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

## <u>Order</u>

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

This order was adopted by the Board at its meeting of \_\_\_\_(date) \_\_\_\_.

# A. <u>Effective Date</u>

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

## B. <u>Contact Persons</u>

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

# C. Statutory Authority

This rulemaking is being made under the authority of section 106 of the Storage Tank and Spill Prevention Act (Storage Tank Act) (35 P.S. § 6021.106), which authorizes the Board to adopt rules and regulations governing aboveground and underground storage tanks to accomplish the purposes and carry out the provisions of the Storage Tank Act; sections 107(d) and 108 of the Storage Tank Act (35 P.S. §§ 6021.107(d) and 6021.108), which authorize the Department to establish a certification program by regulation for installers and inspectors of storage tanks; section 301(a) and (d) of the Storage Tank Act (35 P.S. § 6021.301(a) and (d)), which requires the Department to establish a regulatory program for aboveground storage tanks and a simplified program for small aboveground storage tanks; sections 301(b) and 501(b) of the Storage Tank Act (35 P.S. §§ 6021.301(b) and 6021.501(b)), which authorize the Department to establish classes and categories of tanks by regulation; sections 302(a) and 303(a) of the Storage Tank Act (35 P.S. §§ 6021.302(a) and 6021.303(a)), which authorize the Department to establish registration and fee requirements for aboveground storage tanks; section 501(a) of the Storage Tank Act (35 P.S. § 6021.501(a)), which requires the Department to establish a regulatory program for underground storage tanks; sections 502(a) and 503(a) of the Storage Tank Act (35 P.S. §§ 6021.502(a) and 6021.503(a)), which authorize the Department to establish registration and fee requirements for underground storage tanks: section 701(a) and (b) of the Storage Tank Act (35 P.S. § 6021.701(a) and (b)), which authorizes the Board to establish regulations necessary for maintaining financial responsibility and methods of coverage; and section 1920-A of The Administrative Code of 1929 (71 P.S. § 510-20), which authorizes the Board to

formulate, adopt and promulgate rules and regulations that are necessary for the proper work of the Department.

# D. Background of the Amendments

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

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

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

This final-form rulemaking changes permitting provisions in Subchapter C (relating to permitting of underground and aboveground storage tank systems and facilities), by adding clarity, simplifying certain site specific installation permit (SSIP) requirements and addressing when construction design criteria or engineering specifications may be required with permit applications. The amendments should reduce paperwork and administrative processes for many SSIP applicants and combines the operating permit application and tank registration application process. Construction design criteria and engineering specifications are a necessary part of tank construction. The Department currently reviews this information for permits that require specific plans to mitigate certain conditions at the site. The amendments are needed to further clarify this requirement and does not place a new burden or cost on the tank owner or SSIP applicant.

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

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

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

The Department worked closely with informal technical workgroups and advisory subcommittees, as well as the Storage Tank Advisory Committee (STAC), during development of this final-form rulemaking. The Department also met with several organizations, associations and groups, such as the Electric Power Generator Association, the National Association of State Aboveground Storage Tank Programs and the Tank Installers of Pennsylvania, a State association. The STAC, which was established by section 105 of the Storage Tank Act (35 P. S. § 6021.105), consists of persons representing a cross-section of organizations having a direct interest in the regulation of storage tanks in this Commonwealth. As required by section 105 of the Storage Tank Act, the STAC has been given the opportunity to review and comment on this final-form rulemaking. At meetings on February 5, 2002, June 4, 2002, June 3, 2003, December 9, 2003, and December 7, 2004, the STAC reviewed and discussed the proposed rulemaking. At its September 19, 2006 meeting, the Department presented the STAC with a draft Comment Document and discussed final-form rulemaking concepts. The STAC reviewed and discussed the final-form rulemaking at its meetings on December 12, 2006 and February 20, 2007. A Financial Responsibility and Certification Subcommittee meeting was held on February 9, 2007.

