# Administrative & Aboveground Storage Tank Inspector Seminar

Bureau of Environmental Cleanup & Brownfields 02/27/2025





# **Attention**



- Attendance at this course is required periodically for certification renewal.
- You are welcome to attend DEP training as often as you would like.
- Information being shared is for your benefit.
- Opportunity for discussion to better the tanks program.

"Nobody ever told me that."



# **Questions: Who to Contact**

ASTs – Inspections and Modifications		
Magen Majeski	717-772-5810	Compliance/ Policy
Kevin Davenport	717-772-5823	Regions 1, 4 & 5
Jesse Winfrey	717-787-9561	Regions 2, 3 & 6
Tank Registration and Permitting		
Ken Corish	717-772-5815	
Tank Handler and Inspector Certification		
Anne Toth	717-772-5808	
Wendy Davis	717-772-5829	



US EPA has added **PFOA and PFOS**, including their salts and structural isomers to the CERLA hazardous substance list.

- Effective date 7/8/2024
- Beginning 7/8/2024, storage tanks (ASTs and USTs) containing substances
  with greater than 'de minimis' concentration of these substances are
  regulated by DEP, unless they meet an exemption (example: a pressure
  vessel where the AST itself is operated under continuous pressure)



Newly regulated ASTs should have been registered by 7/8/2024:

 These AST systems were required to meet all applicable sections of Chapter 245 by 7/8/2024.

 Owner should hire an AST certified installer or inspector to register the tanks.





- Installer/Inspector:
  - Assist owner in completing registration paperwork, including AST system components.
  - Include AST construction standard (if any) on signature page.
  - ASTs need to meet either double walled tank requirements or be installed within a containment area that meets the requirements in Chapter 245 (large or small tank section, depending on tank size).
  - ASTs that operate under consistent pressure do not need to be registered (greater than 15 psi) – Pressure Vessel exemption.



- Installer/Inspector (cont'd):
  - DO NOT sign the registration form as a certified individual UNLESS the AST system meets ALL applicable DEP technical requirements for regulated AST systems.
  - Attach a signed cover-letter, itemizing deficiencies/violations that must be corrected for the AST system to meet applicable technical requirements.



#### Where could these tanks be?

- Bulk plants
- Airports
- Carpet and textile manufacturers
- Cookware manufacturers
- Cosmetic manufacturers
- Drycleaners
- And more...





# Summary

- Administrative
  - Registration & Permitting
  - Certification Applications & Renewals
  - Electronic Submissions through "PUP"

- "Technical"
  - Release Reporting Requirements
  - Site Specific Installation Permits
  - Standards of Performance for Certified Individuals
  - Industry Standards
  - Facility Monitoring/Operation and Maintenance
  - Containment
  - Linings
  - Closure



# **Administrative Training**





# **Administrative Training**

- **Section 1:** New Website
- Section 2: Public Upload Portal (PUP)
- Section 3: Registration Form/e-permitting
- Section 4: Site-Specific Installation Permits
- Section 5: Certification Reminders

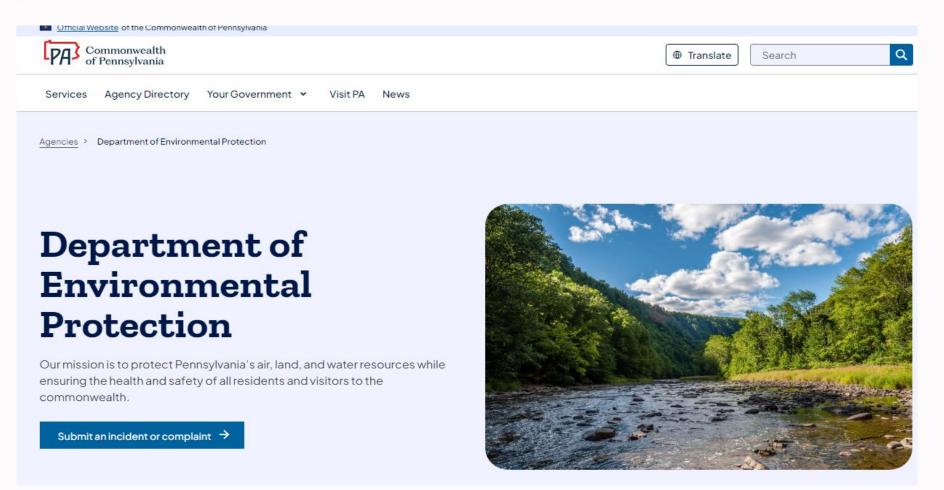


www.pa.gov/agencies/dep.html

The old website address <u>www.dep.pa.gov</u> will redirect you to the new website address

However, you may need to update your bookmarks or favorites











#### Streamlining Permits for Economic Expansion and Development (SPEED)

Created to accelerate permit processing and keep Pennsylvania aligned with business demands, eligible permit applications will use DEP-approved contractors for expedited review.

The Invitation For Bids (IFB) is now open to find qualified professionals to fill these roles.

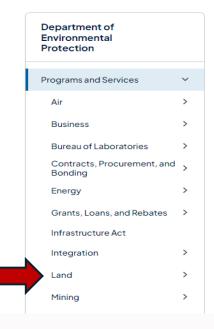
Read more about SPEED →





DEPARTMENT OF ENVIRONMENTAL PROTECTION

#### **Programs and Services**



Explore the Programs and Services section to see all the ways the Pennsylvania DEP aims to protect air, land, and water resources in PA.





PROGRAMS AND SERVICES

#### Land

Department of
Environmental
Protection

Programs and Services

Air

Business

Bureau of Laboratories

Contracts, Procurement, and Bonding

Explore this section to see all the ways the Pennsylvania DEP aims to protect land resources in PA.

