



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Environmental Cleanup & Brownfields

Welcome to the 2016 Aboveground Storage Tank Inspector Seminar



Introductions

Central Office Staff

- **Chad Clancy** - Solid Waste Program Specialist - Supervisor of the AST Unit
- **Anne Toth** - Solid Waste Program Specialist - Permitting & Certification Unit
- **Wendy Davis** – Administrative Assistant 1 – Permitting & Certification Unit
- **Aaron Emick** - Solid Waste Specialist - AST Unit

Introductions

Regional Office Staff

Ground Rules

- Please turn all cell phones and electronic devices to vibrate or silent mode.
- If there is an emergency, proceed to the closest emergency exit and gather outside. Generally, following the DEP regional staff is the way to go.
- Ask questions and interact! We are all here to learn from each other. This is your time to ask questions to the DEP technical staff.

Let's start with:

Administrative Information



Receiving credit for this training

- ✓ **Sign in upon arrival in the classroom and obtain handouts**
- ✓ **If asked please present credentials**
 - **Certification Card**
 - **Photo ID**
- ✓ **Remain for the entire training session**
- ✓ **Obtain your training certificate**

Central Office – AST Technical Staff

- **Kris Shiffer** - Environmental Group Manager - Supervisor of the Compliance and Enforcement Section (AST and UST Units)
- **Alex Eckman** - Solid Waste Program Specialist - Compliance and Enforcement Section (AST and UST Units)
- **Chad Clancy** - Solid Waste Program Specialist - Supervisor of the AST Unit

Central Office – AST Technical Staff

- **Aaron Emick** - Solid Waste Specialist – Currently responsible for all regions. Otherwise assigned to Regions 1, 2, 6 (SE, NE, NW);
- **Vacant** – Environmental Trainee – Will be responsible for Regions 3, 4, 5 (SC, NC, SW)

Central Office – Certification and Permitting Staff

- **Eric Lingle** - Environmental Group Manager - Supervisor of the Registration, Permitting & Certification Section
- **Anne Toth** - Solid Waste Program Specialist - Permitting & Certification Unit
- **Wendy Davis** - Administrative Assistant 1 - Permitting & Certification Unit

Why are we here?

§ 245.21 – Tank Handling and Inspection Activities

- **Tank handling activities shall be conducted by a certified installer**
- **Storage tank facilities shall be inspected by a certified inspector**

§ 245.31 – Tightness Testing

- **Shall be conducted by a Department-certified UTT**
- **As of November 10, 2008 line testing requires UTT certification**

Why are we here?

§ 245.114 – Renewal and Amendment of Certification

- **...certifications are valid for 3 years... (certified individuals must go through the renewal process every 3 years)**

➤ Why are we here?

- **§ 245.114(c) An applicant shall meet the following minimum training requirements...for renewal of tank handling certification.**
- **§ 245.114(d) An applicant shall meet the following minimum requirements...for renewal of tank inspector certification.**

Why are we here?

For tank handlers:

One (1) of the requirements is attendance at any DEP-provided administrative training session. You must attend within the 24 month period preceding your submission of an application requesting renewal of tank handling certification.

➤ Why are we here?

For tank inspectors:

One (1) of the requirements is attendance at a DEP-provided inspector training session (technical seminar). You must attend within the 24 month period preceding your submission of an application requesting renewal of tank inspector certification.

➤ Certification Renewal

Requirements for Tank Handlers

For Categories:

UMX
UMR
AMMX
AMNX
AMR
AFMX
AFR
AMEX
ACVL

3 Requirements:

- Technical Training or Retest for Each Certification Category
- Administrative Training
- Application

> Certification Renewal

Requirements for Tank Handlers

For Categories:

UTT

3 Requirements:

- Maintain Current Certification with Testing Equipment Manufacturer (ex. Estabrooks, Acurite, etc.) Test method must be a current DEP-approved training course.
- Administrative Training
- Application

➤ Certification Renewal

Requirements for Tank Handlers

For Categories:

TL

3 Requirements:

- Coating Manufacturer's Certification (letter from coating manufacturer stating you have been trained in the proper installation of their coatings)
- Administrative Training
- Application

> Certification Renewal

Requirements for Tank Inspectors

For Categories:

IAF/IAM

IAM only

3 Requirements:

- Maintain API 653 Certification
 - AST Technical Seminar
 - Application
-
- Maintain API 653 or STI SP001 Certification
 - AST Technical Seminar
 - Application

➤ Certification Renewal

Requirements for Tank Inspectors

For Categories:

IUM

2 Requirements:



- UST Technical Seminar
- Application

Certification Renewal

Pay Attention to Your Expiration Date!

3930-FM-WC0042 Rev. 8/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
 BUREAU OF ENVIRONMENTAL CLEANUP AND BROWNFIELDS
 DIVISION OF STORAGE TANKS
 P.O. BOX 8763
 HARRISBURG, PENNSYLVANIA 17105-8763

THIS CERTIFICATION AUTHORIZES THE BELOW NAMED INDIVIDUAL TO CONDUCT TANK HANDLING OR INSPECTION ACTIVITIES PURSUANT TO THE STORAGE TANK AND SPILL PREVENTION ACT, AND DEPARTMENT REGULATIONS AT TITLE 25 PA CODE CHAPTER 245 IN THE SPECIFIC CATEGORIES SHOWN.

CATEGORIES	ISSUE DATE(S)	EXPIRATION DATE(S)
UMR *****	08/26/2015	08/26/2018
*****	*****	*****
*****	*****	*****
*****	*****	*****
*****	*****	*****
*****	*****	*****
*****	*****	*****

ISSUED TO: [REDACTED]
 DEP CLIENT ID NUMBER: [REDACTED]
 CERTIFICATION NUMBER: [REDACTED]

Anne Toth
 Anne Toth, Chief
 Certification Unit

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 DIVISION OF STORAGE TANKS

INSTALLER/INSPECTOR CERTIFICATION NUMBER: [REDACTED]

ISSUED TO: [REDACTED]

CATEGORIES	EXPIRATION DATE(S)
UMR *****	08/26/2018
*****	*****
*****	*****
*****	*****
*****	*****
*****	*****

Expired over 60 days!

An individual's failure to renew certification within the *60 day period immediately following* an expiration date requires applicant to meet the *initial certification requirements* for that category. §245.114 (g)(1)

Renewal requests submitted more than 60 days beyond the expiration date require:

- Application
- Attachment A – listing verifiable activities
- Pass Category-specific Examination Module
- Note – Technical Training requirement specified at §245.111(a) is met by individuals who previously held certification in the category

➤ Renewal Notification Letters

- **Individuals and companies are notified by mail 4-5 months prior to expiration of each certification.**
 - ✓ This is a courtesy only
 - ✓ Requires the department to maintain accurate certification records
 - ✓ DEP notification of changes to **Addresses, phone numbers, employer/employee relationships** are extremely important
- **Failure to notify the Department of changes in certification information is a violation of the regulations.**

▶ Lost Card?

Call or E-mail for a Replacement

➤ Modifying Your Certification

Adding one or more certification categories.

In most cases, you will need to meet the “initial” certification requirements:

- **Years of experience**
- **Technical Training (initial course)**
- **Activities**
- **Application**
- **Technical Exam**

Refer to “initial” qualifications sheet.

▶ Modifying Your Certification

Some exceptions:

- **You currently hold UMR:**
 - If you have a passing UMR exam score within the past 2 years, you can add AMR by submitting an application and requesting AMR. No training, no activities, no exam needed.
 - If no recent score, a new exam will be required. Submit application and take either the UMR or AMR exam.
- **You currently hold AFMX or UMX. You can add AMMX by submitting an application and taking the AMMX exam. No technical training or activities needed.**
- **You currently hold AMMX. You can add AMNX by submitting an application, 6 AST installation activities, and taking the AMNX exam. No technical training needed.**

➤ Modifying Your Certification

Adding Inspector Categories:

- **IAF/IAM:**
 - 4 years experience
 - API 653 Certification
 - Application
 - Exam
- **IAM only:**
 - 4 years experience
 - API 653 or STI SP001 Inspector Certification
 - Application
 - Exam
- **IUM:**
 - 4 years experience
 - UMX Certification
 - UTT Certification or Familiarization
 - Corrosion Protection Training
 - Application
 - Exam

Initial Certification

For first-time applicants:

- Required years of experience.
- Initial technical training course for each requested category, out of state certification, other industry training
- Application
- Attachment A for each requested category showing required number of activities
- Exams:
 - Administrative exam
 - Technical exam for each certification category

Technical Training Courses

Training Courses for Tank Handlers and UTT

- Current list is located on the website.
- If you are adding a new category or signing up a co-worker who is brand new to certification, make sure you choose a course with the I/R designation (initial or renewal course)
- Developing your own training course:
 - Application is available on the website
 - Technical training for initial category-specific certification must be based on Nationally-recognized codes and standards in conjunction with manufacturers specifications
 - Technical training for renewal of category-specific certification must at a minimum review the technical and regulatory material appropriate for the certification category

► Certification Examinations

§ 245.105 – Certification Examinations

- **Separate administrative and technical content for examinations**
- **Passing score 80 for administrative and each technical section**
- **Applicants have up to 1 year from the date of authorization to take the examination**
- **An applicant failing 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.**

➤ Certification Examinations

The Certification Exam Process

- **Application reviewed (Experience, Education, Training, Attachments)**
- **Authorization letter and study materials sent to applicant at address designated on application (Home or Employer)**
- **DEP provides Plut Examination Service (PES) with names, addresses, list of authorized categories, & eligibility dates.**
- **PES notifies applicant of test dates and locations; provides registration forms & instructions. Exam fee \$75 per module.**

➤ Certification Examinations

The Certification Exam Process, continued...

- Two weeks before the exam, PES provides DEP with a list of individuals who registered for the exam.
- The Certification Unit cross references the list with applicant names & authorizations; verifies accuracy; notifies PES it is ok to proceed.
- Plut Examination Service prints the examination forms.
 - At this point it is too late to schedule this examination.
 - PES refund and credit policy is in effect, and is clearly defined in the registration materials mailed by PES to all individuals authorized by DEP to sit for the exams.

➤ Certification Application

§ 245.104 – Application for Installer or Inspector Certification

- ✓ A complete application shall be submitted no later than 60 days prior to the announced date of the certification examination
- ✓ Use current forms as provided by the Department
- ✓ Include all Attachment A's, training certificates, etc.
- ✓ Signed and dated by applicant and company official (no computer generated signatures)

Certification Application

STORAGE TANK INSTALLER AND INSPECTOR CERTIFICATION APPLICATION (Read the instructions before completing this application)

DATE		OFFICIAL USE ONLY	
Appl. Appr.	Appl. Denied	Application # _____	
_____	_____	Client ID # _____	
_____	_____	Employer ID # _____	
_____	_____	Master Auth. # _____	
		Auth. ID# _____	
		Date Rec'd _____	

SECTION I – APPLICANT INFORMATION

Name _____ Last First MI **SSN** _____

Home Address _____

City _____ State _____ Zip +4 _____

Municipality _____ County _____
(City, Boro, Twp)

Home Telephone (_____) _____ Cell Phone (_____) _____

Email Address _____



➤ Certification Application

File Edit Application Client Site Facility Compliance Fee Collection Bonding Views Reports Admin Complaints Help Window

Record / Verify Client - Role : APPL

Clients

Client Id 125107 Client Type INDIV Individual

Organization

Individual SMITH JOHN A

Search Name SMITH JOHN A

Browse by Name

Browse by AKA

General HQ Address Add'l Addresses AKAs Names

SSN XXX-XX-1234 EIN DUN DOB

Status ACTIN Active, Indiv Status Date

Resp Program WMHW WM Hazardous Waste

Created 02/18/1999 RCRIS BATCH 1

Updated

Verified No

Comment

Back Go To

Individual's Social Security Number.

Record: 1/1 <OSC>

Certification Application

2630-PM-BECB0506 4/2012

SECTION III – CURRENT EMPLOYER INFORMATION (If more than one, attach additional pages)

Hire Date _____ Employer's Federal Tax ID # (EIN) _____
Employer's DEP Client ID # _____ Employer's Certification # _____
Name _____ Company Type Code _____
Street Address _____
City _____ State _____ Zip +4 _____
Municipality _____ County _____
(City, Boro, Twp)
Telephone (_____) _____ - _____ Fax (_____) _____ - _____
Company Contact Person _____
Email Address _____

SECTION IV – MAIL CORRESPONDENCE TO ADDRESS

Applicant Address Employer's Address

If the applicant has more than one employer and chooses to have correspondence delivered to the employer's address, provide the name of that employer. _____



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Certification Application

INSTALLER CATEGORIES	Initial	Renewal		Delete
		Retest	Training	
Underground				
UMX _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
UMR _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
UTT _____	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Aboveground				
AMMX _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AMNX _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AMR _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AFMX _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AFR _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AMEX _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ACVL _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Underground/Aboveground				
TL _____	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
INSPECTOR CATEGORIES				
Underground				
IUM _____	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Aboveground				
IAM _____	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
IAF _____	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Certification Application

Aboveground

IAM _____ _____
IAF _____ _____

_____ <input type="checkbox"/> _____
_____ <input type="checkbox"/> _____

SECTION VI – APPLICANT’S CERTIFYING STATEMENT

I certify under penalty of law as provided in 18 PA C.S.A. §4904 (relating to unsworn falsification to authorities), that I am the applicant herein named, that I have received the safety training as provided for under §245.111(h) of the regulations, and that the information I have provided on this Application for Certification is true, accurate, and complete to the best of my knowledge and belief.

Signature of the Applicant (In Ink)

_____/_____/_____
Date

SECTION VII – EMPLOYER’S CERTIFYING STATEMENT

I certify under penalty of law as provided in 18 PA C.S.A. §4904 (relating to unsworn falsification to authorities), that I am an officer of the applicant’s employer. The applicant herein named has been provided with adequate safety training as provided for under §245.111(h) of the regulations. I further certify that the information provided on this Application for Certification is true, accurate, and complete to the best of my knowledge and belief.

Signature & Title of Company Officer (In Ink)

_____/_____/_____
Date



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Certification Amendment

Certification Amendment Form

Change or add
employer?

SECTION II – CURRENT EMPLOYER INFORMATION:

Federal Employer Tax Number (EIN) _____

Employment Start Date _____ Company Certification Number: _____

Employer Client ID _____ Company Type Code _____

Employer Name _____

Address _____

City _____ State _____ Zip+4 _____

County _____ Municipality _____

(City, Township, Borough)

Company Contact _____

Phone: (_____) _____ - _____ Ext _____ Fax: (_____) _____ - _____

Email _____

Are you Adding an Employer? Changing Employers? Deleting an Employer?

Previous Employer's Name _____ Date of change _____

SECTION III – MAILING INFORMATION:

Send correspondence to (Choose One) Applicant's Home Address Employer's Address

If more than one employer, specify employer _____

Signature _____ Date _____



Company Certification

§ 245.121 – Certification of Companies

- **Primary consideration: the company applying for certification must employ at least one (1) DEP certified tank handler or inspector.**
 - **Note: An employee is an individual who has completed a IRS Form W-4 and to whom a company issues a IRS Form W-2 (Wage and Earnings Statement) at the end of the year.**
 - **A company may contract with a certified individual to whom the company will issue an IRS Form 1099.**
 - **The non-certified company may contract with a certified company for the performance of tank handling, tightness testing or inspection activities.**
 - **The certified individual and certified company is responsible for submitting all forms or reports, and provides DEP with all applicable certification ID numbers.**

Company Certification

2630-PM-BECB0510 4/2012
Application



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL CLEANUP AND BROWNFIELDS

STORAGE TANK COMPANY CERTIFICATION APPLICATION

OFFICIAL DEP USE ONLY	
Appl. Appr	Appl. Den.
_____	_____
_____	_____
_____	_____
Application # _____	Client ID # _____
Master Auth. # _____	Auth. ID# _____

SECTION I – APPLICATION TYPE

- FIRST** request for Company Certification (This company has never applied for certification)
- RENEW** Company Certification (This company is currently certified, or has been previously certified)
- AMEND** Company Certification Information (Change of address, ownership, certified employees, etc.)

Company Certification

2570-PM-BWM0510 Rev. 12/2009

Federal Employer Tax ID # (EIN) _____

SECTION VII – CERTIFIED EMPLOYEES

Please list all certified installers and/or inspectors employed by this company. Also, if applicable list the names and termination dates of any previously employed and certified individuals who have terminated. If you have no PA Certified Installers or Inspectors write "None". If you have an employee who has applied for their first certification write "Pending". Note that an "employee" has a IRS Form W-4 (Tax withholding) on file and receives a Form W-2 (Wage and Earnings Statement) from the company. At least one certified individual must be employed in order for the company to receive DEP certification.