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

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

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

### General

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

The Board does not agree, however, with delaying this rulemaking until EPA issues final guidelines under the Energy Policy Act. First, the process that led to this final-form rulemaking began in 2002, based on the Department's experience in administering the Storage Tank Act, as well as the U.S. General Accounting Office's 2001 report reviewing the national UST program. The Board believes it is in Pennsylvania's best interest to have an UST program that addresses the specific issues facing the Commonwealth, while meeting the letter and spirit of the Storage Tank Act. Second, the Energy Policy Act is fairly clear on its face, and the Board feels that the final-form rulemaking addresses almost every issue raised in that legislation. It is the Board's belief that EPA will have no problem approving Pennsylvania's UST program as meeting the requirements of 40 CFR Part 281 after the rulemaking is in effect, even in light of the federal statutory changes. Third, the Energy Policy Act only addresses USTs, and so does not affect significant areas addressed in the rulemaking – ASTs, certification, permitting and registration, to name several. Fourth, some Energy Policy Act grant guidelines are not required to be in place as final until August 2007. This is not simply a "short-term delay," and allowing Pennsylvania's rulemaking process to be held hostage to EPA's schedules does not seem appropriate. Finally, it might make some sense to wait if EPA was actually proposing to amend the UST regulations at 40 CFR Parts 280 and 281, but instead EPA is only issuing "grant guidelines." These are only policy documents, and only impact federal funding of the state UST programs, rather than binding the regulated community. This means that EPA should have flexibility and discretion to approve continued and expanded funding for Pennsylvania, even where the exact program requirements are not identical (compare, e.g., 40 CFR 280.50 (relating to reporting of suspected releases) with 25 Pa.Code §§ 245.304 (relating to investigation of suspected releases) and 245.305 (relating to reporting releases)).

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

## Subchapter A

# "Consumptive use"

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

The Board agrees with the commentator that this class of ASTs poses risks and should be regulated. Further, we believe that regulation of these ASTs is consistent with the original intent behind the Storage Tank Act, and they should therefore be regulated under that Act. That is true regardless of the existence of a federal program that also regulates these tanks; the Pennsylvania regulatory program contains many items missing from the federal Oil Pollution Act. A critical argument in favor of independent Storage Tank Act regulation

from the Board's perspective is the ability to respond to releases from such tanks under the Storage Tank Act authority, rather than waiting for federal action that may not be forthcoming.

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

# "Regulated substance"

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

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

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

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

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

## § 245.41. Tank registration requirements.

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

One commentator was concerned that the requirements in subsection (f)(4) could cause excessive or frequent notification to the Department. The commentator requested that notification requirements should not apply when minor changes in tank product storage occur. For example, products such as kerosene and diesel fuel are very similar in composition and storage tanks are often switched back and forth between these products depending on inventories and supply demands. The commentator suggested that notification of changes in substances stored should only apply when there is a significant change, such as a change from a petroleum product to a hazardous substance, and not when a change is only in the type of petroleum product (e.g., from diesel to kerosene). The Board recognizes that some operations change substances frequently because of business practices and included the ability to address this issue in the final-form rulemaking. The substance in a tank is important, however, as the substance stored determines technical regulatory requirements and Underground Storage Tank Indemnification Fund billing.

#### § 245.43. Failure to pay registration fee.

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

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

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

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

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

## Subchapter B

#### § 245.110. Certification of installers.

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

## § 245.114. Renewal and amendment of certification.

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

The Board received several comments concerning the transition proposed in this section concerning renewal from qualifications based on activities to qualifications based on training. Specifically, commentators were concerned that more detail was needed in the regulations on what specific training meets these requirements. Among the suggestions for amendments was a requirement for a minimum annual continuing education for certified installers and inspectors, or at least establishing a minimum number of hours of training for each category. Clarifying language concerning the difference between technical training requirements for initial and renewal of certification and course expectations has been added to the final-form rulemaking, but no

minimum number of hours of training requirements are established. The Board believes that flexibility will be needed to require training when appropriate. In some instances this might require more than the suggested minimum requirements, and for specific certification categories less training might be acceptable. Because the training courses are category-specific and approved by the Department, based on course outline and content, there is no need or desire to assign credit hours for a course or require a specific number of training hours for renewal. Course content is the important factor, not the time spent in training.

## Subchapter C

§ 245.203. General requirements for permits.

§ 245.222. Application requirements.