Land Recycling Program 

Mining 

Site Remediation 

Storage Tanks 

Waste Programs 

Waste Programs



**ENVIRONMENTAL CLEANUP AND BROWNFIELDS** 

#### **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 <a href="Storage Tank">Storage Tank</a> and Spill Prevention Act, which became effective on Aug. 5, 1989, the Storage Tank Program is responsible for developing and implementing <a href="regulations">regulations</a> for aboveground and underground storage tanks. Specific program responsibilities include the following: tank <a href="registration">registration</a> and payment of an annual registration fee, <a href="certification">certification</a> of tank handling and inspection individuals and companies, <a href="permitting">permitting</a> of tanks, establishment of technical and operational standards for <a href="aboveground">aboveground</a> and <a href="underground">underground</a> storage tank systems, and procedures for reporting of releases and corrective action by tank owners.

What's New in Storage Tanks

2018 Revisions to
Pennsylvania's
Storage Tank
Regulations

About Storage
Tanks

→

Storage Tank
ePermitting

→

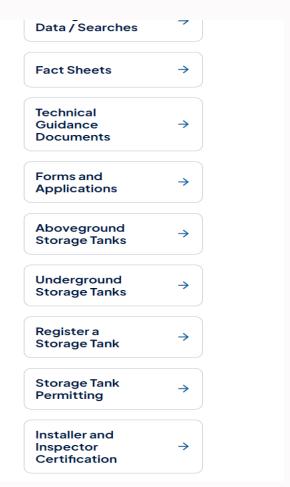
Storage Tank
Data / Searches





#### What's New in Storage Tanks

- PFOS and/or PFOA and related substances in Storage Tanks (PDF)
- Electronic payments and document submittals:
  - Quick Pay for registration fees
  - Online Registration & Fee Payment
  - Public Upload Portal for Document Submissions | Instructions (PDF)
- Summary Information on Underground Storage Tanks (USTs) (PDF) Updated 12/11/2024





www.pa.gov/agencies/dep.html ———

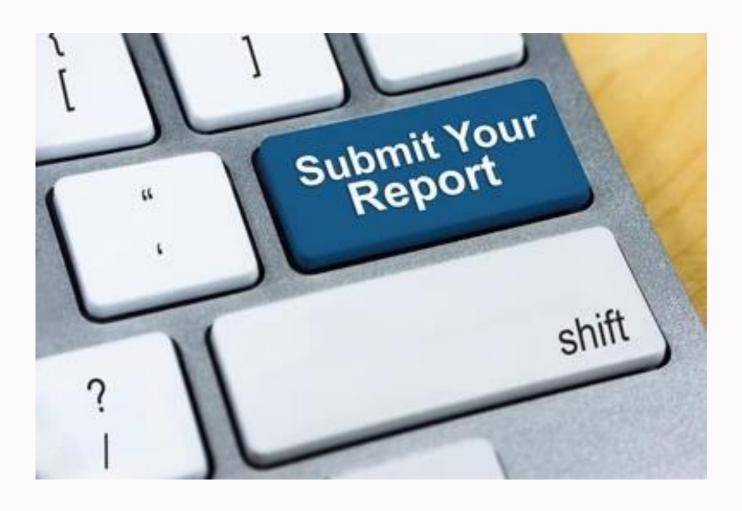
**Programs and Services** ———

Land ----

**Storage Tanks** ——



# **Electronic Submissions – "PUP"**





# Public Upload with Payment (PUP)

- DEP has been working over the past 5 years to transition records to a common Electronic Records Management System.
- A major feature of this system is the ability for the public to provide documents directly to DEP through a public upload interface. You may have encountered this public upload system in the past.
- The system has been integrated with a payment function that can be used by many areas in DEP to accept payments. This function would be unusual for Storage Tanks submissions.
- The payment feature can be used for Site-Specific Installation Permit (SSIP) fees and penalty payments associated with enforcement documents.



# Where

https://www.pa.gov/agencies/dep/programs-and-services/land/storage-tanks.html

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#### What's New in Storage Tanks

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2018 Revisions to Pennsylvania's Storage Tank Regulations

About Storage Tanks

Storage Tank ePermitting

Storage Tank Data / Searches

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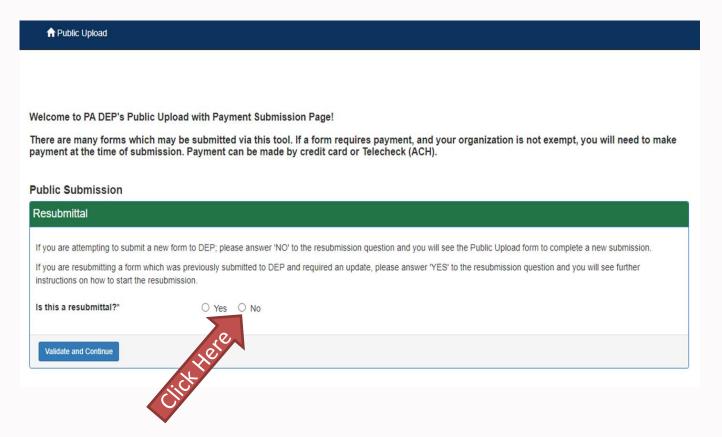
Fact Sheets

Technical
Guidance
→
Documents

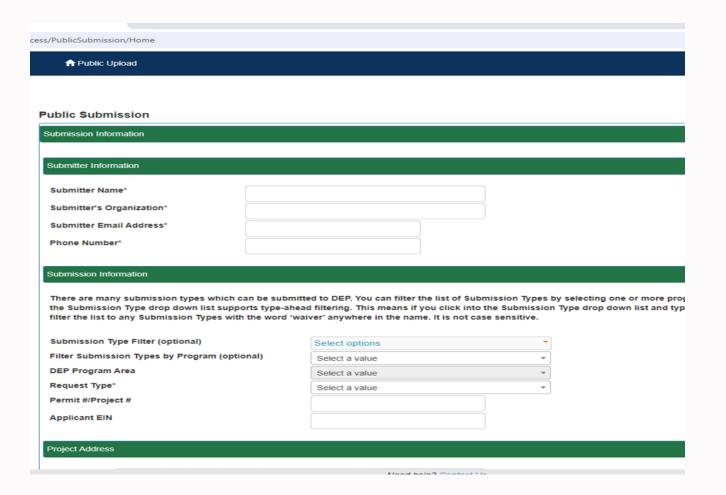


# Where

Click 'No' unless a DEP representative has returned a previous submission with a request to update and resubmit.