**If more space is needed copy this page before listing the certified individuals.*

Installer/Inspector Name	Certification Number	A=Active	P=Pending	T=Terminated
		Status (A, P, T)	Hire Date	Termination Date
Brown, John L.	0101	A	07/22/05	
Smith, Edward P.	0202	T		03/21/09
Jones, Roger B.	NA	P	02/19/08	

➤ Certified Companies List

Storage Tanks Website →
Underground Storage Tanks →
Storage Tank Certified Companies
Search

***Updated Daily**



Certified Companies List

Certified_ST_Companies - Report Viewer - Windows Internet Explorer

http://www.depreportingservices.state.pa.us/ReportServer/Pages/ReportViewer.aspx?/Tanks/Certified_ST_Companies


Method Index Certified_ST_Co... Google

REGION: Out of State PA COUNTY: All

CERTIFICATION CATEGORY: IUM - Inspector - UST - System

View Report

1 of 1 100% Find | Next

 Bureau of Environmental Cleanup and Brownfields
Certified Storage Tank Companies
9/5/2013 11:55:41 AM

Region: Out of State
County: All
Certification Category: IUM - Inspector - UST - System/Facility

Company Name	CHRISTOPHER CONST CO INC	County	
Address	25 WELLS RD HAMMONTON, NJ 08037-8608 (609)561-1607	Region	Out Of State

<u>CERTIFICATION CATEGORY</u>	<u>DESCRIPTION</u>
IUM	Inspector - UST - System/Facility
UMR	UST - Tank/System - Removal
UMX	UST - Tank/System - Installation/Modification

Company Name	ELDRETH ENV SVC INC	County	
Address	654 COLORA RD COLORA, MD 21917-1122 (610)842-2418	Region	Out Of State

Done

Local intranet | Protected Mode: On 125%

Standards of Performance

Standards of Performance

- **things that are required of you as a certified individual or company**

Standards of Performance

- **§ 245.132 – Standards of Performance**

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

(1) Maintain current technical and administrative specifications and manuals...

(2) Submit, within 60 days of the inspection activity or 30 days of the tank handling activity, a Department-approved form certifying that the activity... meets the requirements of the act and this chapter...

... (for projects requiring multiple certification activities and individuals the tank handling and inspection reports may be submitted within 30 days of the conclusion of all activities).

Standards of Performance

- (3) Maintain complete records...for a minimum of 10 years.**
- (4) Report a release...or suspected contamination...observed while performing certified activities. Submit a written report within 48 hours. If notification is being submitted as a result of a failed tightness test, a copy of the test should accompany the written notification to the Region.**
- (5) Installers or inspectors should not sign documentation unless personally performed or supervised.**
- (6) Not certify... that the storage tank system project or component thereof is complete unless it complies with the act or this chapter. Project certification applies to both certified activities and non-tank handling activities performed as part of the project.**

Standards of Performance

Release Reporting Requirements for Department Certified Individuals

Standards of Performance

Release – “Spilling, leaking, emitting, discharging, escaping, leaching or disposing from a storage tank into surface waters and groundwaters of this Commonwealth or soils or subsurface soils in an amount equal to or greater than the reportable released quantity determined under section 102 of CERCLA, and regulations promulgated thereunder, or an amount equal to or greater than a discharge as defined in section 311 of the Federal Water Pollution Control Act and regulations promulgated thereunder.

The term also includes spilling, leaking, emitting, discharging, escaping, leaching or disposing from a storage tank into a containment structure or facility that poses an immediate threat of contamination of the soils, subsurface soils, surface water or groundwater.”



Standards of Performance

An **indication of a release** includes one or more of the following conditions:

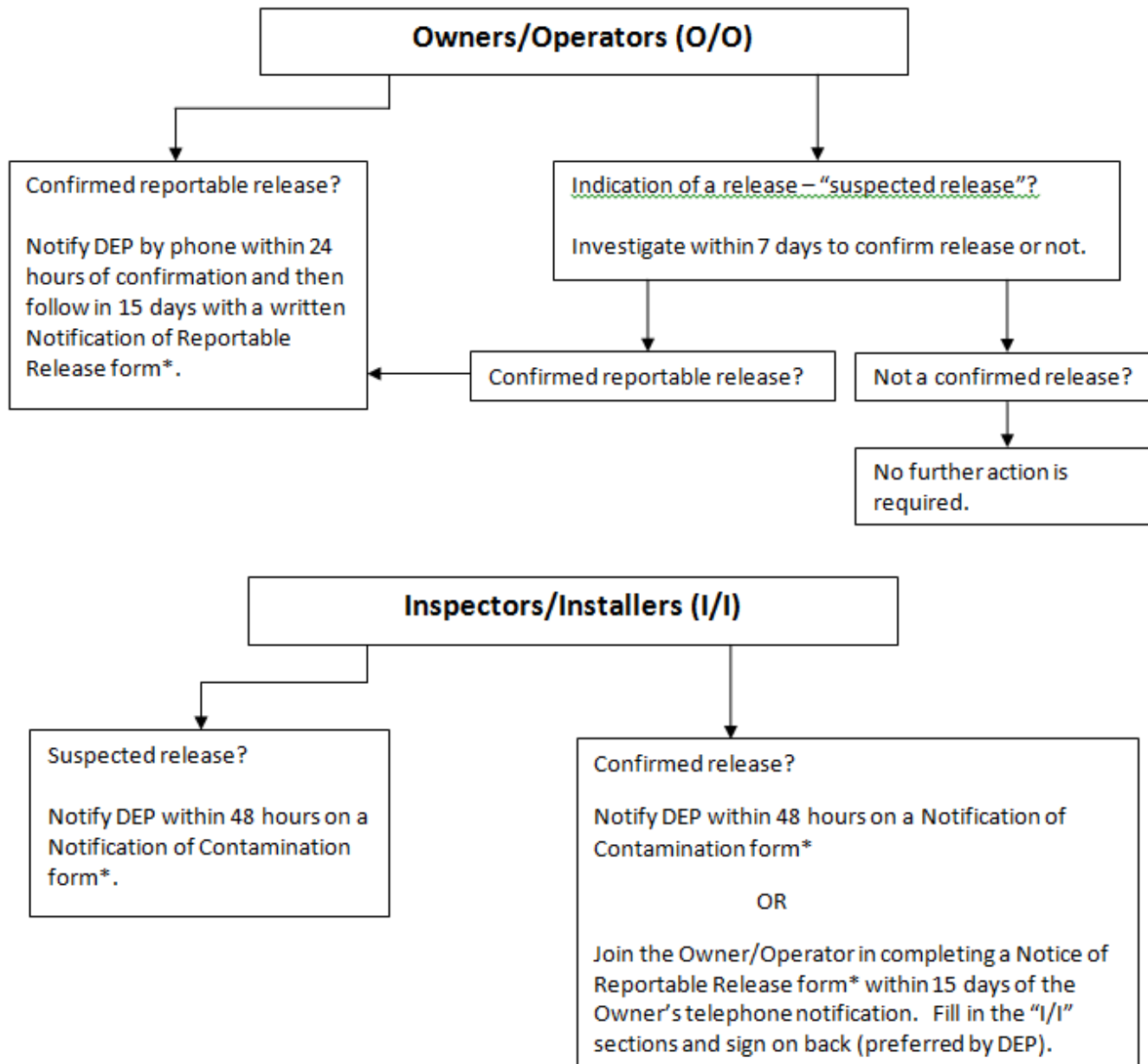
- (1) The presence of a regulated substance or an unusual level of vapors from a regulated substance of unknown origin at a storage tank facility.
- (2) Evidence of a regulated substance or vapors in soils, basements, sewer lines, utility lines, surface water or groundwater in the surrounding area.
- (3) Unusual operating conditions, indicative of a release, such as the erratic behavior of product dispensing equipment.
- (4) The sudden or unexpected loss of a regulated substance from a storage tank or the unexplained presence of water in a storage tank.

Standards of Performance

- (5) Test, sampling, or monitoring results from a release detection method which indicate a release.
- (6) The discovery of holes in a storage tank during activities such as inspection, repair or removal from service.
- (7) Other events, conditions or results which may indicate a release.



RELEASE REPORTING FLOW CHART



Standards of Performance

Reportable Release:

“A quantity or an unknown quantity of regulated substance released to or posing an immediate threat to surface water, groundwater, bedrock, soil or sediment.”



Standards of Performance

“A Reportable Release **DOES NOT INCLUDE** (if the owner or operator has control over the release, the release is completely contained and, within 24 hours of the release, the total volume of the release is recovered or removed) the following:

1. A release to an interstitial space of a double-walled aboveground or underground tank.
2. A release of petroleum to an aboveground surface that is less than 25 gallons.
3. A release of a hazardous substance to aboveground surface that is less than its reportable quantity under CERCLA.”

Standards of Performance

If a Department certified individual suspects a release of regulated substance, while performing services as a certified individual, they must submit a “Notification of Contamination” form, within 48 hours, to the appropriate regional office of the Department.

On the form, they should indicate a suspected release along with completing all of the certified individual’s sections of the form.

Standards of Performance

If a Department certified individual confirms that a reportable release has occurred while performing services as a certified individual, they have two options:

1. Submit a “Notification of Contamination” form to the appropriate regional office of the Department within **48 hours**. On the form, he should indicate a confirmed release along with completing all of the certified individual’s sections of the form; or

Standards of Performance

2. Submit the “Notification of Contamination” form jointly with the owner/operator of the facility within **15 days** of the owner/operator’s telephone notification to the appropriate regional office of the Department.

On the form, they should indicate a confirmed release along with completing all of the certified individual’s sections of the form.

Standards of Performance

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

2550-FM-BWM0082 Rev. 12/2008
BUREAU OF WASTE MANAGEMENT

NOTIFICATION OF REPORTABLE RELEASE (Owners and Operators)		<input type="checkbox"/> Initial <input type="checkbox"/> Follow-Up			
NOTIFICATION OF CONTAMINATION (Certified Installers and Inspectors)					
<p>NOTIFICATION OF REPORTABLE RELEASE (Owners and Operators)</p> <p>The Storage Tank Program's Corrective Action Process (CAP) regulations establish release reporting requirements for owners and operators of storage tanks and storage tank facilities.</p> <p>Subsection 245.305(a) of the regulations requires owners or operators to notify the appropriate regional office of the Department as soon as practicable, but no later than 24 hours, after the confirmation of a reportable release.</p> <p>Subsection 245.305(d) requires owners or operators to provide an initial written notification to the Department, each municipality in which the reportable release occurred, and each municipality where that release has impacted environmental media or water supplies, buildings, or sewer or other utility lines, within 15 days of the notice required by Subsection 245.305(a).</p> <p>Subsection 245.305(e) requires owners or operators to provide follow-up written notification to the Department and to each impacted municipality of new impacts to environmental media or water supplies, buildings, or sewer or other utility lines discovered after the initial written notification required by subsection 245.305(d). Written notification is to be made within 15 days of the discovery of the new impact.</p> <p>This form may be used to comply with Subsection 245.305(d) and (e).</p> <p style="text-align: center;">OWNERS AND OPERATORS (O/O) INDICATE IF THIS IS AN INITIAL OR FOLLOW-UP NOTIFICATION BY MARKING THE APPROPRIATE BOX FOUND IN THE TOP RIGHT-HAND CORNER OF THIS FORM. PLEASE COMPLETE ALL INFORMATION IN SECTIONS I, II, IIIA, IIIB, IV, V, VII and VIII.</p>	<p>NOTIFICATION OF CONTAMINATION (Certified Installers and Inspectors)</p> <p>The Storage Tank Program's Certification regulations establish standards of performance for certified installers and inspectors of storage tanks and storage tank facilities.</p> <p>Subsection 245.132(a)(4) of the regulations requires certified installers and inspectors to report to the Department a release of a regulated substance or confirmed or suspected contamination of soil, surface or groundwater from regulated substances observed while performing services as a certified installer or inspector.</p> <p>This form may be used to comply with Subsection 245.132(a)(4). Subsection 245.132(a)(4) requires submission of the form within 48 hours of observing suspected or confirmed contamination. Where there is a reportable release, the form may be submitted jointly by the owner, operator, certified installer and certified inspector. In this instance, the form must be received by the appropriate regional office within 15 days of the notice required by Subsection 245.305(a).</p> <p style="text-align: center;">CERTIFIED INSTALLERS AND INSPECTORS (I/I) PLEASE COMPLETE ALL INFORMATION IN SECTIONS I, II, IIIA, IIIC, VI, VII and VIII.</p>				
INSTRUCTIONS					
<p>I. FACILITY INFORMATION - Record the name, I.D. number and physical location (not P.O. Box) of the facility at which a reportable release has been confirmed or at which suspected or confirmed contamination has been observed. Include the name and phone number of a person to contact at the facility.</p> <p>II. OWNER/OPERATOR INFORMATION - Record the name, business address and phone number of the owner of the facility identified in Section I. Also, record the name and phone number of the operator of the facility.</p> <p>III. REGULATED SUBSTANCE INFORMATION - Indicate to the best of your knowledge: A) the type of product or products involved; B) the quantity of product or products released; and C) whether the contamination is suspected or confirmed.</p> <p>IV. REPORTABLE RELEASE INFORMATION - Record the date of confirmation of the reportable release, e.g., "9/18/01"; the date and regional office notified; and the date the local municipality(ies) [provide name of municipality(ies)] was/were sent a copy of this form. Indicate to the best of your knowledge the source/cause of the release, how the release was discovered and the environmental media affected and impacts.</p> <p>V. INTERIM REMEDIAL ACTIONS - Indicate the interim remedial actions planned, initiated or completed.</p> <p>VI. SUSPECTED/CONFIRMED CONTAMINATION INFORMATION - Record the date of observation of the suspected or confirmed contamination, e.g., "11/24/01". Indicate to the best of your knowledge the indications of a suspected release or extent of confirmed contamination resulting from the release of the regulated substance.</p> <p>VII. ADDITIONAL INFORMATION - Provide any additional, relevant, available information concerning the reportable release or suspected or confirmed contamination. Include in this section specific details or problems about the release. For example, if the piping was the source of the release and the cause was corrosion of a metal connector or flexible connector, it is important to include that information here. Use additional 8 1/2" x 11" sheets of paper, if necessary.</p> <p>VIII. CERTIFICATION - Please print your name, and provide your signature and date of signature. If a certified installer/inspector, provide certification number and company certification number.</p> <p>IX. ATTACHMENT - If a certified installer/inspector, provide a copy of failed tightness test(s), if applicable.</p> <p style="text-align: center;">PLEASE SEND COMPLETED ORIGINAL FORM TO: PA Department of Environmental Protection Environmental Cleanup Program Storage Tank Section (and the appropriate address below, depending on where the FACILITY is located)</p>					
<p>Southwest Region 2 East Main Street Norristown, PA 19401 PHONE: 484-250-5900 FAX: 484-250-5961</p> <p style="text-align: center;">Counties Bucks, Chester, Delaware, Montgomery, Philadelphia</p>	<p>Northeast Region 2 Public Square Wilkes-Barre, PA 18711-0790 PHONE: 570-826-2511 FAX: 570-820-4907</p> <p style="text-align: center;">Counties Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, Wyoming</p>	<p>Southeastern Region 909 Elmerton Avenue Harrisburg, PA 17110 PHONE: 977-353-1904 FAX: 717-705-4830</p> <p style="text-align: center;">Counties Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, York</p>	<p>Northcentral Region 208 W. Third Street, Suite 101 Williamsport, PA 17701 PHONE: 570-321-6525/327-3696 FAX: 570-327-3420</p> <p style="text-align: center;">Counties Bradford, Cameron, Centre, Clinton, Clearfield, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Toga, Union</p>	<p>Northwest Region 400 Waterfront Drive Pittsburgh, PA 15222 PHONE: 412-442-6091/4000 FAX: 412-442-4328</p> <p style="text-align: center;">Counties Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington, Westmoreland</p>	<p>Southwest Region 226 Chestnut Street Meadville, PA 16335-3481 PHONE: 814-332-6945 800-373-3398 FAX: 814-332-6121</p> <p style="text-align: center;">Counties Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango, Warren</p>



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Standards of Performance

2540-FM-BWM0082 Rev. 12/2008

FACILITY I.D. NUMBER _____

I. FACILITY INFORMATION (Both O/O and I/I)			II. OWNER/OPERATOR INFORMATION (Both O/O and I/I)		
Facility Name _____		Facility I.D. Number _____	Owner Name _____		
Street Address (P.O. Box not acceptable) _____			Address _____		
City _____	State _____	Zip Code _____	City _____ State _____ Zip Code _____		
County _____		Municipality _____	Phone Number _____		
Contact Person _____		Phone Number _____	Operator Name _____ Phone Number _____		