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

§ 245.231. Scope.

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

## Subchapter E

§ 245.405. Codes and standards.

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

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

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

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

# § 245.411. Inspection frequency.

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

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

Finally, in response to a comment from IRRC, the final-form rulemaking has been amended to include examples of the type of training that could be used. Because the Department will typically require the

training as part of the enforcement follow-up after the verification of facility violations, the specific course necessary will be addressed at that time. The final-form rulemaking is also amended to note that the tank owner or operator shall incur the cost of the training.

§ 245.421. Performance standards for underground tank systems.

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

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

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

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

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

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

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

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

- planned locations for new community water systems or new potable drinking water wells;
- the entire extent of aquifers used to provide drinking water (the Energy Policy Act requirements are unclear as to whether or not the aquifer is protected, or only the well itself);
- wells providing water for "agricultural purposes," as that phrase is defined in 25 Pa.Code § 250.1 (relating to definitions);
- buildings with subsurface features that might be impacted by vapors from a release;
- "waters of the Commonwealth," as that phrase is defined in section 1 of the Clean Streams Law (35 P.S. § 691.1); and,
- other water supplies ("water supply" is defined in section 245.1 as "[e]xisting, designated or planned sources of water or facilities or systems for the supply of water for human consumption or for agricultural, commercial, industrial or other legitimate use, protected by the applicable water supply provisions of § 93.3 (relating to protected water uses)").

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

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

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

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

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

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

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

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

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

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

Several commentators went further, and suggested that replacement of piping with identical materials should not trigger the upgrade requirement, regardless of the percentage of piping replaced (up to and including 100%). The Board does not agree and believes that this would be in conflict with the Energy Policy Act (*see*, Final Secondary Containment Grant Guidelines, issued by EPA on November 15, 2006, pages 4-5).

Piping associated with USTs is a significant source of contamination in the Commonwealth. When piping replacement is over the 50% threshold, such replacement must meet the new UST system standards, i.e., total secondary containment piping, rather than simply replacing old piping with equipment that is less protective than total secondary containment.

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

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

§ 245.422. Upgrading of existing underground storage tank systems.

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

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

§ 245.432. Operation and maintenance including corrosion protection.

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

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

§ 245.435. Reporting and recordkeeping.

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

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

§ 245.441. General requirements for underground storage tank systems.

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

§ 245.444. Methods of release detection for tanks.

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

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

§ 245.445. Methods of release detection for piping.

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

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

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

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

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

## Subchapter F

#### § 245.523. Aboveground storage tanks in vaults.

The IRRC raised a concern about the proposed amendments to this sections, specifically that paragraph (11) requires certain underground piping distribution systems to "be appropriately monitored," which is an indefinite term. The final-form rulemaking has been amended to clarify that the underground piping must be monitored as required in paragraph (7) and monitoring records retained for 12 months as required under sections 245.516 or 245.615.

# § 245.541. Overfill prevention requirements.

Several commentators raised concerns about the proposed amendment to subsection (e), arguing for allowing for the use of a visual gauge, in lieu of a high-level alarm, if the large AST also has a manned operator shutdown procedure. The installation of high-level alarms will require emptying and cleaning of the large ASTs prior to working on them. That is an expensive and potentially dangerous proposition, and is not justified prior to the next scheduled removal from service (i.e., an out-of-service inspection). The Board acknowledges the commentators' concerns. The current regulatory requirements for installation of high-level alarm when a large AST is taken out-of-service have been in place since October 11, 1997 and the

Board believes these requirements are appropriate. No additional deadlines are necessary for these tanks. However, ASTs that do not routinely undergo out-of-service inspections may still need to address overfill prevention. Therefore, the final-form rulemaking has been amended to reflect overfill protection requirements consistent with national industry standards, such as API 2350, NFPA 30 or PEI RP 200 for saddle-mounted ASTs and ASTs that are not routinely required to conduct out-of-service inspections.