The top of your submission screen should look like this.

There are 5 areas:

- Submitter Info
- Submission Info
- Project Address
- Comments
- File Upload



#### **Submitter Info**

- Information in these fields should be filled out for the individual responsible for the point of contact for questions about the submitted documents.
- This individual will receive an emailed confirmation.



#### **Submission Info**

Filter by: ENV CLEANUP & BROWNFIELDS ECB

#### **Submission Information**

There are many submission types which can be submitted to DEP. You can filter the list of Submission Types by selecting one or more program areas. Additionally, the Submission Type drop down list supports type-ahead filtering. This means if you click into the Submission Type drop down list and type the word 'waiver'; it will filter the list to any Submission Types with the word 'waiver' anywhere in the name. It is not case sensitive.

Filter Submission Types by Program (optional)

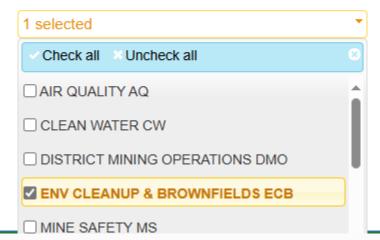
Submission Type - Select from the list\*

**DEP Program Area** 

Request Type\*

Permit #/Project #

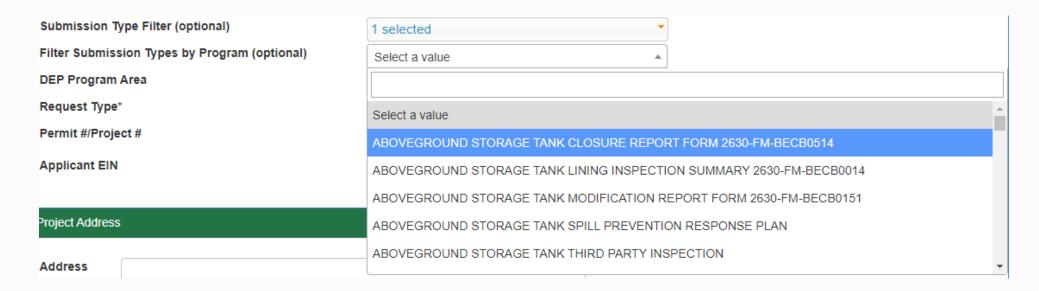
Applicant EIN





#### **Submission Info**

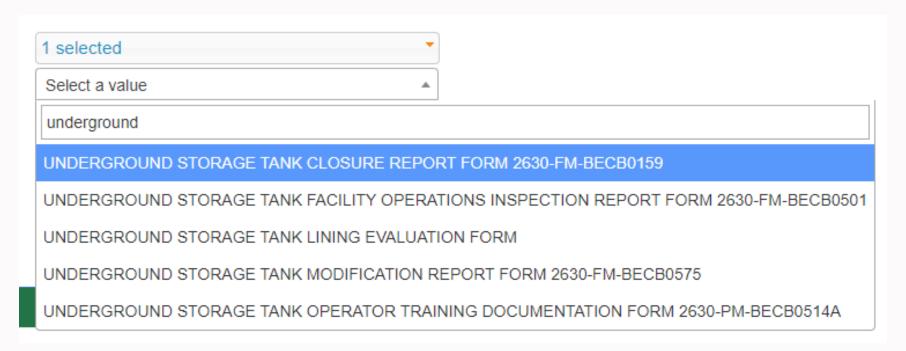
When filtered, the Filter Submission Types by Program (really Document Name) is narrowed to Storage Tanks, Site Remediation, and Land Recycling documents.





#### **Submission Info**

Start typing part of the **Document Name** to narrow the list further.





#### **Submission Info**

Start typing part of the **Document Name** to narrow the list further.

- Suggestions:
  - MOD: UST and AST Modification Report Forms
  - Under: Underground FOI, Closure, Lining Eval, Operator Training
  - Install: Certification Forms, Install/Closure Notification, Alternative Fuels
  - Closure: UST and AST Closure Forms
  - Regis: Storage Tank Registration/Permitting Form



#### **Submission Info**

- Request Type:
  - O NEW
  - Some of the other categories may seem like they are Storage Tanks related,
     but they represent types of submitted documents for other programs.

#### Please place the Storage Tanks Facility ID in the Permit #/Project # field





#### **Submission Info**

If you are a NEW facility and submitting your first Registration form (no Facility ID has been assigned by DEP)

- Enter the Applicant EIN



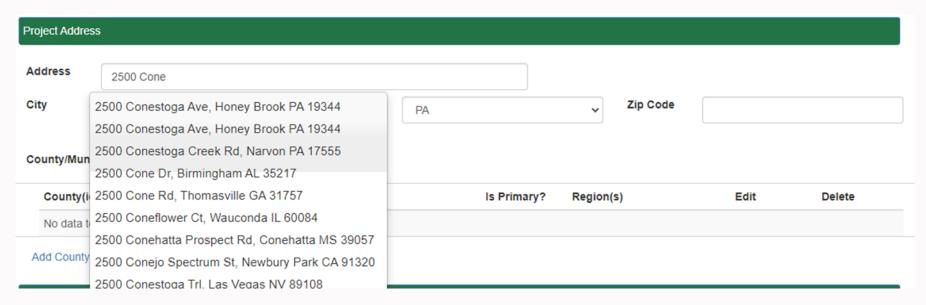
#### **Submission Clarification**

- Each submission is associated with a Facility ID (Permit #)
- But multiple files and types of files can be uploaded
- This is NOT intended to allow submitters to send in documents for multiple facilities or document types in the same upload



#### **Project Address**

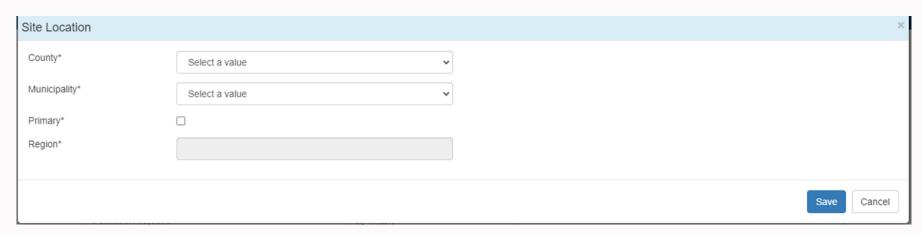
If an address exists, the autocomplete function will make it available as you type. When selected, the autocomplete will finish the address entry, city, state, and zip code.