III. REGULATED SUBSTANCE INFORMATION

A. Type of Product(s) Involved (Mark All That Apply <input checked="" type="checkbox"/>): <u>Both O/O and I/I</u>	B. Quantity (Gallons) of Product(s) Released: <u>O/O Only</u>	C. Contamination Suspected [S] or Confirmed [C] (Mark All That Apply <input checked="" type="checkbox"/>): <u>I/I Only</u>
Leaded Gasoline <input type="checkbox"/>	<input type="checkbox"/> [S] <input type="checkbox"/> [C]
Unleaded Gasoline <input type="checkbox"/>	<input type="checkbox"/> [S] <input type="checkbox"/> [C]
Aviation Gasoline <input type="checkbox"/>	<input type="checkbox"/> [S] <input type="checkbox"/> [C]
Kerosene <input type="checkbox"/>	<input type="checkbox"/> [S] <input type="checkbox"/> [C]
Jet Fuel <input type="checkbox"/>	<input type="checkbox"/> [S] <input type="checkbox"/> [C]
Diesel Fuel <input type="checkbox"/>	<input type="checkbox"/> [S] <input type="checkbox"/> [C]
New Motor Oil <input type="checkbox"/>	<input type="checkbox"/> [S] <input type="checkbox"/> [C]
Used Motor Oil <input type="checkbox"/>	<input type="checkbox"/> [S] <input type="checkbox"/> [C]
Fuel Oil No. 1 <input type="checkbox"/>	<input type="checkbox"/> [S] <input type="checkbox"/> [C]
Fuel Oil No. 2 <input type="checkbox"/>	<input type="checkbox"/> [S] <input type="checkbox"/> [C]
Fuel Oil No. 4 <input type="checkbox"/>	<input type="checkbox"/> [S] <input type="checkbox"/> [C]
Fuel Oil No. 5 <input type="checkbox"/>	<input type="checkbox"/> [S] <input type="checkbox"/> [C]
Fuel Oil No. 6 <input type="checkbox"/>	<input type="checkbox"/> [S] <input type="checkbox"/> [C]
Other (Specify) _____ <input type="checkbox"/>	<input type="checkbox"/> [S] <input type="checkbox"/> [C]
Unknown <input type="checkbox"/>	<input type="checkbox"/> [S] <input type="checkbox"/> [C]



Standards of Performance

2550-FM-BWM0082 Rev. 12/2008

FACILITY I.D. NUMBER _____

VIII. CERTIFICATION (Both O/O and I/I)

I, _____, hereby certify, under penalty of law as provided in 18 Pa.
(Print Name)

C.S.A. §4904 (relating to unsworn falsification to authorities) that I am the owner or operator of the above referenced storage tank facility and that the information provided by me in this notification is true, accurate and complete to the best of my knowledge and belief.

Signature of Owner or Operator

_____/_____/_____
Date

I, _____, hereby certify, under penalty of law as provided in 18 Pa.
(Print Name)

C.S.A. §4904 (relating to unsworn falsification to authorities) that I am the certified installer who performed tank handling activities at the above referenced storage tank facility and that the information provided by me in this notification is true, accurate and complete to the best of my knowledge and belief.

Signature of Certified Installer

_____/_____/_____
Date

Installer Certification Number

Company Certification Number

I, _____, hereby certify, under penalty of law as provided in 18 Pa.
(Print Name)

C.S.A. §4904 (relating to unsworn falsification to authorities) that I am the certified inspector who performed inspection activities at the above referenced storage tank facility and that the information provided by me in this notification is true, accurate and complete to the best of my knowledge and belief.

Signature of Certified Inspector

_____/_____/_____
Date

Inspector Certification Number

Company Certification Number



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Standards of Performance

§ 245.132(b) A certified installer or certified inspector shall display a certification identification card or certificate upon request.



Standards of Performance

- **§ 245.21(a) – Tank Handling and Inspection Requirements**

The certified individual must perform the activity or provide “direct, onsite supervision” whenever tank handling and inspection activities are occurring.

Standards of Performance

Pennsylvania Department of Environmental Protection
Division of Storage Tanks
March 28, 2014

IMPORTANT NOTICE **Signatures**

The Department has recently investigated numerous occurrences in which signatures affixed to Department documents were not signed by the individuals themselves. These documents include, but are not limited to, the Registration/Permitting Application Form, UST and AST modification report forms, tank inspection report forms, and Installer/Inspector and Company Certification Applications. Documentation submitted to the Department must be reviewed and signed by the proper individual(s), acknowledging the legal statements preceding the signature field(s) in the document.

Under no circumstances should any other person sign the name of a certified individual, tank owner, or company officer.

The Department takes this issue seriously. The submittal of fraudulent signatures to the Department can result in enforcement, such as suspension or revocation of Installer/Inspector or Company Certification. Criminal penalties can be considered under the guidelines set forth in 1. Pa. C.S. §4904, relating to unsworn falsification to authorities.

If you have questions or desire clarification of the above, please contact Eric Lingle with the Division of Storage Tanks at (717) 772-5599.

Standards of Performance

Tank Installers Indemnification Program (TIIP):

- *Companies doing underground tank work, make sure you keep up with fee payments.*
- *Annual company fee*
- *Activity Fees*
- *Company certification will not be renewed if behind on payments.*

Storage Tank Permitting

Permitting Requirements

Storage Tank Permitting

§ 245.222 – Application Requirements

- **Application for a General Operating Permit shall be submitted on a Department form...**
 - **Storage Tank Registration / Permitting Application Form**
 - **A one-page Storage Tank Registration Amendment Form is now available for use in making some changes.**

Storage Tank Permitting

2630-FM-BECB0607 Rev. 8/2012

Form



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL CLEANUP AND BROWNFIELDS

STORAGE TANK REGISTRATION AMENDMENT FORM

Before completing this form, read the instructions provided for this form.

I. FACILITY AND CLIENT INFORMATION					
Facility ID#		Facility Name			
County		Municipality			
Client's Name or Registered Fictitious Name				Client ID#	
II. PURPOSE OF SUBMITTAL					
<input type="checkbox"/> Change to C status , Currently In Use Tank(s) *		<input type="checkbox"/> Change to E status , Tank(s) registered in error only			
* For Underground Storage Tanks (UST), attach the UST Operator Training Documentation Form (2630-PM-BECB0514a) and copies of the Class A and Class B operator training certificates.		<input type="checkbox"/> Change Capacity			
<input type="checkbox"/> Change to T status , Temporarily Out of Use Tank(s)		<input type="checkbox"/> Change Substance			
		<input type="checkbox"/> Change Contact Information			
III. TANK INFORMATION					
Tank #	Change Date (Mo/Day/Yr)	Status	Capacity (Gallons)	Substance Name	CAS# Component %



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Storage Tank Permitting

2630-PM-BECB0514 Rev. 9/2013
Form

X. INSTALLER / REMOVER CERTIFICATION

This section must be completed by the certified tank handler(s) who is responsible for the installation or removal from service of the aboveground and underground storage tank systems listed in Section VI. Tank modification activity must be submitted on a "Tank Modification Report" form.

SIGNATURE & CERTIFICATION OF INSTALLER(S) / REMOVER(S)

As the certified tank handler responsible for the tank handling activities in the category or categories listed, I certify that all tank handling activities were conducted in compliance with the design, installation and operation standards of the Storage Tank and Spill Prevention Act of 1989 and all applicable regulations. I also certify, under penalty of law as provided in 18 PA C.S.A. 4904 (relating to unsworn falsification to authorities), that the information provided therein is true, accurate and complete to the best of my knowledge and belief.

Tank#	Installer/Remover Name	Construction Standard	Individual Certification#	Certification Category	Company Certification#	Installer/Remover Signature	Date

XI. INSPECTOR CERTIFICATION

This section must be completed by the DEP Certified Tank Inspector(s) who is responsible for verifying the installation standards for field constructed tanks and aboveground tanks greater than 21,000 gallons listed in Section VI. (Type or Print legibly) A DEP Certified Inspector may also be responsible for inspecting existing ASTs which are entering regulated service for the first time with no tank handling activities.

SIGNATURE & CERTIFICATION OF INSPECTOR(S)

As the certified tank inspector responsible for verifying tank handling activities and construction standards, I certify that the tank(s) listed below are constructed to appropriate industry standards and, if applicable, to manufacturer's specifications; that the tank(s) have been tested as required by industry standards; and that the tank(s) meet or exceed applicable design and operating standards; and are in compliance with the requirements of the Storage Tank and Spill Prevention Act of 1989, and all applicable regulations. I also certify under penalty of law as provided in 18 PA C.S.A. 4904 (relating to unsworn falsification to authorities), that the information provided herein is true, accurate and complete to the best of my knowledge and belief.

Tank#	Inspector Name	Construction Standard	Individual Certification#	Certification Category	Company Certification#	Inspector Signature	Date



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DEPARTMENT OF ENVIRONMENTAL PROTECTION

New Registration Certificate

- More inspection information
- Easily track inspection due dates
- Shows overdue inspections
- “TBD” indicates the next inspection due date will be determined once tank repairs are made (AST only)

VERIFY PRESENCE OF WATERMARKED HOLD TO LIGHT TO VIEW

Commonwealth of Pennsylvania
Department of Environmental Protection
Bureau of Environmental Cleanup and Brownfields

STORAGE TANK REGISTRATION/PERMIT CERTIFICATE
EXPIRATION: JUN-04-2015

SEQ#	CAPACITY	SUBST	PERMIT TYPE	PERMIT STATUS	AST IN-SVC INSP DUE	AST OUT-OF-SVC INSP DUE	UST OPERATIONS INSP DUE	LINING INSP DUE
003	7,000	DIESL	PBR	Approved	*****	*****	07/10/2016	*****
004	3,000	GAS	PBR	Approved	*****	*****	07/10/2016	*****
005	3,000	DIESL	PBR	Approved	*****	*****	07/10/2016	*****
****	****	****	****	***	***	****	*****	*****
****	****	****	****	***	***	****	*****	*****
****	****	****	****	***	***	****	*****	*****
****	****	****	****	***	***	****	*****	*****
****	****	****	****	***	***	****	*****	*****
****	****	****	****	***	***	****	*****	*****
****	****	****	****	***	***	****	*****	*****

Client ID: 164666 Site ID: 572708
Owner: VERNON L GESSNER Facility Kind: TRANS
Id: 22-61557 Facility Id: 22-61557
GESSNER LOGGING GESSNER LOGGING
496 LUXEMBURG RD LUXEMBURG RD
LYKENS PA 17048 RR 1 BOX 391
LYKENS PA 17048

WARNING: THIS DOCUMENT IS PRINTED ON SECURITY WATERMARK PAPER AND CONTAINS SECURITY FIBERS. DO NOT ACCEPT WITHOUT VERIFYING THE PRESENCE OF THE WATERMARK.

Storage Tank Permitting

§ 245.203 – General Requirement for Permits

(f) The Department will automatically withhold or withdraw the operating permit for a storage tank that is reported... in temporary closure or temporary removal from service (out-of-service) 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 tank if the Department suspends, revokes or denies the tank operating permit

▶ Delivery Prohibition

- **Lists are available on Storage Tank Web Site**
 - **Active tank list – no large ASTs or highly hazardous tanks**
 - **Suspended or revoked as a result of enforcement action**
 - **Tanks without operating permits**
- **Tanks in “T” (temporarily out of service) status**
 - **Tank must be empty**
 - **Operating permit withdrawn or withheld**

Storage Tank Listings

**Storage Tanks Website → Registration →
Regulated Tank List**

**Excel spreadsheets (updated monthly)
or live search**

***Excludes large ASTs and
highly hazardous tanks**

Storage Tank Listings

Report Viewer - Windows Internet Explorer provided by DEP

http://www.depreportingsvcs.state.pa.us/ReportServer/Pages/ReportViewer.aspx?%2ftanks%2ftanks

File Edit View Favorites Tools Help


Report Viewer

Facility ID (99-99999) Zip Code 17003 View Report

County and Permit Status Approved, Denied, Revoked, Si

Municipality (Null)

1 of 8 100% Find | Next Select a format Export

 **Storage Tanks Search Results**

1/3/2011 3:03:43 PM


Site ID: 453633 Client: 13067
Other ID: 38-39466 Client Name: PA DEPT OF MILITARY & VETERANS AFFAIRS
Name: AAFES FORT INDIANTOWN GAP Address: 1 FORT INDIANTOWN GAP
Address: FISHER AVE BLDG 9-120 Address2:
Address2: City: ANNVILLE City: ANNVILLE
State: PA State: PA
Zip: 17003 Zip: 17003-5099
County: Lebanon
Municipality Name: Union Twp

SEQ NUMBER	TANK CODE	DATE INSTALLED	CAPACITY	SUB CODE	TANK STATUS	PERMIT TYPE	PERMIT STATUS	DATE LAST INSPECTION	INSPECTION CODE
934708 - 001	UST	10/19/2008	12,000	GAS	C	PBR	APPR	11/20/2007	FOI
934709 - 002	UST	10/19/2008	8,000	GAS	C	PBR	APPR	11/20/2007	FOI

Site ID: 579185 Client: 87584
Other ID: 38-17324 Client Name: ANNVILLE CLEONA SCH DIST

ReportViewer.aspx?%2ftanks%2ftanks Local intranet 100%

start Oracle Applic... Report Viewe... Microsoft Po... My Documents Blank letter fo... 3:04



Query parameters:

- Facility ID
- County
- Municipality
- Zip Code
- Permit Status

Site Specific Installation Permits

§ 245.231 – Scope

Site-specific installation permits are required *prior to* construction, reconstruction or installation...

- When adding an aboveground tank with a capacity greater than 21,000 gallons at an existing facility
- When installing tanks with an aggregate capacity greater than 21,000 gallons at a new AST facility
- New highly-hazardous storage tank systems
 - An AST or UST with a capacity greater than 1,100 gallons storing a highly hazardous substance
- New underground field constructed storage tank systems

Site Specific Installation Permits

New Large Aboveground Facility:

An aboveground storage tank or a group of aboveground storage tanks with a capacity greater than 21,000 gallons at a site where no previously regulated ASTs were registered.

Site Specific Installation Permits

Major Elements:

- Part I / Part II SSIP Application
- General Information Form
- Municipal & County Notification Letters (and Proof of Receipt)
- Siting – Floodplain, Wetlands
- Geology – if karst, deep-mined, or other geological issues, requires geotechnical analysis
- Mapping – plot plan, topographic map, wells within 2500' plotted
- Environmental Assessment – when required
- 30-day public notice in PA Bulletin required for new facilities (DEP handles this)



Other Storage Tank Issues

Additional Issues and Information

New Alternative Fuels Factsheet



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DEPARTMENT OF ENVIRONMENTAL
PROTECTION

UNDERGROUND STORAGE TANK (UST) EQUIPMENT COMPATIBILITY & STORAGE OF BIOFUELS AND BIOFUEL BLENDS

Federal and Pennsylvania release prevention laws require that regulated underground storage tank (UST) systems be constructed or lined with material that is compatible with the substance stored. Compatibility, in this sense, refers to the ability of both the storage tank system components and the stored substance to maintain their respective physical and chemical properties upon contact with one another for the design life of the tank system.

Because the physical and chemical properties inherent to biofuels, such as ethanol and biodiesel, differ from their conventional petroleum fuel counterparts, some UST equipment and components that are compatible with conventional petroleum fuels are not compatible with biofuels or biofuel blends. Higher biofuel blends – such as gasoline-ethanol blends containing greater than 10 percent ethanol, and biodiesel-blended fuel containing greater than five percent biodiesel – can degrade many non-metallic materials, such as natural rubber, polyurethane, older adhesives, certain elastomers and polymers used in flex piping, bushings, gaskets, meters and filters. They can also degrade soft metals, such as zinc, brass, aluminum, lead and copper.

Whether a newly installed UST system or an existing UST system that has been converted to store a different substance, the components of the UST system must satisfy the compatibility requirement before receiving delivery of product into the UST. The following UST system components should be compatible with the substance stored:

- Tank or internal tank lining
- Spill buckets and containment sumps
- Overfill prevention equipment
- Drop tube
- Fill and riser caps
- Line leak detector
- Release detection floats, sensors and probes
- Piping and flexible connectors
- Sealants (including pipe dope and thread sealant)
- Fittings, gaskets, o-rings, bushings, couplings and boots
- Suction pump and components
- Submersible turbine pump and components
- Product shear valve
- Dispensers and hanging hardware

Owners and operators of USTs storing ethanol blends may use the following code to comply with the compatibility requirement:

- American Petroleum Institute Publication 1626 (API RP 1626), "Storing and Handling Ethanol and Gasoline-Ethanol blends at Distribution Terminals and Service Stations."

