings and protections from deterioration.

(9) Tank system integrity and suitability for service.

Subchapter H. FINANCIAL RESPONSIBILITY 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 must be in a method [~~approved~~] REQUIRED under section 701(b) of the act (35 P.S. § 6021.701(b)) including a guarantee, surety bond, qualification as a self-insurer, insurance or risk retention coverage, letter of credit, indemnity contract, trust fund, stand by trust fund, or other method approved OR DEEMED SATISFACTORY by the Department.**

(c) **[Upon request of the Department, an owner or operator of an underground storage tank shall submit a written certification or provide other written evidence] The owner or operator shall have written documentation of the USTIF deductible coverage readily available and provide this documentation to the Department upon request to demonstrate** that the owner or operator has sufficient financial resources to

meet the USTIF deductible for both corrective action and third party liability as determined in accordance with § 245.707. **[The certification shall be made on a form provided by the Department.]**

* * * * *

§ 245.707. Coverage amounts for financial responsibility.

The owner or operator of an underground storage tank, other than an exempt underground storage tank, shall comply with the financial responsibility requirements of this subchapter by maintaining sufficient financial resources to provide the coverage for both corrective action and third party liability, in the amounts set forth in paragraphs (1) and (2) for the applicable number of tanks:

(1) *For corrective action*:

Number of tanks	Amount of required coverage
1–6	1 x USTIF deductible
7–12	2 x USTIF deductible
13–18	3 x USTIF deductible
19–24	4 x USTIF deductible
25–30	5 x USTIF deductible
31–36	6 x USTIF deductible
37–42	7 x USTIF deductible
43–48	8 x USTIF deductible
49–60	9 x USTIF deductible

61–100	10 x USTIF deductible
101–200	11 x USTIF deductible
201–300	12 x USTIF deductible
301–600	13 x USTIF deductible
over 600	14 x USTIF deductible

(2) *For third party liability*:

Number of tanks	Amount of required coverage
1–100	1 x USTIF deductible
over **[101]** **100**	2 x USTIF deductible

* * * * *