#### **Project Address**

- Clicking Add County/Municipality/Region will pop up the screen below.
- You will select the Facility's County.
- After the County's Municipality list loads, you will select the Municipality that the facility is located within.
- The Region will auto complete.
- Click Save.



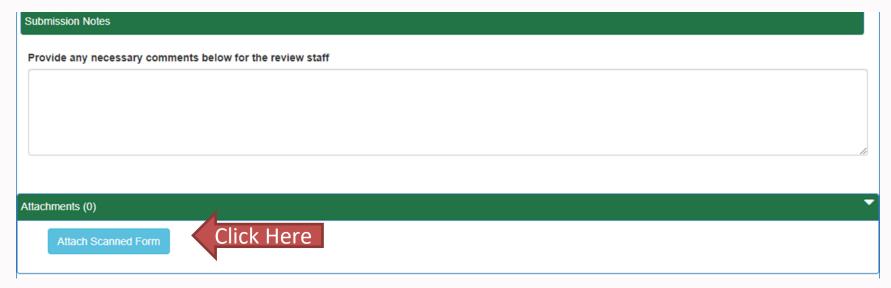


#### **Comments**

- Comments are optional; there are no required comments.
- We reserve the right to change this requirement based on DEP needs.

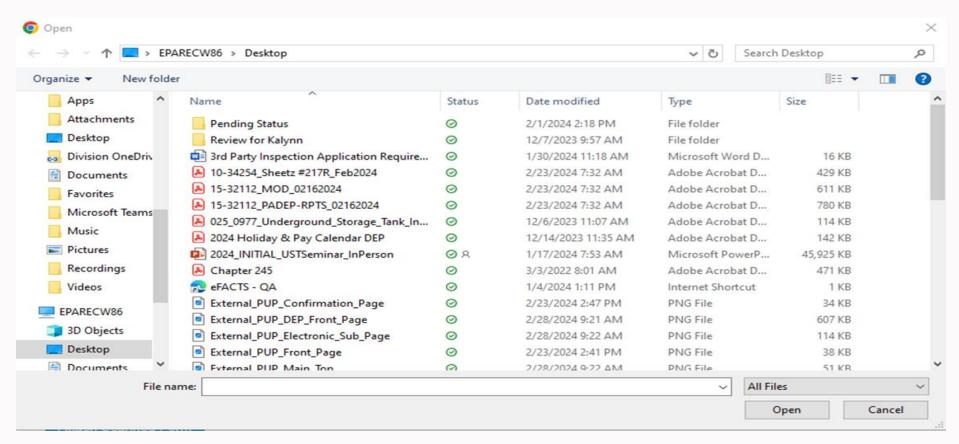
#### **Attachments**

- The action happens here!
- Click Attach Scanned Form.





#### **Attachments**



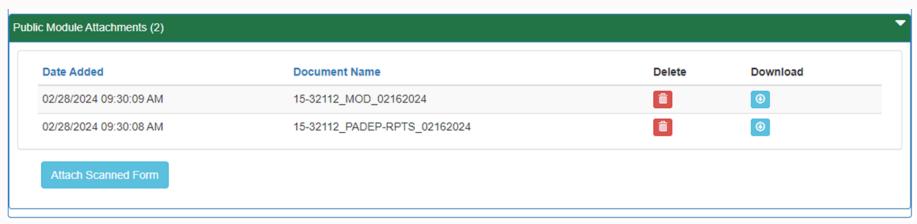


### How

#### **Attachments**

**Recommendation:** Place files in designated location to make easy to find. **Notes:** 

- No commas in File Names
- No File Names longer than 100 characters IMPORTANT!
- You can CTRL+click to select multiple files





### Reminder

### When Can I Submit Multiple Documents?

#### UST Example:

- Modification Report: You may attach testing forms and facility diagrams to the Modification Report.
- FOI Report: Should also attached cathodic protection evaluations reviewed during the inspection. You may also attach monthly walkthrough inspections, 60-day ICCP rectified readings, and other documents reviewed to make compliance determinations during the inspection.



### Reminder

### When Can I Submit Multiple Documents?

#### AST Example:

- Inspection Report (General): May attach supplemental documentation related to the tank system being inspected (ex: P.E. Containment Certification).
- Out-of-Service Inspections: May attach the Lining Inspection Form where required.
- Modifications and Modification Inspections: May attach supplemental documentation related to the reported activity.



### Reminder

### When Can I Submit Multiple Documents?

#### Registration Example:

Registration/Permitting Applications: May also attach UST Operator training documentation, deed (or other ownership documentation), substance SDS, or other pertinent documentation relating to the registration submission.

#### Certification Example:

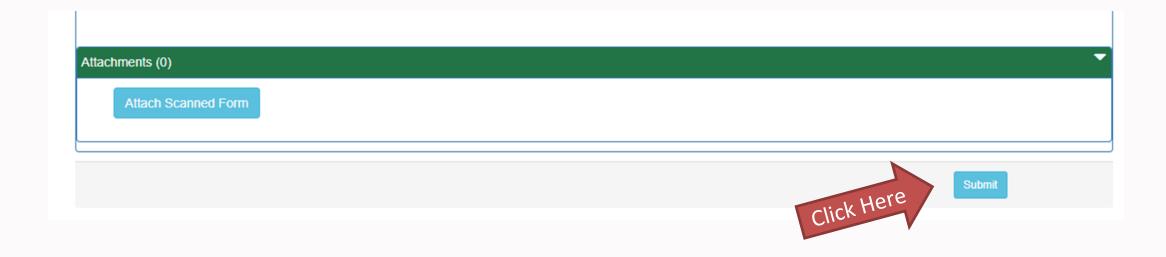
 Certification Applications: May attach the Attachment A, training course certificates, manufacturer letters, or other documentation associated with the submitted application.