There are a number of resources available to assist UST owners and operators with determining equipment compatibility with biofuels and biofuel blends, including:

- The Environmental Protection Agency's Office of Underground Storage Tanks maintains information about biofuels and links to resources relevant to storing ethanol and biodiesel in USTs: www.epa.gov/oust/altfuels/biofuels.htm.
- The Petroleum Equipment Institute maintains an online database that contains information on equipment compatibility with ethanol-blended and biodiesel-blended fuels. Listings include product specifications and links to manufacturers: <http://resource.pei.org/altfuels/guide.asp>.
- The Steel Tank Institute maintains information about biofuels storage and links to tank manufacturers' statements of compatibility: www.steeeltank.com.

In addition to the material compatibility of UST equipment with the substance stored, the functional capability of equipment used to meet the UST system operating requirements – such as overfill prevention and release detection equipment – may be dependent on the substance stored; as documented by equipment manufacturers' product literature and performance claims, or by third-party evaluations.

The Department of Environmental Protection (DEP) recommends that UST owners and operators follow the below checklist when installing a new UST system, or converting an existing UST system, for storage of gasoline-ethanol blends containing greater than 10 percent ethanol, or biodiesel-blended fuel containing greater than five percent biodiesel.

New Alternative Fuels Factsheet

Before Biofuel is Transferred to the Tank

- Determine storage tank system equipment compatibility with the product to be stored. Complete DEP form 2630-FM-BECB0608, *Alternative Fuel Storage Tank Installation/Conversion Form*.
- Check for water in the tank. No level of water is acceptable for gasoline-ethanol blends due to the possibility of phase separation.
- All visible fittings and connections at the top of the tank are tight (no vapors escape and no water enters).
- The appropriate vent top (pressure vacuum/updraft) is present for the type of product being stored.
- Stage I Vapor Recovery is installed and operational, if required.
- Sump and spill containment covers prevent water from entering.
- Water infiltration problems fixed if necessary.
- The tank has been cleaned of all water and sediment.
- Fill Labeling: identify the fill port and paint access covers according to API RP 1637.
- Dispenser Labeling: label dispenser in compliance with Federal and State regulations.
- New UST installation:** Within 30 days after installation, and prior to product delivery, submit to DEP a completed permit application 2630-PM-BECB0514, *Storage Tank Registration/Permit Application Form*, to register the UST and apply for an operating permit. Include the completed *Alternative Fuel Storage Tank Installation/Conversion Form*.

First Delivery

- Tank filled to 80 percent capacity as recommended by the Renewable Fuels Association (RFA) and kept as full as possible for seven to 10 days.
- Have dispenser calibrated prior to any retail sales.
- Conduct a precision test of the tank system (0.1 gph leak rate) with automatic tank gauge (ATG) system within seven days after tank is filled to make sure the UST system is tight and the leak detection equipment is operating properly. Investigate any "Fail" results according to the suspected release investigation requirements.
- Test for water (use alcohol compatible paste if gauging a UST storing an ethanol blend) at the beginning of each shift for the first 48 hours after delivery (RFA). If there is water in the tank – remove it, find out how it got there, and fix it so it does not occur again.
- Existing UST conversion:** Within 30 days of changing the substance stored in the UST, submit to DEP a completed form 2630-FM-BECB0607, *Storage Tank Registration Amendment Form*, to amend the UST registration information. Include the completed *Alternative Fuel Storage Tank Installation/Conversion Form*.

Ongoing Maintenance

- Check regularly for water. No level of water is acceptable for gasoline-ethanol blends.
- If product seems to pump slowly, check and replace filters.
- Calibrate the dispenser meter at the time of conversion and two weeks after conversion to verify meter accuracy. Particulate materials may cause excessive wear of the meter, which would require more frequent calibration (API RP 1626).
- Conduct daily, visual inspections of the dispenser and dispenser sump (secondary containment) beneath the dispenser (if one is installed) and perform periodic walkthrough inspections.

For additional information on Pennsylvania's Storage Tank Program or to obtain forms, contact:

Central Office, Bureau of Environmental Cleanup and Brownfields, Division of Storage Tanks, P.O. Box 8762, Harrisburg, PA 17105-8762, 717-772-5599, 800-42-TANKS (in PA only)

For more information, visit www.dep.state.pa.us, keyword: Storage Tanks.

Alternative Fuel Storage Tank Installation / Conversion Form

- All USTs, and ASTs used for motor vehicle fueling, storing:
 - Gasoline/alcohol blends greater than 10% alcohol (E15, E85)
 - Biodiesel blends greater than 5% biodiesel (B10, B20)
- Ensures compatibility of all system components



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL CLEANUP AND BROWNFIELDS

ALTERNATIVE FUEL STORAGE TANK INSTALLATION/CONVERSION FORM

FOR DEP USE ONLY	
Reviewer	_____
Date	_____

This form is to be completed and signed by the storage tank owner (or owner's representative) and DEP certified tank installer when installing a new storage tank system, or when converting an existing storage tank system, for storage of alternative fuel blends, such as gasoline-ethanol blends containing greater than 10% alternative fuel, or biodiesel or biodiesel blended fuel containing greater than 5% biodiesel. For aboveground storage tank systems, this form only applies to tank systems used for motor vehicle fueling. See the bottom of page 2 for the form submittal and recordkeeping requirements.

DEP recommends that UST owners and operators follow the procedural checklist provided in the Storage Tank Program Fact Sheet 2630-FS-DEP4447 *Underground Storage Tank (UST) Equipment Compatibility & Storage of Biofuels and Biofuel Blends*.

I. FACILITY INFORMATION – Type or print (in ink) all items. When completing this form for a new facility, omit the Facility ID.			
Facility ID#:		Facility Name:	
Facility Street Address:			
Facility Telephone:		County:	Municipality:
<p>II (a). STORAGE TANK & PIPING INFORMATION – Sections II(a) and II(b) should be completed in full by the storage tank system owner and DEP certified tank installer. Type or print (in ink) all items. Provide the model/brand and equipment manufacturer for each storage tank system component. Write "NA" and check the corresponding box if the tank/piping/dispenser system does not have the component. Write "UNK" if the model/brand or equipment manufacturer cannot be determined. Check the appropriate box(es) to indicate whether or not the component has been confirmed by a Nationally Recognized Testing Laboratory (NRTL), such as Underwriters Laboratories (UL), and/or has been verified by the component manufacturer for use with the substance stored. Only check "No" if the component is neither NRTL listed nor manufacturer verified. Only one storage tank system per form may be listed.</p> <p>DEP will not approve an operating permit for an alternative fuel storage tank system with "unknown" components, or components that are neither NRTL listed nor manufacturer verified for use with the substance stored, unless a PA licensed professional engineer (P.E.) who has knowledge, experience, and training in materials science determines in his/her professional judgment that those components satisfy the compatibility requirements listed in the Storage Tank Regulations in 25 Pa Code, Chapter 245. The P.E. must sign the certifying statement in Section IV. DEP may request documentation supporting the P.E. determination.</p>			
Tank Orientation: <input type="checkbox"/> Underground <input type="checkbox"/> Aboveground		Alternative Fuel Blend (>10%) Stored	
Capacity (gallons): _____ Date Installed: _____		<input type="checkbox"/> E15 <input type="checkbox"/> E85 <input type="checkbox"/> Other _____	
<input type="checkbox"/> New Tank <input type="checkbox"/> Existing Tank → DEP Tank #: _____		Biodiesel Blend (>5% biodiesel) Stored	
		<input type="checkbox"/> B10 <input type="checkbox"/> B20 <input type="checkbox"/> Other _____	
Component	Model / Brand	Equipment Manufacturer	NRTL Listed or Manufacturer Verified for the Stored Fuel
Storage Tank			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Internal Tank Lining			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
ATG Probe, Float / Sensor			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Tank Interstitial Sensor			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Spill Bucket			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Drop Tube			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Overfill Auto Shut-off Valve			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Ball Float Valve			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Product Pipe Information: <input type="checkbox"/> New <input type="checkbox"/> Existing <input type="checkbox"/> Mixed (New & Existing)			
Product Pipe Configuration: <input type="checkbox"/> Single wall <input type="checkbox"/> Double wall			
Product Pipe			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Pipe Fitting / Valve Material			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA

Alternative Fuel Storage Tank Installation / Conversion Form

2630-FM-BECB0608 5/2014

Facility ID#: _____ Facility Name: _____

II (b). DISPENSER INFORMATION – Follow the instructions provided for Section II(a) of this form. If needed, attach an additional copy of this page with Section II(b) completed for each additional dispenser unit installed to the storage tank system.

Dispenser Number: _____ Dedicated Dispenser Hose: Yes No Blending Dispenser: Yes No

Component	Model / Brand	Equipment Manufacturer	NRTL Listed or Manufacturer Verified for the Stored Fuel
Dispenser			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Suction Pump			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Dispenser Sump			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Dispenser Sump Sensor			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Sump Penetration Fittings			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Flex Connector			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Emergency (Shear) Valve			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Gaskets / Seals			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Blending Valve			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Check Valve			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Meter			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Fuel Filters			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Break-Away Device			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Nozzle(s) / Swivel(s)			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA
Hose(s)			<input type="checkbox"/> Listed <input type="checkbox"/> Verified <input type="checkbox"/> No <input type="checkbox"/> NA

III. INSTALLER CERTIFICATION – (Required)

Based on my personal observation of the storage tank system and review of the substance compatibility documentation for the storage tank system components, I certify that the storage tank system satisfies the compatibility requirements of Act 32 and Chapter 245. I also certify under penalty of law, as provided in 18 PA C.S.A. Section 4904 (relating to unsworn falsification to authorities), that the information provided on this form is true, accurate and complete to the best of my knowledge and belief.

Installer Name _____ Installer Cert. No. _____ Company Name _____ Company Cert. No. _____

Installer Signature _____ Date _____

IV. PROFESSIONAL ENGINEER CERTIFICATION – (Only if needed. See the instructions for Sections II(a) and II(b).)

Based on my personal observation of the storage tank system and review of the substance compatibility documentation for the storage tank system components, I certify that the storage tank system satisfies the compatibility requirements of Act 32 and Chapter 245. I also certify under penalty of law, as provided in 18 PA C.S.A. Section 4904 (relating to unsworn falsification to authorities), that the information provided on this form is true, accurate and complete to the best of my knowledge and belief.

P.E. Name _____ PA License No. _____ Phone No. _____ P.E. Signature _____ Date _____

V. OWNER CERTIFICATION – (Required)

My signature represents to the Department that I own or represent the owner of the storage tank. I have reviewed the completed form, and I certify under penalty of law as provided in 18 PA C.S.A. Section 4904 (relating to unsworn falsification to authorities) that the information provided on this form is accurate and complete to the best of my knowledge and belief.

Owner/Representative Name _____ Owner/Representative Signature _____ Phone No. _____ Date _____

Facility Owner Owner's Representative Facility Operator Property Owner

Submit: Within 30 days of the installation of a new storage tank or the conversion of an existing storage tank, mail the completed form to PA DEP at the address listed to the right.

Recordkeeping: Keep a copy of the completed form as a permanent installation/construction record for the operational life of the storage tank system, and have it available for review upon request by DEP or a certified storage tank inspector.

PA DEP
Division of Storage Tanks
P.O. Box 8762
Harrisburg, PA 17105-8762

- The form is signed by the tank owner or owner's representative.
- The form is signed by a Professional Engineer for any components that have unknown compatibility, is unlisted, or the manufacturer's certification is not available.
- Finally, the form is signed by the PA DEP certified installer (UMX or AMMX).
- The ultimate responsibility lies on the UMX/AMMX to ensure that all system components are compatible with the substance stored.

2007 REGULATION CHANGES

§ 245.1 – Definitions

- **Re-regulates large aboveground heating oil tanks greater than 30,000 gallons capacity where the product is consumed on the premises where stored**
- **Registration of existing tanks was to have been accomplished by January 9, 2008**
- **Requires most combination of tanks (manifold systems) to be registered separately**

2007 REGULATION CHANGES

§ 245.1 – Definitions

Regulated substances now include:

- **Biodiesel**
- **Synthetic fuels and fluids (motor oil)**
- **Ethanol intended for blending with motor fuel**
- **Several non-petroleum oils**

▶ Notable Changes to Certifications

- ***AFMX*** – Now permits the *modification of tank components* of an aboveground manufactured storage tank system. (ex: nozzle, manway, etc.) **AMMX** still needed to *install* a manufactured tank system.
- ***TL*** - For purposes of corrosion protection, installation or repair of an internal UST lining is no longer permitted. A certified TL may evaluate the integrity of an internal UST lining or supervise the evaluation of the lining. (To evaluate an AST lining an IAM or IAF certification is required.)

Storage Tank Closure

- **Closure Notification**
 - **Submit to Department regional office 30 days before scheduled date of removal – serves notice of intent to close or remove tank (USTs or Large ASTs)**
 - **This is a dual purpose form, also used to notify DEP of intent to install (USTs)**
- **Closure Report (USTs or Large ASTs)**
 - **When required the report is sent to the applicable Department regional office**
- **Registration/Permitting Application**
 - **The only way to remove tanks from system inventory**

Storage Tanks Website

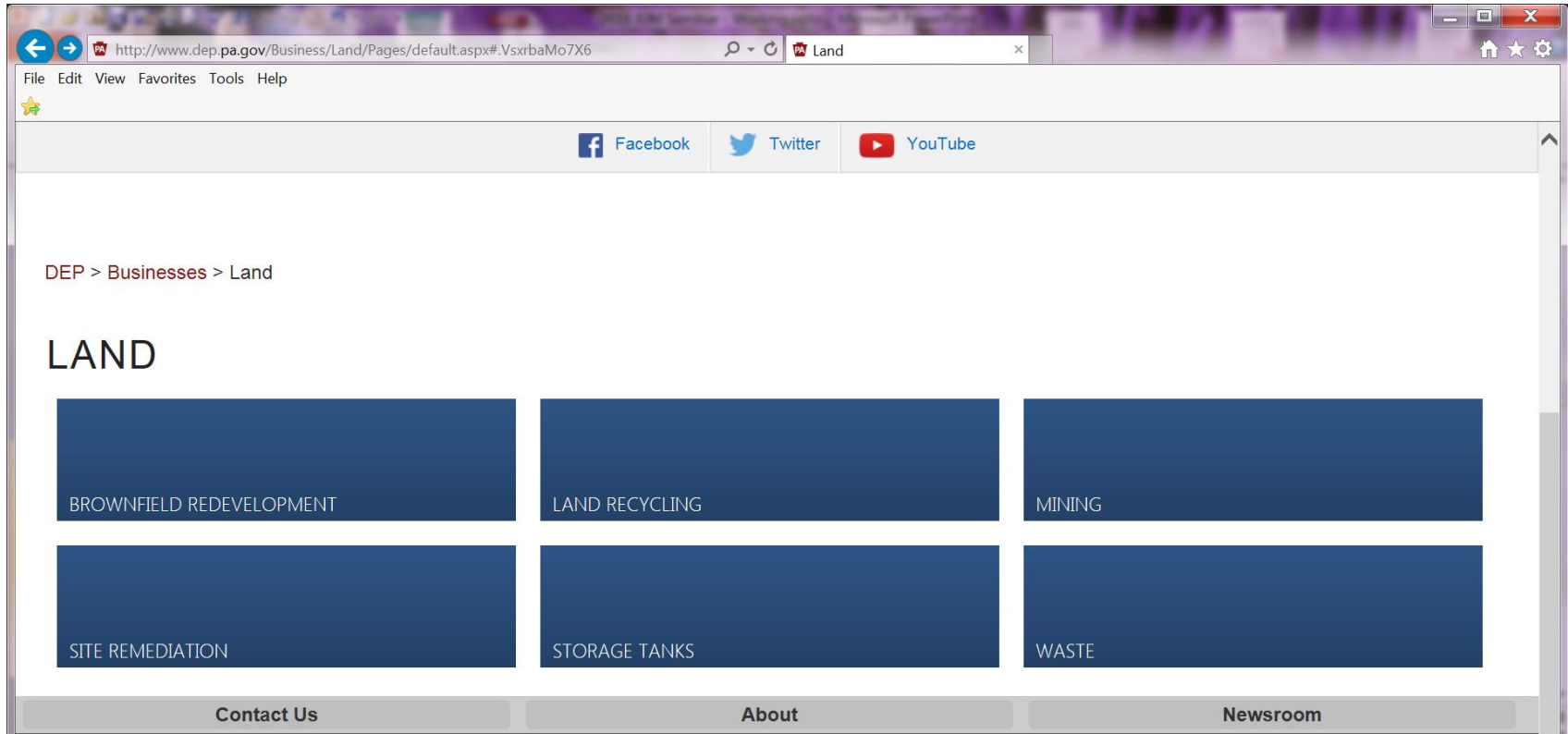
www.dep.pa.gov



Storage Tanks Website

The screenshot shows a web browser window displaying the Pennsylvania Department of Environmental Protection (PA.GOV) website. The browser's address bar shows the URL: <http://www.dep.pa.gov/Pages/default.aspx#.Vsxm8qMo7X5>. The website's header includes the PA.GOV logo and navigation tabs for CITIZENS, BUSINESSES, PUBLIC PARTICIPATION, and DATA AND TOOLS. The main content area features a large image of a snowy landscape with trees. Overlaid on this image is the Pennsylvania Department of Environmental Protection logo and the text: "pennsylvania DEPARTMENT OF ENVIRONMENTAL PROTECTION" and "TOM WOLF, GOVERNOR | JOHN QUIGLEY, SECRETARY". A Facebook icon is visible below the image. A search bar is located in the top right corner of the main content area. The navigation menu for "BUSINESSES" is open, listing the following categories: AIR, LAND, WATER, ENERGY, RADIATION PROTECTION, PROGRAM INTEGRATION, CONSTRUCTION CONTRACTS, and OTHER PROGRAMS. The "LAND" category is currently selected and highlighted. On the right side of the page, there is a vertical menu with a search icon and the following options: SITE MAP, REGIONAL RESOURCES, and REPORT AN INCIDENT. At the bottom of the page, there are links for "Contact Us", "Privacy Policy", "Newsroom", and "Tech Help".