## § 245.542. Containment requirements for aboveground storage tank systems.

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

## § 245.543. Leak detection requirements.

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

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

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

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

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

## § 245.562. Temporary removal-from-service.

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

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

## Subchapter G

## § 245.612. Performance and design standards.

One commentator requested clarification in subsections (d) and (e) regarding the intention of the Board to have any one (1) of the listed controls meet the need for additional spill and overfill protection on double-walled small ASTs. The measures addressed for double-walled small aboveground storage tanks are required by EPA to meet Oil Program requirements in 40 CFR 112.7 and are also reflected in NFPA 30, and PEI Recommended Practice 200 (PEI RP 200) for installation of manufactured aboveground storage tanks. PEI RP 200 provides detailed diagrams with instructions on when specific valves, cutoffs and controls should be used. To help clarify when each of the listed controls are needed, the final-form rulemaking has been amended to include specific reference to PEI RP 200 and NFPA 30. The 3-year delay for tanks containing newly regulated substances and heating oil consumed on the premises has been addressed in the final-form rulemaking in section 245.605.

## § 245.614. Requirements for closure.

Similar to sections 245.453 and 245.562, a commentator suggested that this section should be amended to waive service inspections for small ASTs in temporary closure status, or when permits are withheld or withdrawn. Instead, the Department should require inspection of such tanks prior to permitting, or changing

the tank status from non-operating back to operating. The Board acknowledges the commentator's concerns, and the final-form rulemaking has been amended to allow routine scheduled service inspections to be delayed on tanks that are in temporary closure or removal from service status. The delayed inspections must be performed, submitted to the Department and deficiencies remedied prior to placing regulated substance back into the tanks and returning them to operational service.

## Subchapter H

§ 245.704. General requirements.

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

# F. Benefits, Costs and Compliance

Executive Order 1996-1 requires a cost/benefit analysis of the final-form regulations.

#### **Benefits**

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

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

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

Subchapter C: The changes to permitting provisions will help simplify the site-specific installation permit process for many applicants, while ensuring that appropriate design criteria and engineering

considerations are used to mitigate specific conditions that pose potential problems at some tank sites. The changes will also clarify that the tank registration process and single application also serve as the operating permit application. Routine withdrawal of operating permits for tanks that are empty and reported to the Department in temporary closure or removal-from-service status will allow tank owners and operators to delay scheduled inspections and thus defer related inspection costs.

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

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

#### Compliance Cost

Subchapter E: The cost of the average UST facility third-party operations inspection is approximately \$350 per inspection. UST owners or operators will incur this cost every three years under this rulemaking, rather than every five years or ten years under the current inspection frequencies. The cost of total secondary containment (double-wall) UST systems is approximately 15 to 30 percent greater than the cost of single-wall UST systems. Costs will vary depending on the types of tank systems and materials used (fiberglass, steel or composite tank wall and hard or flexible piping). These costs are only incurred when new or replacement systems are installed. Approximately 150 UST systems were installed annually during the past four years. Department records indicate that 60 percent of the UST systems and approximately 80 percent of piping systems installed since 1998 already meet the double-wall requirement. Costs for testing containment sumps for tightness could range from \$50 to \$100. The cost of upgrading a line leak detector that only slows product flow or sounds an alarm, to a line leak detector with an automatic pump shut-off device ranges from \$100 to \$500 depending on availability of

electric service and circuitry in the current system. This cost is only incurred when installing new or replacement tank, piping or release detection systems.

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

# Compliance Assistance Plan

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

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

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

## Paperwork Requirements

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

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

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

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

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

## **G.** Pollution Prevention

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

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

## H. Sunset Review

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

## I. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on \_\_\_\_(date)\_\_\_, the Department submitted a copy of the notice of proposed rulemaking, published at 36 Pa.B. 1851, April 22, 2006, to the Independent Regulatory Review Commission (IRRC) and the Chairpersons of the House and Senate Environmental Resources and Energy Committees for review and comment.

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

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

# J. Findings of the Board

The Board finds that:

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

# L. Order of the Board

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

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

(d)	The Chairman of the Board shall certify this order and Annex A and deposit them with the
	Legislative Reference Bureau, as required by law.

(E) I IIIS OLUCI SHAIL LAKE CITECT HIIIIICUIAN	(e)	his order shall take effect immediately
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BY:

Kathleen A. McGinty Chairperson Environmental Quality Board