### How

#### **Submit**

Large file sizes may take more time than a regular internet link to load.





# **Complete - Confirm**

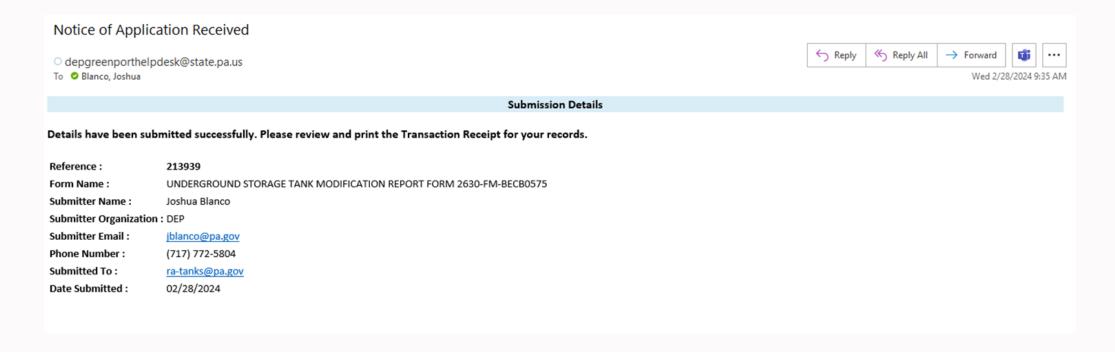
#### **Confirmation Screen**

♠ Public Upload				
	Submission Details			
Details have been sub	mitted successfully. Please review and print the Transaction Receipt for your records.			
Reference :	213939			
Form Name :	UNDERGROUND STORAGE TANK MODIFICATION REPORT FORM 2630-FM-BECB0575			
Submitter Name :	Joshua Blanco			
Submitter Organization :	DEP			
Submitter Email :	jblanco@pa.gov			
Phone Number :	(717) 772-5804			
Submitted To :	ra-tanks@pa.gov			
Date Submitted :	02/28/2024			
	Print Confirmation			



# **Complete - Confirm**

#### **Confirmation Email -> Submitter Email**





### Summary

- Step 1: Navigate to <u>https://greenport.pa.gov/ePermitPublicAccess/PublicSubmission/Home</u>
- Step 2: Enter your information
- Step 3: Enter Document/Submission Type Info
  - Filter by: ENV CLEANUP & BROWNFIELDS ECB
- Step 4: Enter Facility ID in Permit #
  - 1 Document/Submission Type for 1 Facility per upload
- Step 5: Enter Address, County, and Municipality
- Step 6: Click Submit
- Step 7: Save your confirmation



# Why

### Why is DEP asking for your participation?

- <u>Document Security</u> less risk of loss between your submission and final filing.
   The document remains in one storage location with a designated reference number through the whole lifecycle.
- Future Access documents move through our review and processing directly into Electronic Records Management. This will allow future document reviews to go to a single source for all records about any location.
- <u>Clear Confirmations</u> certified individuals and companies are provided with a clear submission confirmation to verify timely and appropriate submission.
- Single Submission no need to send to multiple email addresses and verify submission to the correct regional office resource email account.



#### Two methods of submittal:

- PUP (attach document from your computer)
- e-permitting (online form)



#### **Advantages of e-permitting:**

- Provides immediate feedback for missed or incorrect information
- Faster processing!
- Registration/permit certificate is available for download immediately following payment
- Update contact information immediately through Maintenance tab
- Payments and contact updates can be made in bulk (multiple facilities at one time)
- Registration/permit certificate is always available if you need an additional copy



#### **E-permitting accepts:**

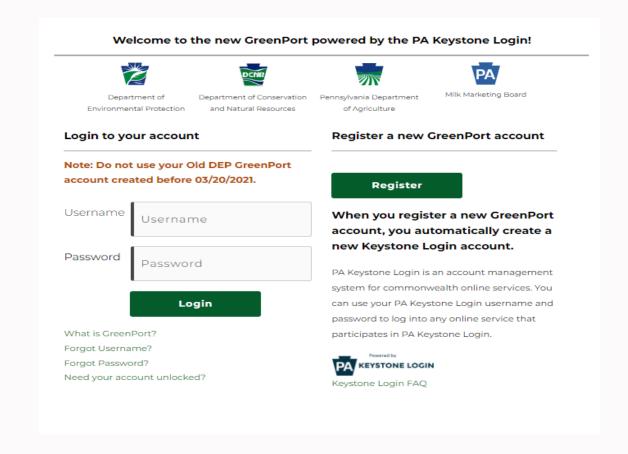
- Registration fee payments
- New facility registration
- Add tanks
- Remove or close tanks
- Change tank status or substance
- Change of ownership
- Update contact or owner information
- Update site or facility information



In order to use the online registration form through e-permitting you must first create a Greenport Account:

https://greenport.pa.gov

Click the register button to create a new account.



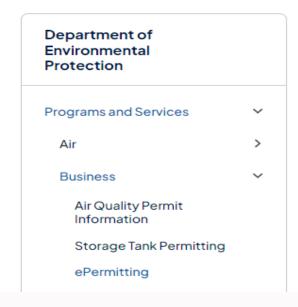


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### Storage Tanks ePermitting



#### Online Registration and Fee Payment Instructions

Quick Pay now available – pay registration fees and obtain your certificate with no login required!

Storage tank owners may now pay annual Storage Tank registration fees and submit the below listed storage tank registration amendments online through the Department's ePermitting application on Greenport. Follow the steps below to create a Greenport account and access the ePermitting application. Contact the Division of Storage Tanks at 717–772–5599 with any questions.