Storage Tanks Website



Storage Tanks Website

DEP > [Businesses](#) > [Land](#) > Storage Tanks

WELCOME TO DIVISION OF STORAGE TANKS

In accordance with the Department of Environmental Protection's mission, the Storage Tank Program will protect Pennsylvania's air, land and water from storage tank releases and provide for the health and safety of its citizens. Storage Tank Program staff will work as partners with individuals, organizations, governments and businesses to prevent releases from storage tanks and restore our natural resources when releases do occur. Under the [Storage Tank and Spill Prevention Act](#), which became effective on Aug. 5, 1989, the Storage Tank Program is responsible for developing and implementing [regulations](#) for above ground and underground storage tanks. Specific program responsibilities include the following: tank [registration](#) and payment of an annual registration fee, [certification](#) of tank handling and inspection individuals and companies, [permitting](#) of tanks, establishment of technical and operational standards for [aboveground](#) and [underground](#) storage tank systems, and procedures for reporting of releases and [corrective action](#) by tank owners.

RELATED INFORMATION

- ABOUT STORAGE TANKS
- FACT SHEETS
- DEP TECHNICAL GUIDANCE DOCUMENTS
- FORMS AND APPLICATIONS
- ABOVEGROUND STORAGE TANKS

Contact Us About Newsroom

+ More Agencies Privacy Policy Settings Share Tech Help

Administrative Summary

- **Submit documents, reports, applications on current forms**
 - **Tank handling activities within 30 days of completion**
 - **Inspection activities 60 days from date of inspection**
 - **Inspections as part of a project involving multiple certified individuals and certification categories should be submitted 30 days from completion of the project. Signature dates should never precede an install date!**
- **New Alternative Fuel Storage Tank Installation / Conversion Form**
- **Pay attention to your certification expiration date**
- **Renew certification 60-120 days prior to expiration date**
- **Requests for renewal of certification submitted more than 60 days beyond expiration date requires applicant to meet initial requirement for certification (see handout – Qualifications for Initial Applicants)**
- **Update individual and company information as changes occur**

Administrative Summary

- **Certified companies and certified individuals share responsibility for all activities, and for the timely submission of all reports or project-related forms**
- **Certify safety training and application accuracy**
- **All tank handling or inspection activities involving non-certified employees or personnel are to be supervised by a certified installer or certified inspector with the applicable certification**
- **Do not sign tank handling or inspection documents unless you performed or supervised the certified activity**
- **Please don't refer tank owners to the Pollution Prevention Reimbursement Grant Program (pump & plug) without confirming eligibility**
- **Companies, pay TIIP fees!**

▶ Department Contact Information

PA DEP

Rachel Carson State Office Building

400 Market Street

P.O. Box 8763

Harrisburg, PA 17105-8763

Phone: 1-800-42-TANKS (in PA)

717-772-5599

FAX: 717-772-5598

Web address: www.dep.pa.gov

AST Technical Information

Presented by:

AST Technical Staff

Aboveground Storage Tank Inspection

- Inspection Summary Forms
 - Ensure the most current are being utilized
 - Check AST part of DEP Division of Storage Tank Website
 - DEP will try to keep you updated if changes are implemented

Aboveground Storage Tank Inspection

2630-FM-BECB0150 Rev. 3/2013
FORM



Latest update

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL CLEANUP AND BROWNFIELDS

ABOVEGROUND STORAGE TANK INTEGRITY INSPECTION SUMMARY

<p>I. <u>Type of Inspection</u></p> <p><input type="checkbox"/> In-service</p> <p><input type="checkbox"/> Out-of-service</p> <p>Lining Inspection</p>	<p>II. <u>Inspection Date(s)</u></p> <p>Completion of this inspection _____</p> <p>Last in-service inspection _____</p> <p>Last out-of-service inspection _____</p>	<p>FOR DEP USE ONLY</p> <p>Reviewer _____</p> <p>Date _____</p> <p>Entered By _____</p> <p>Date _____</p>
<p>III. <u>Facility Information</u></p> <p>Facility I.D. Number XX-XXXXX _____</p> <p>Facility Name _____</p> <p>Facility Address _____</p> <p>_____</p> <p>Municipality _____</p>	<p>IV. <u>Inspector Information</u></p> <p>Name _____</p> <p>Certification number _____</p> <p>Phone A number that you can be reached _____</p> <p>Employer _____</p> <p>Employer certification number _____</p>	

Aboveground Storage Tank Inspection

V. Tank Identification

Owner's Tank

DEP Tank ID number 123_A ID Number _____

Nominal Capacity (gallons) NOT BARRELS!

Size: diameter _____ (ft) length/height _____ (ft)

Substance stored Current or proposed, if empty

Original construction code Must be AST

VI. Fire/Safety Permit

Number Is this AST on the permit?

Issuing Authority PA L&I? City? PASPFM?

Date Issued _____

- Horizontal Saddle Tank
- Vertical Tank
- Elevated Vertical Tank

- Shop Built
- Field Built

Check one box
in each column



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Aboveground Storage Tank Inspection

VII. Certified Inspector

I, the DEP Certified Inspector, have inspected the entire above referenced tank system. Based on my observation of the tank system, review of examination and tests results and information provided by the owner, I certify under penalty of law as provided in 18 Pa. C.S.A. Section 4904 (relating to unsworn falsification to authorities), that the information provided by me is true, accurate, and complete to the best of my knowledge and belief. I also certify that this tank system can cannot remain in service or be returned to service without additional evaluation or modification.

Only YOURS, signed by YOU!!!

Date Signed

Certified Inspector's Signature

Date

VIII. Owner or Owner's Representative I have reviewed the completed inspection report. I certify under penalty of law as provided in 18 PA C.S.A. Section 4904 (relating to unsworn falsification to authorities), the information provided by me is true, accurate, and complete to the best of my knowledge and belief.

Name (Please Print)

Title

Phone Number

Signature

Date

***Ensure owners reviewed/understand inspection, if they refused to sign, write that in the signature block.**

Aboveground Storage Tank Inspection

2630-FM-BECB0150 Rev. 3/2013
FORM

Facility ID XX — XXXXX

DEP Tank ID 123 A

Inspection Date _____

IX. **Evaluation of Tank System** Indicate the condition of the following components by marking the appropriate columns. If unsatisfactory explain deficiency in comment section.

<u>System component</u>	<u>Satisfactory</u>	<u>Unsatisfactory</u>		<u>Not Applicable</u>
			<u>Tank Cannot be Returned to Service</u>	
Foundation and tank supports	<input type="checkbox"/>		<input type="checkbox"/>	
Tank shell	<input type="checkbox"/>		<input type="checkbox"/>	
Tank roof	<input type="checkbox"/>		<input type="checkbox"/>	
Tank bottom/floor	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Internal linings & coating, if installed	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Method(s) used for nondestructive examination(s)	<u>Large AST bottoms need visual, UT, and 1 more (VB, MFE, etc.)</u>			

	<u>Satisfactory</u>	<u>Unsatisfactory</u>	<u>Tank Cannot be returned to service</u>	<u>Not Applicable</u>
External deterioration protection	<input type="checkbox"/>	<input type="checkbox"/>		
Appurtenances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ancillary equipment (including piping)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cathodic protection system, if installed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Ensure any comments in Section XV. match this section. Always label each page with Facility ID, DEP Tank ID, and Inspection Date.

Aboveground Storage Tank Inspection

X. Calculated Information

1. Corrosion/deterioration rate: Tank Shell _____ (in/yr)
Tank Bottom _____ (in/yr)
Piping _____ (in/yr)
3. Service life based on corrosion rate:
Tank _____ (years)
Piping _____ (years)

Which method did you use to calculate the tank bottom service life?: API-653 Corrosion Rate

What was the retirement thickness for the calculation? (T-min or other endpoint) _____

2. Next inspection scheduled by:

In-service _____ (mm/dd/yy)

Out-of-service _____ (mm/dd/yy)

If checked, the cannot remain in service box on page 1 should be checked

- Next Inspection Dates to be Determined after Repairs and before tank is returned to service

Calculate corrosion rates, service life and next inspection dates, unless the minimum acceptable thickness has been reached for that component. If repairs are completed subsequent to the inspection, the next inspection dates can be updated after the modifications.

▶ Calculation of service life (large ASTs)

- API 653 calculated service life method, **or**;
 - Based on minimum acceptable thickness for continued use (0.1 in. or 0.05 in. for bottom)
- the corrosion rate life
 - $\frac{1}{4}$ of the corrosion rate life with a maximum of 5 years for in-service inspection frequencies
 - $\frac{1}{2}$ of the corrosion rate life with a maximum of 20 years for out-of-service inspection frequencies

Aboveground Storage Tank Inspection

XI. Observations

1. Contamination observed/suspected: No Yes, Department notification form submitted on _____.
2. Does the tank have any perforations? No Yes
3. Is the tank system appropriately labeled? Yes No

XII. Record Review

1. Written operations and maintenance plan available on site: Yes No
2. Spill Prevention Response Plan is current and available on site: Yes No Not required
3. Owner/Operator monthly maintenance inspection record is available for the past twelve months: Yes No
4. Is this tank internally lined? Yes No No record available
5. Is a leak test required at the time of this inspection? Yes No
If so, did the test indicate a possible leak? Yes No What method was used? _____

Do not breeze through these sections. If available, you must review these records as part of your integrity inspection. If any of the required records aren't available, please note and comment about this.

Aboveground Storage Tank Inspection

Records

- Spill Prevention Response Plans (SPRPs) are required when the aggregate capacity of all regulated ASTs exceed 21,000-gallons
 - SPCC plans are not necessarily SPRP Plans.
- Operation and maintenance plans are an integral part of the SPRP, and are also required for large storage tank facilities
 - Doesn't always need to be a stand alone document, but make sure that it's included with the SPRP, if it is not.

Aboveground Storage Tank Inspection

Records

- Leak tests are required for existing large ASTs without secondary containment (RPB), no cathodic protection, and no internal lining at every in-service integrity inspection – Refer to API Publication 334 – A Guide to Leak Detection for ASTs
 - Acoustic Technology
 - Volumetric/Mass Technology
 - Soil-Vapor Monitoring Technology
 - Inventory Control Technology
 - Tracer Gas (i.e. helium tests)

[Return to
slide 154](#)

Aboveground Storage Tank Inspection

2630-FM-BECB0150 Rev. 3/2013
FORM

Facility ID _____

DEP Tank ID _____ A

Inspection Date _____

XIII. Tank Information

(1) Tank Construction

- A Single wall steel
- D Double wall steel
- E Single wall fiberglass
- F Double wall fiberglass
- R Single wall molded plastic
- S Single wall stainless steel
- 99 Other _____

(3) Aboveground Piping Construction

- A Steel
- D Fiberglass
- F PVC or Plastic
- L Stainless Steel
- 99 Other _____

(5) Pipe Release Detection Method

- G Visual inspection
- H None
- 99 Other _____

(7) Overfill Prevention

- Y Yes
- N No

(10) Tank Cathodic Protection

- B Galvanic
- C Impressed current
- N None

(16) Emergency Containment **Check records.**

- Meets permeability requirement
- Verified by a Registered Professional Engineer
- Containment present but does not meet requirements
- No containment structure
- Outer wall of a double walled tank

(17) Secondary Containment

- Impermeable layer: **material?** _____
- Space for release detection: **what space?** _____
- N None

(24) Normal Vent / Emergency Vent

- S Satisfactory
- U Unsatisfactory **Identify which vent if Unsatisfactory**

Aboveground Storage Tank Inspection

XIV. Double Walled Tanks If this is a double walled tank that relies solely on the outer wall for containment, please answer the following questions.

Is there spill prevention (Spill Bucket/Containment Box)? Yes No

Are there block valves on all product lines? Yes No

Is there a solenoid valve or antisiphon device? Yes No Not applicable?

- Solenoid valve or anti-siphon device is only not applicable when all the piping never drops below maximum liquid level for the tank or when there is no pumping system downstream of the block valve located immediately downstream of the tank nozzle.

Aboveground Storage Tank Inspection

XV. Comments Describe any tank system deficiencies and note additional information discovered during the inspection. If additional comment sheets are needed, label each sheet with facility and tank identification numbers, inspection date and page number.

Describe any deficiencies here!

*Ensure comments match evaluation and observations sections of the AST Integrity Inspection Summary Form.

Aboveground Storage Tank Inspections

AST Integrity Inspection Summaries

- Ensure that the summaries are sent within 60-days of inspection date.
- Review thoroughly if you aren't filling out the forms, sign-off and submit when completed, see above.
- Do not sign the form unless you personally performed the entire integrity inspection.
- If tank is internally lined, please add the due date for the lining inspection to the form
- Changes to this form are forthcoming

▶ AST Integrity Inspection Summary - Class Exercise

AST In-service Integrity Inspection – Tank Details

Owner Tank ID#: 5223

Substance: Fuel Oil No. 2

Diameter: 80'

Height: 48'

Capacity: 41,000 barrels

Construction Date: 12/01/1978

Construction Standard: API 650

Last In-service Inspection: 02/26/2009

Last Out-of-Service Inspection: 04/14/2005

Single Bottom AST on ring wall

No Cathodic Protection

No internal lining



AST Integrity Inspection Summary Exercise

VERIFY PRESENCE OF WATERMARKED HOLD TO LIGHT TO VIEW

Commonwealth of Pennsylvania
 Department of Environmental Protection
 Bureau of Environmental Cleanup and Brownfields

STORAGE TANK REGISTRATION/PERMIT CERTIFICATE
 EXPIRATION: FEB-04-2015

SEQ#	CAPACITY	SUBST	PERMIT TYPE	PERMIT STATUS	AST IN-SVC INSP DUE	AST OUT-OF-SVC INSP DUE	UST OPERATIONS INSP DUE	LINING INSP DUE
002A	2,497,572	GAS	GOP	Approved	06/18/2015	08/09/2025	*****	*****
003A	1,723,722	HO	GOP	Approved	02/26/2014	04/14/2025	*****	*****
005A	2,300,760	OTHER	GOP	Withdrawn	*****	TBD	*****	*****
007A	4,707,570	OTHER	GOP	Withdrawn	08/27/2012	12/10/2017	*****	*****
008A	2,297,694	OTHER	GOP	Withdrawn	02/01/2014	01/31/2014	*****	*****
010A	4,708,410	FO6	GOP	Withdrawn	*****	*****	*****	*****
011A	5,043,066	OTHER	GOP	Withdrawn	TBD	*****	*****	*****
012A	2,268,000	HZSUB	GOP	Withdrawn	*****	*****	*****	*****
018A	8,736	OTHER	PBR	Approved	02/24/2019	*****	*****	*****

Client ID:
 Owner:
 Id:



Site ID:
 Facility Kind:
 Facility Id:

123456
 22-12345
 Capitol City Terminal
 1 William Penn Drive
 Harrisburg, PA 17100

WARNING: THIS DOCUMENT IS PRINTED ON SECURITY WATERMARK DO NOT ACCEPT WITHOUT VERIFYING THE PRESENCE OF THE WATERMARK

AST Integrity Inspection Summary Exercise

Some observations from this AST IS integrity inspection conducted on 11/19/2015...

- Minor scattered coating failure on tank shell and associated piping
- No label that identifies regulated substance in tank
- Emergency containment, free of vegetation and debris, combustible material, excess water
- Emergency containment drain valve in closed position
- Vents on roof free of restrictions
- Tank gauging/overflow alarms functioning properly

AST Integrity Inspection Summary Completion

Record Review

- Monthly maintenance Checklist – Last 12 months available and owner followed up on needed items
- Spill Prevention Response Plan current
- Written operations and maintenance plan available (Part of SPRP)
- Compacted clay emergency containment study 05/12/2010 – all 18 data points from containment floor and walls $<1.0 \times 10^{-6}$ cm/sec for heating oil storage
- Leak test? Owner had no clue.

AST Integrity Inspection Summary Completion

Calculations

- Safe fill height – 36' 11"
- Out of plane survey – within limits per API 653
- Corrosion/deterioration rate
 - Tank Shell = 0.00015 in/yr
 - Piping = 0.0002 in/yr
- Service life based on corrosion rates – API 653
 - Tank = 50 years
 - piping = 50+ years

Facility ID 22 — 12345

DEP Tank ID 003 A

Inspection Date 11-19-2015

IX. Evaluation of Tank System Indicate the condition of the following components by marking the appropriate columns. If unsatisfactory explain deficiency in comment section.

System component	Satisfactory	Unsatisfactory		Not Applicable
		Returned to Service	Tank Cannot be	
Foundation and tank supports	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Tank shell	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Tank roof	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Tank bottom/floor	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>
Internal linings & coating, if installed	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>
Method(s) used for nondestructive examination(s) <u>UT, Visual</u>				

	Satisfactory	Unsatisfactory	Tank Cannot be returned to service	Not Applicable
External deterioration protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Appurtenances	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ancillary equipment (including piping)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cathodic protection system, if installed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

X. Calculated Information

1. Corrosion/deterioration rate: Tank Shell 0.00015 (in/yr) 3. Service life based on corrosion rate:
 Tank Bottom _____ (in/yr) Tank 50 (years)
 Piping 0.0002 (in/yr) Piping 50+ (years)

Which method did you use to calculate the tank bottom service life?: API-653 Corrosion Rate

What was the retirement thickness for the calculation? (T-min or other endpoint) _____

2. Next inspection scheduled by:
 In-service 09/15/2020 (mm/dd/yy) Next Inspection Dates to be Determined after
 Out-of-service 04/14/2025 (mm/dd/yy) Repairs and before tank is returned to service

XI. Observations

1. Contamination observed/suspected: No Yes, Department notification form submitted on _____
 2. Does the tank have any perforations? No Yes
 3. Is the tank system appropriately labeled? Yes No

XII. Record Review

1. Written operations and maintenance plan available on site: Yes No
 2. Spill Prevention Response Plan is current and available on site: Yes No Not required
 3. Owner/Operator monthly maintenance inspection record is available for the past twelve months: Yes No
 4. Is this tank internally lined? Yes No No record available
 5. Is a leak test required at the time of this inspection? Yes No
 If so, did the test indicate a possible leak? Yes No What method was used? Not completed

Facility ID 22 — 12345

DEP Tank ID 003 A

Inspection Date 11-19-2015

XIII. Tank Information

(1) Tank Construction

- A Single wall steel
- D Double wall steel
- E Single wall fiberglass
- F Double wall fiberglass
- R Single wall molded plastic
- S Single wall stainless steel
- 99 Other _____

(3) Aboveground Piping Construction

- A Steel
- D Fiberglass
- F PVC or Plastic
- L Stainless Steel
- 99 Other _____

(5) Pipe Release Detection Method

- G Visual inspection
- H None
- 99 Other _____

(7) Overfill Prevention

- Y Yes
- N No

(10) Tank Cathodic Protection

- B Galvanic
- C Impressed current
- N None

(16) Emergency Containment

- Meets permeability requirement
- Verified by a Registered Professional Engineer
- Containment present but does not meet requirements
- No containment structure
- Outer wall of a double walled tank

(17) Secondary Containment

- Impermeable layer: _____
- Space for release detection: _____
- N None

(24) Normal Vent / Emergency Vent

- S Satisfactory
- U Unsatisfactory

XIV. Double Walled Tanks If this is a double walled tank that relies solely on the outer wall for containment, please answer the following questions.

- Is there spill prevention (Spill Bucket/Containment Box)? Yes No
- Are there block valves on all product lines? Yes No
- Is there a solenoid valve or antisiphon device? Yes No Not applicable

XV. Comments Describe any tank system deficiencies and note additional information discovered during the inspection. If additional comment sheets are needed, label each sheet with facility and tank identification numbers, inspection date and page number.

Minor scattered coating failure on tank shell and piping.
Tank needs to be labeled with No. 2 Fuel Oil and NFPA Fire Diamond.
AST needs a leak test

▶ AST Modifications

- *Major Modifications – alters design and may affect integrity of AST system or facility; affects tank portion
- Minor Modifications – does not alter design and may affect integrity of AST system or facility; does not affect tank portion.
- Maintenance – does not alter design and does not affect integrity of AST system or facility.

*Always inspected

AST Modifications

- Storage Tank Modification/Maintenance Technical Guidance updated March 2014
- Read the definitions to assist category of repair
- Questionable repairs, please call AST Unit
- If inspection is needed for major modifications, involve appropriate AST inspector prior to repair and critical times
- 30-day submittal requirement for Modification Reports!

▶ AST Major Modifications

- Replacement or addition of tank shell plate(s)
- Repair or replacement of tank bottom
- Installation, repair or replacement of interior lining or coating
- Installation, replacement, or structural repair of the tank integral roof or of an internal floating roof
- New or additional piping runs or not like kind replacements within the containment
- Initial penetrations of tank shell, roof or bottom
- Installation of new containment structure

▶ AST Minor Modifications

- Excavations within the containment.
- Installation of spill containment, tank gauging, and vents for which the AST was designed and fitting exist on the shell or roof
- Repairs involving cutting or welding on piping runs or not like kind replacements downstream of the first control valve and within the emergency containment

▶ AST Maintenance Activities

- Tank painting, exterior coating, labeling
- Containment maintenance, surface coating, minor surface repair
- Like kind replacement of tank gauge
- Piping outside containment area
- AST cleaning not performed as part of a closure activity
- Replacement of threaded or flanged ancillary equipment located downstream of first isolation valve within emergency containment

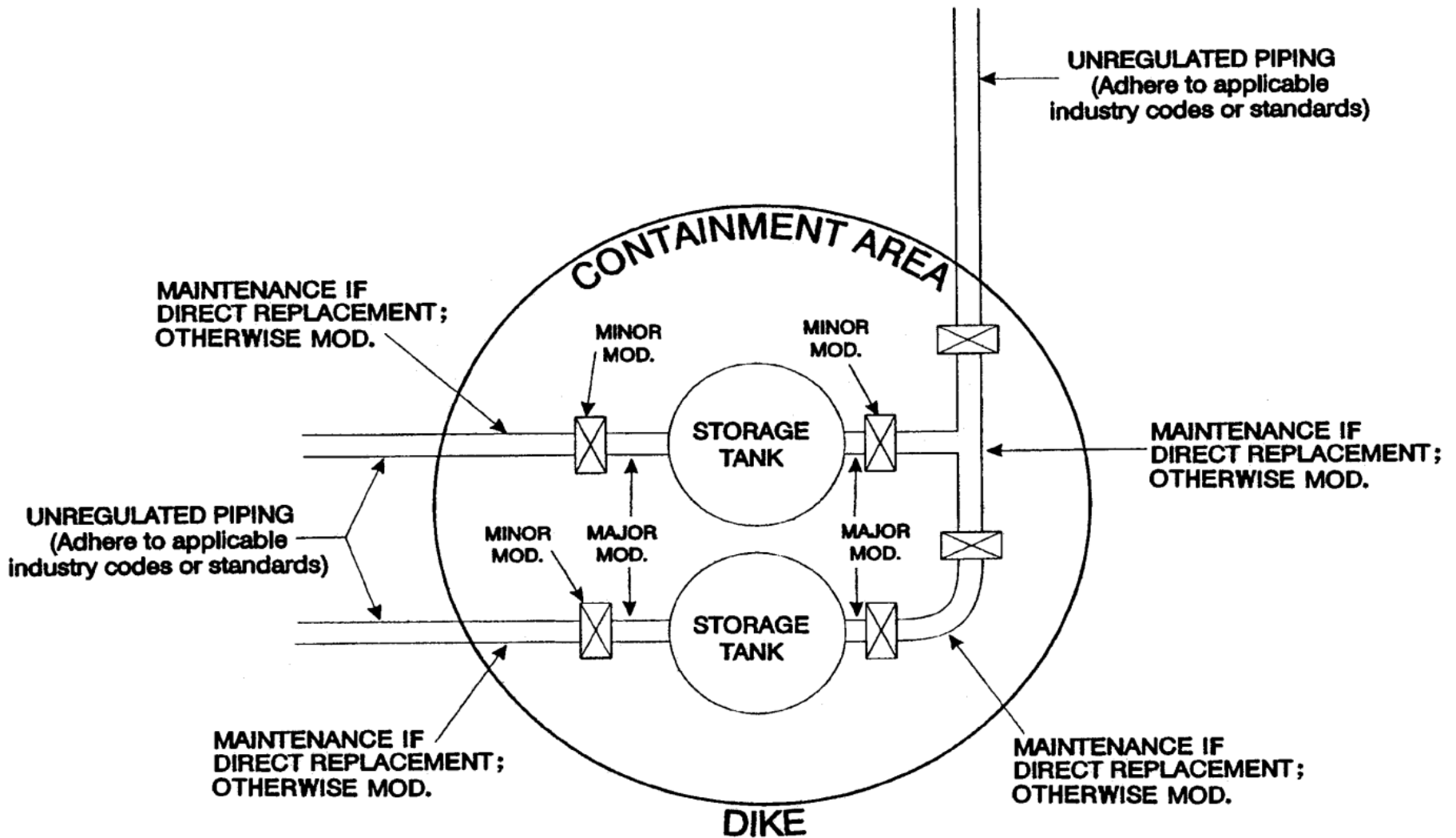


Figure from *Storage Tank Modification and Maintenance Issues*, update March 29, 2014



ABOVEGROUND STORAGE TANK MODIFICATION REPORT

I. FACILITY INFORMATION	OFFICIAL USE ONLY			
Facility I.D. Number _____	INITIAL	DATE		
Facility Name _____	CO Review _____	_____		
Facility Address _____	Data Entry _____	_____		
_____	RO Review _____	_____		

Municipality _____				
County _____				
II. TANK INFORMATION – Information Obtained from Registration Certificate? <input type="checkbox"/> Yes <input type="checkbox"/> No				
Tank ID Number _____ A	Owner Tank Number _____	Tank Capacity (gallons) _____		
Substance Stored _____				
Where was the tank assembled? <input type="checkbox"/> Field Constructed <input type="checkbox"/> Manufactured (Shop Built)				
Tank configuration <input type="checkbox"/> Horizontal <input type="checkbox"/> Vertical <input type="checkbox"/> Elevated Vertical Tank Construction Code _____				
III. TANK MODIFICATION INFORMATION				
Was this modification work performed to correct deficiencies discovered during an inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No				
Tank modification is in accordance with manufacturer's specifications, engineer's design criteria, current industry standards and complies with the Fire Safety Requirements for flammable and combustible liquids (if applicable). If no, explain all irregularities in the comment section. <input type="checkbox"/> Yes <input type="checkbox"/> No Modification standard _____				
IV. INSTALLER INFORMATION (Please Type or Print Clearly)				
Installer Name	Certification Number	Certification Category Used	Company Name	Company Certification
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
V. INSTALLER CERTIFICATION				
This Section must be completed by the certified installer(s) for tank handling activities performed on aboveground storage tank systems. By signing below, the certified installer verifies that the tank handling activity was conducted in compliance with the design, installation, modification and operation standards of Act 32 and applicable regulations. The signature also certifies, under penalty of law as provided in 18 PA C.S.A. Section 4904 (relating to unsworn falsification to authorities), that the information provided is true, accurate, and complete to the best of his/her knowledge and belief.				
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
Date(s) Work Completed	Installer's Signature(s)	Date(s) of Signature		

Please input the date in MM/DD/YYYY format.

Modification Reports must be submitted to PA DEP within 30 days of the completion of the Activity(s)

VI. TANK SYSTEM COMPONENTS – (Only check the blocks for modified or newly installed component(s))

- | | |
|---|--|
| <p>(1) Tank</p> <p><input type="checkbox"/> I Liner Modification/Installation</p> <p><input type="checkbox"/> K Modification of tank bottom</p> <p><input type="checkbox"/> L Modification of tank shell</p> <p><input type="checkbox"/> M Modification of tank roof</p> <p><input type="checkbox"/> Q Double bottom (explain) _____</p> <p><input type="checkbox"/> 99 Other (explain) _____</p> | <p>(10) Tank Cathodic Protection</p> <p><input type="checkbox"/> B Galvanic</p> <p><input type="checkbox"/> C Impressed current</p> |
| <p>(3) Aboveground Piping</p> <p><input type="checkbox"/> New Piping Run - Piping Material: _____
(A, B, D, E, I, J, K)</p> <p><input type="checkbox"/> H Modification of existing piping</p> <p><input type="checkbox"/> 99 Other (explain) _____</p> | <p>(12) Tank Release Detection</p> <p><input type="checkbox"/> E Automatic tank gauge</p> <p><input type="checkbox"/> H Interstitial monitor</p> <p><input type="checkbox"/> L Grooves made in the impermeable pad</p> <p><input type="checkbox"/> M Slotted pipe above the impermeable pad</p> <p><input type="checkbox"/> 99 Other (explain) _____</p> |
| <p>(5) Pipe Release Detection (AST's in Vaults)</p> <p><input type="checkbox"/> Y Installed/modified</p> | <p>(16) Emergency Containment</p> <p><input type="checkbox"/> Y Installed/modified</p> |
| <p>(6) Spill Prevention (Spill Bucket/Containment Box)</p> <p><input type="checkbox"/> Y Installed/modified</p> | <p>(17) Secondary Containment</p> <p><input type="checkbox"/> Y Installed/modified</p> |
| <p>(7) Overfill Prevention</p> <p><input type="checkbox"/> Y Installed/modified</p> | <p>(24) Normal Vent / Emergency Vent</p> <p><input type="checkbox"/> Y Installed/modified</p> |

VII. DETAILED SCOPE OF WORK AND ANY ADDITIONAL COMMENTS:



VIII. INSPECTOR INFORMATION

A modification inspection is required when a major modification is performed on an aboveground tank greater than 21,000 gallons in capacity. A modification inspection is also required on small aboveground field constructed tanks when a major modification is performed to the tank shell or tank bottom. Is an inspection required for this activity? Yes No

If yes, was the inspector involved prior to the initiation of the project and present at critical times? Yes No

Inspector
Name

Certification
Number

Inspection
Category

Company
Name

Company
Certification No.

When a major modification is performed, the inspector must be involved prior to the initiation of the project and present at critical times. Section VIII. must be completed. Identify yourself and give contact information to the installer.

AST Modification Inspections

Modification Inspections

- Required when a major modification is performed on a large AST (>21,000-gallons), and on a small field constructed AST shell or bottom (>250 to 21,000-gallons).
- IAMs cannot perform modification inspections of aboveground field constructed storage tank systems
- 60-day submittal requirement, but try to get in sooner, preferably within 30-days

AST Modification Inspections

Modification Inspections

- When substantial modifications are made to the tank floor, the next inspections date projections shall be determined based on the condition of the tank subsequent to those modifications as reported to the Department by the certified inspector on the appropriate inspection form provided by the Department (§245.554 Installation and modification inspections)
 - **Still utilize the initial out-of-service inspection date as starting point for projecting next inspection interval, unless the entire tank floor is being replaced.**

AST Modification Inspections

Modification Inspection Scenario 1

The AST modification inspection covers AST bottom patch plates (seven) and puddle welds (12 areas) on existing AST bottom that had isolated areas of pitting on product side, as well as soil side corrosion. These areas of corrosion were identified on during a **09/13/2014** OS integrity inspection. At the time of the OS inspection, the corrosion rate and remaining service life calculations resulted in a shortened OS inspection interval of 11.4 years. Before placing the tank back into service the facility owner opted to have their AST bottom repaired to extend service life and next inspection intervals. Based on the repairs and existing corrosion rates, the new service life calculations and OS integrity inspection interval were greater than 20 years. What would the next OS inspection date be if your modification inspection was today?

AST Modification Inspections

Modification Inspection Scenario 1

The next out-of-service integrity inspection due date of **09/13/2034** would be given because that is when the ultrasonic thickness gauge and other non-destructive examination measurements were taken. Furthermore, the maximum interval between out-of-service inspection intervals is 20 years according to the Pennsylvania Storage Tank Regulations.