Registration amendments accepted through ePermitting Dashboard using the Create or Maintenance Tab (see step 4 below):



#### Instructions and user guides can be found on the e-permitting page

- Create an account in the <u>DEP Greenport</u> if you do not currently have one. From the Greenport home page, click the "Register" button and follow the instructions for creating a Greenport account. A <u>user guide</u> is available to explain the steps in registering a new account, or importing an existing Greenport account into the new Keystone Login system.
- 2. Complete the enrollment process and Electronic Filing Administrator (EFA) Registration and Security Agreement. Follow the <u>e-permitting</u> <u>Enrollment Guide</u> for the steps needed to enroll as a storage tank owner, employee of a storage tank owner, DEP-certified storage tank installer/inspector, or DEP-certified company representative.

The EFA Registration and Security Agreement serves as your legal authorization to represent the storage tank owner in online business transactions with DEP. Once you have completed the agreement by providing your electronic signature, you will be directed to your ePermitting dashboard.

3. Paying registration fees?

Reference the Storage Tank Registration Fee e-Permitting Payment

<u>Guide</u> (PDF) for a tutorial on how to verify your facility information and pay registration fees in the e-permitting application. You must verify that the tank, owner, and facility information is correct before making payment. Any incorrect information must be corrected with DEP by submitting a registration amendment through e-permitting (see step 4 below).

Once payment is made, you will be able to view, print, and save a registration certificate for each paid facility. This registration certificate is valid through the end of the regional billing cycle.

4. Submitting a registration amendment?

Use the Storage Tank Registration Submissions Quick Guide to assist you with the process of submitting registration amendments, registering new facilities, or updating contact information, or change of ownership.

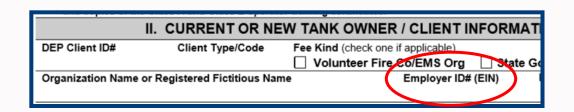
Please contact the Storage Tank Program at 717, 772, 5599 if your

Please contact the Storage Tank Program at 717–772–5599 if you need any assistance with the e-permitting application.



#### **Frequently Missed Information:**

- Section II (Tank Owner):
  - Employer ID# (EIN)
- Section IV (Facility):
  - Facility Kind
  - Latitude/Longitude (can be obtained from Google maps)
- Section VI (Tank Information):
  - Install date for new tanks
  - Change of status date
  - Removal date



IV. FACIL	IV. FACILITY INFORMATION					
acility Name			Facility Kind			
ite Location)		Facility Location Line 2				
		State		ZIP+4		
	Latitude		Longitude			
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
Feet		Or	Me	ters		



#### **Frequently Missed Information:**

- Section IX (Owner Certification):
  - Owner's signature
  - Date signed
- Section X (Installer Information):
  - Installer/Remover signature
  - Date signed
- Required Attachments:
  - UST operator training documentation form
  - Class A/B operator certificates

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



### **Registration Certificates**

- DEP no longer sends registration certificates if invoices are paid online:
  - Facility owners have access to the certificate right away
  - The same applies if the tank status is changed online
- DEP still prints and mails registration certificates if transactions are handled via mail
- Security paper is no longer used for printed registration certificates:
  - Online versus printed certificates have different formatting
  - If you question the legitimacy of the certificate, it can be verified on the Active Storage Tank Search (USTs and small ASTs only)



#### **Individuals:**

Know your expiration date!

Start scheduling training 12 – 18 months in advance:

- Technical Training
- Administrative Training
- Retesting? Submit application at least 120 days out



# DON'T FORGET TO SUBMIT YOUR RENEWAL APPLICATION TO DEP!

DEP CAN'T GRANT YOU CERTIFICATION RENEWAL WITHOUT IT!



#### **RENEWAL IS NOT AUTOMATIC**

Submit (via PUP) the Renewal Application and Technical Training Certificates

#### PUP System:

- Fill in online blocks
- Permit # is your Client # (found on your certificate)
- Attach application and training certificates
- Submit



Companies:

Pay your TIIP fees: <a href="https://ustif.pa.gov">https://ustif.pa.gov</a>

Renew every 3 years: submit application via PUP system



### **New Certification**

#### **New Applicant or Adding Categories**

- Application Form
- Attachment A for each category being requested (some exceptions)
- Initial Technical Training Course for each category being requested (some exceptions)
- Hand sign your application no typed computer fonts
- Submit at least 60 days before desired date of testing



### **New Certification**

2630-PM-BECB0506c 4/2012		
III-b. Storage Tank Facility Employer Inform Provide detailed information for each activity litthe activity numbers listed in III-b.	nation	Applicant Name  a. The activity numbers in III-a. must correspond to
Facility where the work was completed	DEP Verified	Applicant's employer when work was performed
Activity No. 1 Owner Name	Approved	Company Name
Facility Name	I .	Address
Pa Facility I.D. #		City
Address	Verified	State Zip
City		Contact
StateZip		Phone ()
Owner Contact		Verifying Official Signature
Contact Phone ()		
Facility Phone ()		Reported under PA certification ID.
Activity No. 2	Approved	Company Name
Owner Name	□	
Facility Name	I	Address
Pa Facility I.D. #		City
Address	Verified	State 7in



Online Examinations by ASC (Assess)



 Exams can be scheduled any time (24/7) with the exception of some holidays



- Must submit <u>complete</u> application 60 days prior to desired exam date
- After approval, applicant receives an email and letter from DEP
- Applicant receives an email from ASC with instructions about paying for and accessing the exams
- Fee is \$75 per exam
- Examinee needs:
  - Computer with webcam
  - Secondary camera (i.e. smartphone)
  - Government ID (Driver's license, etc.)



- Examinee is connected to a live proctor who will provide instructions and monitor the exam.
- Work surface must be cleared. No other people or pets allowed in the room where applicant is taking the exam.
- DEP provides test results to examinee within 10 business days.
- 80% needed to pass any exam.
- Exams can be scheduled any time (24/7) with the exception of some holidays.