AST Modification Inspections

Modification Inspection Scenario 2

The AST modification inspection covers the installation of a new AST bottom. The original inspection conducted on **11/26/2014** identified that 60% of the tank floor has corroded beyond 0.1" (minimum acceptable thickness). The owner elected to have a new bottom installed over the existing bottom that was covered with a HDPE liner. Sand was poured between the existing bottom and new bottom and installed with leak detection ports in accordance with API 650 Appendix I. Taking into account the corrosion rates of the existing bottom and new 0.250" carbon steel, lap welded bottom, the expected service life of this tank is greater than 20 years.

If your inspection was **today**, when will the next OS integrity inspection be due?

AST Modification Inspections

Modification Inspection Scenario 2

The next out-of-service integrity inspection due date of **11/15/2026**. A 10 year maximum interval would be given due to the unknown corrosion rate of the new bottom. It has been the Department's position that existing corrosion rates from old tank bottoms cannot be utilized for new AST bottoms. This is explained in Section 245.553(e)(2)(i) in the PA Storage Tank Regulations.

AST Modification Inspections

Modification Inspection Scenario 3

The AST modification inspection covers the installation of an internal tank lining over the existing tank bottom and 18" up the shell. This AST had an OS integrity inspection completed on **01/23/2015** by another PADEP-certified inspection company. The API 653 internal inspection reported that corrosion rates for the tank bottom and shell were relatively low (0.00012 in/yr), and the overall condition of the tank bottom was excellent with over 50 years of remaining service life.

What are the next required AST inspection dates for this AST, if your lining inspection was **today**?

AST Modification Inspections

Modification Inspection Scenario 3

The next integrity inspection dates would be as follows:

- Out-of-Service Integrity Inspection: **01/23/2035** (20 years from previous OS Inspection)
- In-Service Integrity Inspection: **01/23/2020** (5 years from previous OS inspection)
- Lining Inspection: **11//2026***

*Maximum interval for a lining inspection is 10 years or as warranted or recommended by the manufacturer or design engineer.



ABOVEGROUND STORAGE TANK MODIFICATION INSPECTION SUMMARY

<p>I. <u>Inspection Date(s)</u></p> <p>_____</p> <p>_____</p>	<p style="text-align: center;">FOR DEP USE ONLY</p> <p>Reviewer _____ Date _____</p> <p>Entered By _____ Date _____</p>
<p>II. <u>Facility Information</u></p> <p>Facility ID number _____</p> <p>Facility Name _____</p> <p>Facility Address _____</p> <p>_____</p> <p>Municipality _____</p>	<p>III. <u>Inspector Information</u></p> <p>Name _____</p> <p>DEP Inspector Certification Number _____</p> <p>Inspection Category _____</p> <p>Phone () _____</p> <p>Employer _____</p> <p>DEP Company Certification Number _____</p>
<p>IV. <u>Tank Identification</u></p> <p>DEP Tank ID number _____ A Owner Tank ID Number _____</p> <p>Capacity (gallons) _____</p> <p>Tank Configuration: <input type="checkbox"/> Horizontal <input type="checkbox"/> Shop Built</p> <p> <input type="checkbox"/> Vertical <input type="checkbox"/> Field Built</p> <p> <input type="checkbox"/> Vertical Elevated</p> <p>Construction Code _____</p> <p>Substance stored _____</p> <p>Size: diameter _____ (ft) length/height _____ (ft)</p>	<p>V. <u>Permit Information</u></p> <p>Fire/Safety Permit Number _____</p> <p>Issuing Authority _____</p> <p>Date Issued _____</p> <hr/> <p>VI. <u>Next Integrity Inspections (If applicable)</u></p> <p>In-Service _____ (mm/dd/yy)</p> <p>Out-of-Service _____ (mm/dd/yy)</p> <p style="color: red; font-weight: bold; font-size: 1.2em;">Lining</p>

Facility ID _____ DEP Tank ID _____ A Inspection Date _____

IX. Installer Information

Installer Name	Certification Number	Company Name	Company Certification
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

X. Description of Modifications. What modification work was inspected?

- New bottom – describe configuration _____
- Repaired bottom _____
- Added or repaired internal lining _____
- Modification of shell _____
- Modification of roof _____
- Added or repaired nozzle(s) – where? _____
- Modification of containment structure(s) _____
- Other - explain _____

List **all** the installers and their information, as well as what you inspected in these sections. Elaborate on these descriptions, if needed, in the comments section.

XI. Evaluation of Modifications:

Was the welding completed in accordance with industry practices and performed by an appropriately qualified welder?

Yes No Not Applicable

Was the tank modification performed in accordance with manufacturer's specifications, engineer's design criteria and current industry standards? If no, explain all deficiencies in Section XII. Yes No

Was the nondestructive testing performed in accordance with industry codes and practices by a properly qualified individual with the test results indicating no deficiencies? Yes No

Were you, as the DEP certified inspector, involved prior to the initiation of the modifications and present at critical times?

Yes No

If this modification was in response to an integrity inspection, were all of the inspector's recommendations addressed?

Yes No Not Applicable

If no, what is still unfinished? _____

Present at critical times? This is not a documentation review, a take your word for it scenario, or an, "I know this welder does everything by the book, and has never made a mistake in their life". The AST inspector must be involved and PRESENT in order to reliably determine that the following were met:

- 1) Industry standards and project specs. were followed throughout the tank handling activity.
- 2) Appropriate testing and NDE were properly conducted
- 3) The tank is suitable for operational service.

AST Installation Inspections

Installation Inspections

Required for:

1. Large (manufactured and field constructed) AST construction, reconstruction, relocation
2. Small field constructed AST construction, reconstruction, relocation

AST Installation Inspections

Installation Inspections

Not required for:

1. Small ($\leq 21,000$ -gallons) manufactured ASTs
2. Uncertified Installs
 - **Tanks 5,000-gallons** or less (AMMX/IAM/IAF can verify installation)
 - **Tanks >5,000-gallons** (IS integrity inspection needs to be completed)
 - If integrity inspection is not completed the due date for the next required integrity inspection may be based off the installation date of the tank, which could result in an overdue inspection upon registration.
 - **Tanks >21,000-gallons** (OS integrity inspection needs completed)
 - Site Specific Installation Permit requirements remain applicable

Installation Inspections

- AST inspectors must be involved prior to the initiation of a project and present at critical times.
- AST systems shall be inspected by a DEP-certified inspector at the time of installation in accordance with § 245.522 (relating to new AST installations and reconstructions)...
- The inspection report shall be kept for the operational life of the tank

Installation Inspections

- Comprehensive evaluation of tank system
- Field constructed ASTs are hydrostatically tested.
- Alternative test for tightness
- Non-destructive testing



ABOVEGROUND STORAGE TANK INSTALLATION INSPECTION SUMMARY

I. Reason for Inspection <input type="checkbox"/> New tank system <input type="checkbox"/> Relocated tank system <input type="checkbox"/> Uncertified installation	II. Inspection Date(s) _____ _____ _____	FOR DEP USE ONLY Reviewer _____ Date _____ Entered By _____ Date _____
III. Facility Information Facility I.D. Number _____ Facility Name _____ Facility Address _____ _____ Municipality _____	IV. Inspector Information Name _____ DEP Inspector Certification Number _____ Inspection Category _____ Phone (____) _____ Employer _____ DEP Company Certification Number _____	
V. Tank Identification DEP Tank ID number ____A Owner Tank ID Number _____ Capacity (gallons) _____ Tank Configuration: <input type="checkbox"/> Horizontal <input type="checkbox"/> Shop Built <input type="checkbox"/> Vertical <input type="checkbox"/> Field Built <input type="checkbox"/> Elevated Vertical Construction Code _____ Substance stored _____ Size: diameter _____ (ft) length/height _____ (ft)	VI. Permit Information DEP Site Specific Installation Permit Number _____ Fire/Safety Permit Number _____ Issuing Authority _____ Date Issued _____	
VII. Next Integrity Inspections (If applicable) In-Service _____ (mm/dd/yy) Out-of-Service _____ (mm/dd/yy)		
VIII. Certified Inspector I, the DEP Certified Inspector, have inspected the above referenced tank system. Based on my observation of the tank system, review of examination and tests results and information provided by the owner, I certify under penalty of law as provided in 18 Pa. C.S.A. Section 4904 (relating to unsworn falsification to authorities), that the information provided by me is true, accurate, and complete to the best of my knowledge and belief. _____ <div style="display: flex; justify-content: space-between; width: 100%;"> Certified Inspector's Signature Date </div>		
IX. Owner or Owner's Representative I have reviewed the completed inspection report. I certify under penalty of law as provided in 18 PA. C.S.A. Section 4904 (relating to unsworn falsification to authorities), the information provided by me is true, accurate, and complete to the best of my knowledge and belief. _____ <div style="display: flex; justify-content: space-between; width: 100%;"> Name (Please Print) Title Phone Number </div> _____ <div style="display: flex; justify-content: space-between; width: 100%;"> Signature Date </div>		

Facility ID _____ - _____ DEP Tank ID _____ A Inspection Date _____

X. Installer Information			
Installer Name	Certification Number	Company Name	Company Certification
XI. Evaluation of Tank System Enter the condition of the following components by marking the appropriate blocks.			
	Satisfactory	Unsatisfactory	Not Applicable
Materials meet specifications	<input type="checkbox"/>	<input type="checkbox"/>	
Foundation and tank supports	<input type="checkbox"/>	<input type="checkbox"/>	
Welding (procedure, qualification)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tank construction (floor, shell, and roof)	<input type="checkbox"/>	<input type="checkbox"/>	
Appurtenances	<input type="checkbox"/>	<input type="checkbox"/>	
Ancillary equipment (including piping)	<input type="checkbox"/>	<input type="checkbox"/>	
Normal venting	<input type="checkbox"/>	<input type="checkbox"/>	
Emergency venting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Secondary containment (under the tank bottom)	<input type="checkbox"/>	<input type="checkbox"/>	
Please describe:			
Emergency containment design & permeability	<input type="checkbox"/>	<input type="checkbox"/>	
Cathodic Protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internal lining/coating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
External coating & labeling	<input type="checkbox"/>	<input type="checkbox"/>	
Overfill prevention (gauge, HLA, & automatic shut off or manned operating procedure)	<input type="checkbox"/>	<input type="checkbox"/>	
Hydrostatic test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative test for tightness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nondestructive testing (procedure, qualifications)	<input type="checkbox"/>	<input type="checkbox"/>	
Fire Safety Standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operations & Maintenance plan	<input type="checkbox"/>	<input type="checkbox"/>	
Spill Prevention & Response Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Yes <input type="checkbox"/> No Tank installation is in accordance with manufacturer's specifications, engineers design criteria and current industry standards. If no, explain all deficiencies in Section XII.			
XII. Comments Describe any tank system deficiencies and note additional information discovered during the inspection. If additional comment sheets are needed, label each sheet with facility and tank identification numbers, inspection date and page number.			

ASTs Inspection Summary

Capacity (gallons)	Installation Inspection	In-service Inspection	Out-of-service Inspection	Modification Inspection	Internal Liner Insp.
251 – 1,100	Field Constructed	-	-	Field Constructed	10 years
1,101 – 5,000	Field Constructed	-	-	Field Constructed	10 years
1,101 – 5K (high. haz.)	Field Constructed	10 years from install	-	Field Constructed	10 years
5,000 – 21,000	Field constructed	10 years from install	-	Field Constructed	10 years
>21,000 (elevated)	All	5 years from install	-	All	10 years
>21,000	All	5 years from install	10 years from install	All	10 years

* These are initial intervals. Subsequent inspection schedules are based on the condition of the tank at the time of the inspection, as well as corrosion, deterioration, and site-specific conditions that may necessitate more frequent intervals.

Common AST Inspection Violations

Top 3 Aboveground Storage Tank Integrity Inspections Violations in PA

#1 Performance/Design standards Violations (paint, label, vents, etc.)

#2 Monthly Maintenance Check Violations

#3 AST Containment Violations

What is common theme here?

Common AST Inspection Violations

Monthly Operation and Maintenance Checks




▶ AST Monthly Operations and Maintenance Checks

Monthly Operations and Maintenance Checks

1. A visual examination of the tank system for deterioration.
2. A check of the containment area for accumulation of water and removal of water as necessary.
3. Confirmation that containment drain valves are secured in the closed position when not in use.
4. Monitoring of the leak detection system.
5. A check of vents for restrictions.
6. A check of ancillary equipment for operational malfunctions.
7. An investigation of conditions that may be a fire or safety hazard, or pose an environmental hazard.
8. Observation for evidence of a release of regulated substance from the tank system.

AST Monthly Operations and Maintenance Checks

2630-FM-BECB0170 2/2012


pennsylvania
 DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 BUREAU OF ENVIRONMENTAL CLEANUP AND BROWNFIELDS

SAMPLE MONTHLY MAINTENANCE OPERATION CHECKLIST FOR OWNERS OF SMALL ABOVEGROUND STORAGE TANKS

ITEM	SYMBOL	REFERENCE
I. Visual Check for Deterioration		
Condition of tank exterior	S U	_____
Condition of aboveground piping	S U	_____
Condition of foundations and supports	S U	_____
Condition of containment structures	S U	_____
II. Containment Areas		
Level of standing water in containment	S U	_____
Drain Valves secured in a closed position	Y N	_____
Debris or fire hazard in containment	Y N	_____
III. Leak Detection System		
Leak detection system monitored	Y N	_____
Regulated Substance in containment area	Y N	_____
Evidence of release from tank	Y N	_____
Evidence of release from ancillary equipment including piping	Y N	_____
IV. Ancillary Equipment		
Overflow prevention device functioning properly (if installed)	Y N	_____
Valves functioning properly	Y N	_____
Vents clear of restrictions	Y N	_____
Gauge or monitoring device functioning properly (if installed)	Y N	_____
V. Safety Precautions		
Safety equipment in place and operative	Y N	_____
Fire extinguishers in place	Y N	_____
Safety precautions posted	Y N	_____
Tank system secured to prevent vandalism and unauthorized use	Y N	_____

Facility I.D.# _____ Inspection Completed By: _____ Date: _____

Comments: _____

Symbols

S - Satisfactory U - Unsatisfactory Y - Yes N - No

AST Monthly Operations and Maintenance Checks

Record Keeping Requirements

Monthly leak detection records and maintenance checklists shall be maintained for the previous 12 months.



AST Monthly Operations and Maintenance Checks

Other Items to Consider

- Aboveground storage tank grounding/bonding /lightning protection
- Fuel monitoring (check for presence of water/microbes)
- Cathodic Protection Rectifiers
- Thermal and pressure relief systems
- Insulated ASTs – check for areas of moisture, external corrosion
- Follow-up on Unsatisfactory and/or Required items

Common AST Inspection Violations

Emergency Venting

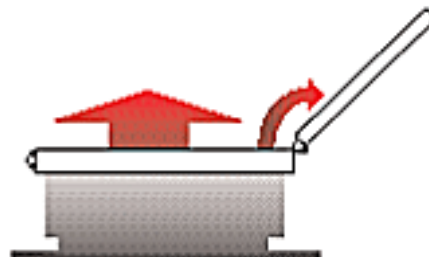
Common Problems

1. Inadequate design – too small, wetted area calculations
2. Not functioning – shear pin replaced, won't lift
3. Long bolt manholes – needs to have the ability to lift
4. Frangible roof – won't work for smaller diameter ASTs
5. Double walled tanks – Primary and secondary both need e-vents



Pop-Up Style

Weight of lid determines pressure setting (8 oz., 12 oz., 16 oz.) . Metal-to-metal seat or O-ring seat.



Flip-Up Style

Latch releases at set pressure, spring loaded hinge lifts lid open.



Long Bolt Manhole

Lid is able to lift under excess pressure. Vapors exit out opening.



Weak Roof-to-Shell Tank

Special joint designed to let go under excessive pressure.

Common AST Inspection Violations

Emergency Venting – Is it needed, and is it present?



Common AST Inspection Violations

Emergency Venting – Is it needed, and is it present?

Class IIIB liquids – Flash point equal to or greater than 200° F.

– motor oil, lubricating oil

Tank Capacities greater than 12,000-gallons and not stored in containment areas with Class I and II liquids do not require emergency vents. (NFPA 30 22.7.1.1.3)

Common AST Inspection Violations

AST system exterior coating

§ 245.533 and §245.612(g) The exterior surfaces of aboveground tanks and piping shall be protected by a suitable coating which prevents corrosion and deterioration. The coating system shall be maintained throughout the operational life of the tank.



Common AST Inspection Violations

Labels - § 245.515(a) and §245.612(i) – ASTs shall be labeled in accordance with industry standards and labels shall be easily legible from outside the containment area and shall be capable of readily identifying the regulated substance stored.