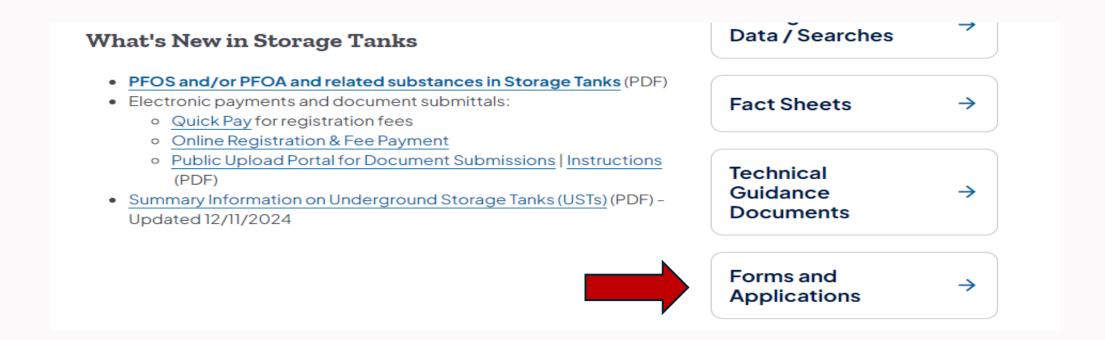
#### **Administrative Exam:**

- Required for first-time applicants only
- Timed exam 1 hour limit
- Open book
- During the exam Chapter 245 and Storage Tank and Spill Prevention Act must be accessed via an online link. Paper copies may not be used during the exam
- Hard copies will still be mailed to applicants



### **Certification Reminders**

#### Use the most recent version of DEP's Forms





### **Certification Reminders**

#### Notify DEP of Changes:

- Address
- Employer
- Email address

Amendment form for individuals.

Company application form marked as amendment.

For email changes only, simply email one of us.







Certified individuals are required to report the following conditions to DEP if observed while performing services as a certified individual:

#### Release

Spills, leaks, discharges, etc. into water or soil OR that pose an <u>immediate</u> threat\* to water or soil.

# Suspected Contamination

Indications of a release:
holes in shell, failed leak tests, unusual vapor levels.

# Confirmed Contamination

Observation of regulated substance in environmental media.



Release

Suspected Contamination

Confirmed Contamination

#### 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 <u>immediate threat of contamination</u> of the soils, subsurface soils, surface water or groundwater.

#### **Immediate Threat of Contamination**

Spilling, leaking, emitting, discharging, escaping, leaching or disposing from a storage tank into a containment structure or facility in an amount equal to or greater than the reportable release quantity determined under section 102 of CERCLA and regulations promulgated thereunder. The term also includes spilling, leaking, emitting, discharging, escaping, leaching or disposing of petroleum into a liquid-tight containment sump or emergency containment structure in an amount less than 25 gallons as a result of a tank handling activity unless the certified installer providing direct onsite supervision has control over the regulated substance, the regulated substance is completely contained and, prior to the certified installer leaving the storage tank facility, the total volume of the regulated substance is recovered and removed.



Release

Suspected Contamination

Confirmed Contamination



Release – Regulated substance escapes the storage tank system.

Product leaked into the emergency containment structure is generally considered a release.





Release

Suspected Contamination

Confirmed Contamination

#### A Release does not include:

Petroleum leaks of less than 25 gallons into a liquid-tight containment sump or emergency containment structure as a result of a tank handling activity if:

- The certified installer providing direct onsite supervision has control over the regulated substance;
- The regulated substance is completely contained; and
- The total volume of the regulated substance is recovered and removed before the certified installer leaves the tank facility.



Release

Suspected Contamination

Confirmed Contamination

#### Indications of a release, like:

- Unusual level of vapors from unknown origin.
- Evidence of a regulated substance or vapors in soils, basements, sewer lines, utility lines, surface water or groundwater.
- Sudden or unexpected loss of a regulated substance from a storage tank.
- Test, sampling, or monitoring results from a release detection method which indicate a release.
- Unusual operating conditions, which may be indicative of a release.
- Unexplained presence of water in a storage tank.
- Hole(s) discovered in a storage tank system.
- Other events, conditions or results which may indicate a release.



Release

Suspected Contamination

Confirmed Contamination

Regulated substance observed in environmental media (soil, water, backfill)







Release

Suspected Contamination

Confirmed Contamination

If you observe any of these while performing duties as a DEP-certified individual, you must report it to DEP in writing within 48-hours of observing the condition.