Secondary Containment

Secondary containment shall be provided on a new tank at installation, on an existing tank at reconstruction or relocation, or when the tank floor is replaced. Needs space for detection of a release

- permeability must be less than 1.0×10^{-7} cm/sec at anticipated hydrostatic head and shall be verified at installation.
 - Steel bottom ASTs on a concrete pad
 - Double steel bottom AST construction with leak detection ports (monitored monthly)
 - Horizontal saddle AST over earthen dike

Secondary Containment

- must be designed to direct any release to a monitoring point to meet leak detection requirements.
- existing ASTs without secondary containment and no cathodic protection or internal lining must be leak tested at each in-service integrity inspection until the tank is upgraded. ([SEE SLIDE #102](#))

Secondary Containment

Can single bottom AST, in direct contact with the ground meet secondary containment requirements?



Emergency Containment

Verify permeability, capacity, and compatibility...



Emergency Containment

Large AST Containments

Emergency containment must be able to contain 110% of the capacity of the largest AST in the containment area.

AND

Permeability of new and replacement emergency containment must be 1.0×10^{-6} cm/sec.

Existing emergency containment structures must meet the requirements for new/replacement structures.

OR

Verification by a PE that the containment structure permeability, coupled with a monitoring program and response plan, is capable of detecting and recovering a release.

Common AST Inspection Violations

Emergency Containment

245.612(d) – Emergency containment must 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.



Common AST Inspection Violations

Emergency Containment

Will it even hold rain for any period of time?



Common AST Inspection Violations

Emergency Containment

Will a cement block wall hold the contents of a catastrophic release?



Common AST Inspection Violations

Emergency Containment - Excessive Vegetation

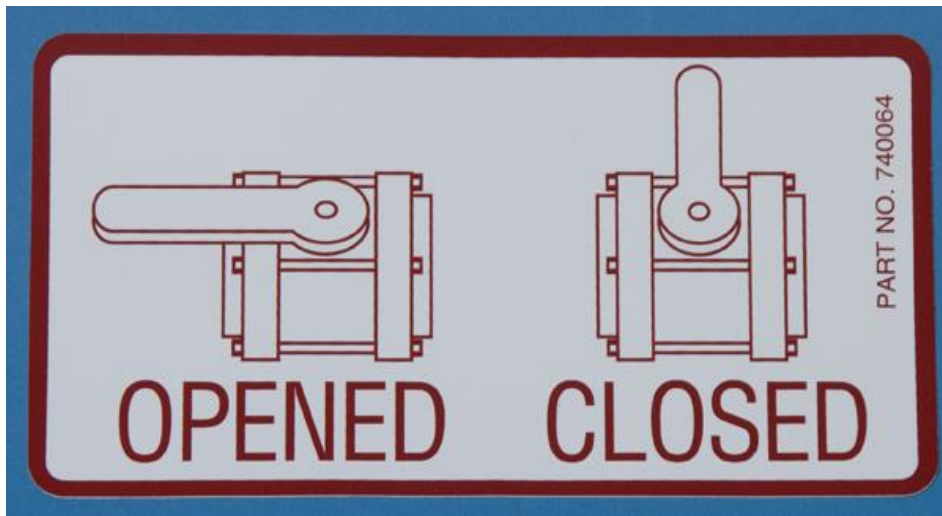
May 2013

July 2013



Common AST Inspection Violations

Emergency Containment - Valves



Common AST Inspection Violations

Emergency Containment – Valves



Common Inspection Violations

Emergency Containment – Structures to prevent accumulation of storm water.

What is wrong here?



Common AST Inspection Violations

**Emergency Containment – Spill and Overfill protection?
UL 142 Closed top dike tank with removable rain shields**



Common AST Inspection Violations

How about inspecting a UL142 Closed top dike AST with welded rain shields?



IMPORTANT NOTICE

UL-142 Closed-top Dike Aboveground Storage Tanks Inspections

The Department of Environmental Protection (Department) has recently been in discussions with the Steel Tank Institute (STI) regarding the inspection requirements for Underwriters Laboratories, Inc. (UL)-142 listed closed-top dike aboveground storage tanks (ASTs). STI is a Nationally-recognized association that trains and certifies individuals to inspect ASTs to the STI's Standard for the Inspection of Aboveground Storage Tanks (SP001). The Department acknowledges this AST inspector certification as one of the acceptable pre-requisites in order to become a Department-certified aboveground manufactured storage tank inspector.

STI's SP001 Inspection Standard does not specifically describe AST inspection methodology for tanks constructed to the UL-142 closed top dike standard. Rain shields, which are welded from the upper portion of the shell of the AST to the steel containment box, limit access to the lower portions (approximately two-thirds) of the tank shell, making ultrasonic thickness measurements and visual inspections of the enclosed portion of the tank shell difficult.

The Department has taken the position that inspectors may use the following criteria to evaluate UL-142 closed-top dike tank system (must be labeled and come from manufacturer with welded rain shields in place) integrity and suitability for service during AST in-service integrity inspections:

1. Visual inspection shall be conducted through an access port to yield enough information about the condition inside the closed top dike area and to determine if liquid is present.
2. If water has entered the space or conditions indicate corrosion could be causing a problem, further evaluation may be needed. AST modifications may be needed in order to provide access for additional assessment.
3. Ultrasonic thickness measurements shall be taken on the tank shell wherever accessible, such as above the rain shields.
4. Ensure tank systems are operated with spill and overflow protection controls. (spill bucket, overflow protection, block valves on product lines, anti-siphon/solenoid valves)
5. Ensure an emergency vent is present and functions for the closed-top containment structure.

If you have questions or desire clarification of the above, please contact the Division of Storage Tanks at (717) 772-5599.

Common AST Inspection Violations

Double-walled ASTs

What items are needed to meet emergency and secondary containment requirements?

- 1. Spill bucket/containment at the fill point**
- 2. Overfill protection – alarm, device, gauge/shut down procedure.**
- 3. Block valves on product lines (located as close as possible to the shell of the AST)**
- 4. Solenoid valve/anti-siphon device – located immediately downstream of the block valve and required on piping that is below the maximum liquid level.**

▶ ASTs in Underground Vaults

Piping distribution systems used to dispense Class I or II motor fuels for resale must be provided with release detection equivalent to underground piping release detection addressed in Section 245.445 and equipped with a continuous leak detection system capable of detecting vapors and liquids. The detection system must activate an alarm that automatically shuts down the dispensing system if a release occurs.



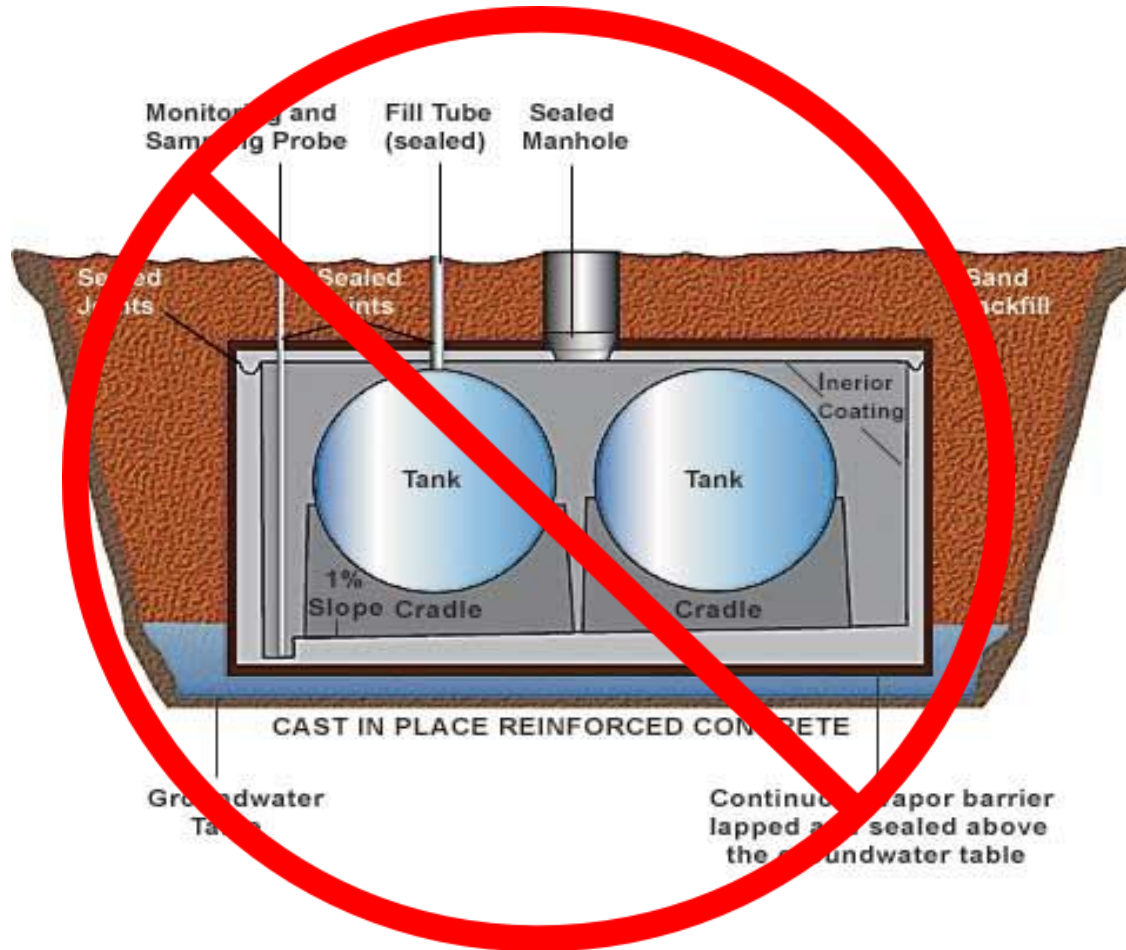
▶ ASTs in Underground Vaults

If you cannot physically enter the underground vault, it must meet Underground Storage Tank requirements. ASTs can not be utilized as USTs, & vice versa; USTs can not be used as ASTs!!! (NFPA 30, PA L & I)



▶ ASTs in Underground Vaults

A tank must be in its own vault. Adjacent vaults may share a common wall.



Questions from the field....

Don't even ask. This is a very ugly situation.



Questions from the field....

Should we put this tank way out back behind the building because acetone is so flammable?



► Questions from the field...



What to do when your spill bucket is full?

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► Questions from the field....

Can we use this tank to store aviation gas?



Questions from the field...

What chime?



Questions from the field...

Why do monthly maintenance checks when you have rain shields?



Questions from the field...

My dad installed this tank 30 years ago...We've never had a problem with it. Why can't we continue using it?



Questions from the field...

...there are more than a dozen reasons why!



Questions from the field...

I lift things up and put them down...The shop built tank will be lifted to install secondary containment and put back down. What do I need to do?



Questions from the field...

We need to move our tank from the back of the garage to down behind the warehouse with the other one....What do I need to do?



➤ Questions from the field...

We have a currently in use AST at our finishing plant across the street, that we'd like to use in our production plant. What do we need to do?



Questions from the field...

Should tanks be protected against flotation?



Questions from the field...

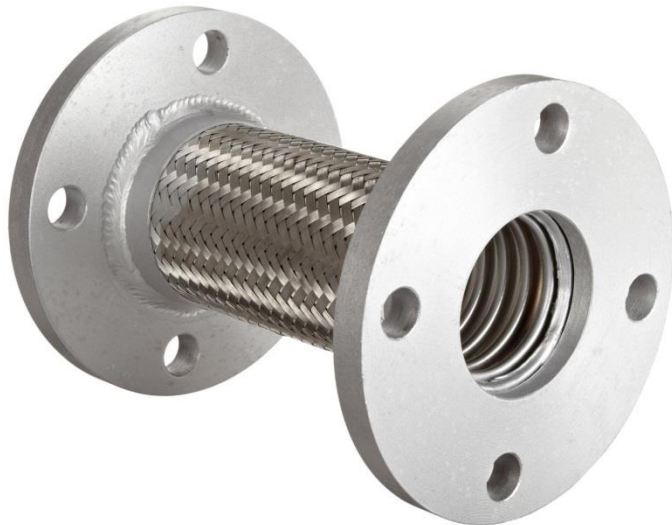
Any suggestions for a non-regulated AST?



➤ Other Reminders...

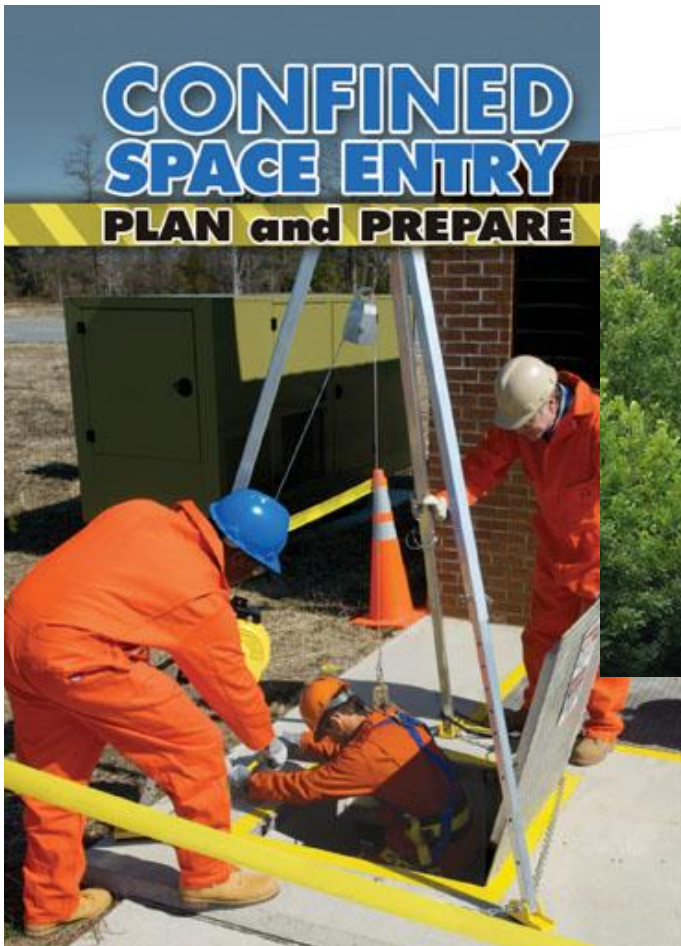
Flexible Connectors

- Always check with tank manufacturer's installation instructions.
- Always ensure it is rated and compatible for the product stored.
- Consider the situations where these connections are needed.



Other Reminders...

Safety



➤ Other Reminders...

Holes in AST roofs

- **Temporary repairs are not permanent repairs, and are not recognized by the American Petroleum Institute Standard 653 – Tank Inspection, Repair, Alteration, and Reconstruction Standard.**
 - **May be allowable for a limited duration, but must be agreed upon by DEP and completed by AFMX and IAF.**
 - **Non-metallic composite materials used to repair a roof of a steel tank will not bring a tank back into compliance.**

What Paperwork Goes Where?

	Regional	Central
Integrity/Installation Inspection	X	X
Lining Inspection	X	X
Mod Report/Mod Insp	X	X
30 day Closure Notice	X	
Closure Report	X	
Contamination / Release Reporting	X	
Amended Registration	X	X
Registration		X
TOS Extension Request Letters		X



Report Submittal Emails

- Central Office: tanks@pa.gov
- Region 1 (SE): ra-serotanks@pa.gov
Modification Reports must be mailed.
- Region 2 (NE): ra-nero-tanks@pa.gov
- Region 3 (SC): ra-ep-scro-tanks@pa.gov
- Region 4 (NC): ra-nc-tanks@pa.gov
- Region 5 (SW): ra-pghtanks@pa.gov
- Region 6 (NW): ra-nwro-tanks@pa.gov

Individual emails must be < 10 MB total



Bureau of Environmental Cleanup & Brownfields

DEP Regional Emergency Response Phone Numbers

North West Region – 1-800-373-3398

South West Region – 412-442-4000

North Central Region – 570-327-3636

South Central Region – 1-866-825-0208 **

North East Region – 570-826-2511

South East Region – 484-250-5900

****Please note that South Central's Phone number is NEW as of 2014****

➤ Additional Questions?

Now is the time to ask...Thank you for your attention!





Bureau of Environmental Cleanup & Brownfields

Questions?

Kris Shiffer – 717-772-5809 – kshiffer@pa.gov

Chad Clancy – 717-772-5830 – cclancy@pa.gov

Alex Eckman – 717-772-5827 – eckman@pa.gov

Aaron Emick – 717-772-5810 – aemick@pa.gov

Eric Lingle – 717-783-2403 – elingle@pa.gov

Anne Toth – 717-772-5808 – anntoth@pa.gov

Wendy Davis – 717-772-5829 – wendavis@pa.gov