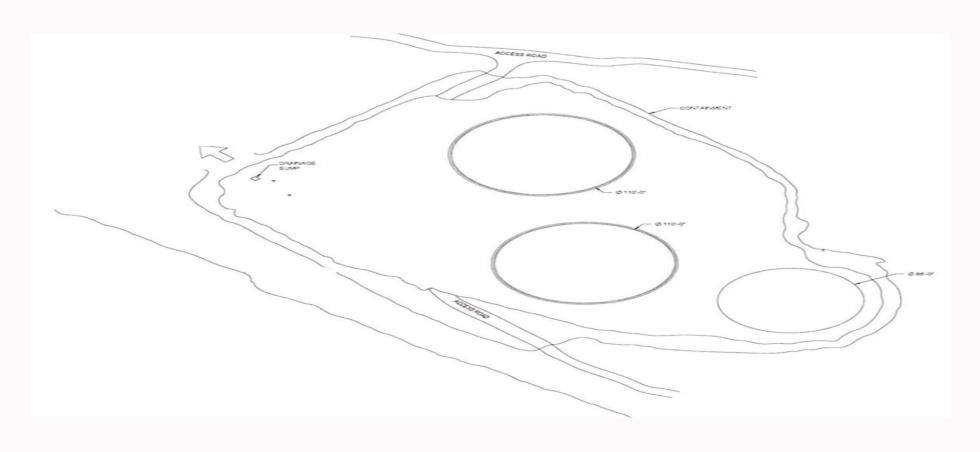
Notification of Contamination

NOR/NOC Form



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION	ON .	2620-FM-BECB0082 Rev. 6/20 BUREAU OF ENVIRONMENTAL CLEANUP AND BROWNFIELD		
NOTIFICATION OF RELEASE (O	FACILITY I.D	. NUMBER	☐ Initial ☐ Follow-Up	
NOTIFICATION OF CONTAMINAT	TION (Certified Installer	s and Ins	pectors)	
INFORMATION FOR OWNERS AND OP	ERATORS (O/O)			
The Storage Tank Program's Corrective A storage tank systems and storage tank fa				
Suspected Release Reporting: Upon determined whether a release has occur release, complete and submit this form to	red, the owner or operator me	ust, within 1	5 days of the indication of	the suspected
Confirmed Release Reporting: The or telephone as soon as practicable, but no (b)). Within 15 days of that telephone not regional office of the Department, to ear release has impacted environmental med and (e)). And if new impacts to environmented that initial written notification, the or and submit this form to the Department at	later than 24 hours, after the iffication, the owner or operator of municipality in which the rila or water supplies, buildings ental media or water supplies, wner or operator must, within	confirmation must complete ase occu , or sewer or buildings, or 15 days of t	of a release (Subsections ete and submit this form to rred, and to each municipar other utility lines (Subsecti r sewer or other utility lines the discovery of the <u>new</u> in	245.305(a) ar the appropria ality where th ions 245.305( are discovere
INFORMATION FOR CERTIFIED INSTA	LLERS AND INSPECTORS (I	/1)		
In accordance with the Storage Tank Pro submit this form to the Department within installer or inspector: a release of a regulat from regulated substances; or a regulat 245.132(a)(6)).	n 48 hours of observing any o ated substance; suspected or o	f the following	ng while performing service ntamination of soil, surface	es as a certific or groundwat
	INSTRUCTIONS			
Record the storage tank facility I.D. numb	er at the top right-hand corner	of each page	e of this form.	
Owners and Operators (O/O): Indicate top right-hand corner of this page.	if this is an initial or follow-up r	otification by	y marking the appropriate be	ox found in th
<ul> <li>To report a Suspected Release, comp</li> </ul>	plete <u>all</u> information in Sections	I, II, IIIA, III	C, VI, VIII and IX.	
<ul> <li>To report a Confirmed Release, comp</li> </ul>	olete all information in Sections	I, II, IIIA, IIIE	B, IIIC, IV, V, VIII and IX.	
Certified Installers and Inspectors (I/I): copy of the failed, valid tightness test resu		Sections I, II	, IIIA, IIIC, VI or VII, VIII, ar	nd IX. Attach
	SE SEND COMPLETED ORI			
	PA Department of Environment Environmental Cleanup and Bro			
	Storage Tank Section	owillicias i i	ogram	
	e address below, depending or			
Northwest Region 230 Chestnut Street Meadville, PA 16335-3481 PHONE: 814-332-6945 / 800-373-3398 FAX: 814-332-6121	North-central Regi 208 W. Third Street, Suite 10 Williamsport, PA 17701 PHONE: 570-327-3636 FAX: 570-327-3420	1	Northeast Reg 2 Public Square Wilkes-Barre, PA 18701- PHONE: 570-826-2511 FAX: 570-820-4907	1915
Counties: Armstrong, Butler, Clarion, Crawford, Elk, Erie, Forest, Indiana, Jefferson, Lawrence, McKean, Mercer, Venango, Warren	Counties: Bradford, Camero Clearfield, Clinton, Columbia, Montour, Northumberland, Pot Sullivan, Tioga, Union	Lycoming.	Counties: Carbon, Lacka Luzerne, Monroe, Norti Schuylkill, Susquehanna, Wa	hampton, Pil
Southwest Region 400 Waterfront Drive Pittsburgh, PA 15222 PHONE: 412-442-4000 FAX: 412-442-4194 Counties: Allegheny, Beaver, Cambria, Fayette, Greene, Somerset, Washington,	South-central Regi 909 Elmerton Avenue Harrisburg, PA 17110 PHONE: 717-705-4705 / 801 FAX: 717-705-4830 Counties: Adams, Bedford, I Cumberland, Dauphin, Frani	0-541-2050 Berks, Blair,	FAX: 484-250-5961 ir, Counties: Bucks, Chester, Delaw	
Westmoreland	Huntingdon, Juniata, Lancaste Mifflin, Perry, York	r. Lebanon.	and the second s	







A Site-Specific Installation Permit (SSIP) is required for the following:

- New AST <u>systems</u> with a capacity > 21,000 gallons.
- New AST <u>facilities</u> with an aggregate aboveground storage capacity > 21,000 gallons.
- New Highly-Hazardous substance tank <u>systems</u> (AST and UST).
- New field-constructed UST systems not inside an existing UST.



Where required, the SSIP must have been issued to the facility **PRIOR** to the construction, reconstruction, or installation of **ANY** parts of the regulated AST system. That includes the emergency containment area.

Certified Installers and Inspectors on a job requiring an SSIP <u>must</u> <u>verify</u> that the SSIP has been issued **BEFORE** beginning activities to build, rebuild, or install the tank system.



- Once issued, the SSIP is a permit to install a tank system or systems at a particular location.
- DEP review of the permit application is not a technical review of the design of the tank system(s).
- Issuance of the SSIP is <u>not</u> DEP-approval of the system design.



Required elements of an SSIP application depend on:

- Tank Type (Large AST, Small ASTs, Hi-Haz)
- Facility Type (Existing Large, Existing Small, New)
- Tank Location (New, Footprint of Previous Tank)



An SSIP Application may require some or all of the following elements:

- SSIP Application Part I (ALL SSIP Applications)
- SSIP Application Part II #1 Mapping
- SSIP Application Part II #2 Siting
- SSIP Application Part II #3 Geological
- SSIP Application Part II #4 Environmental Assessment



SSIP application forms, packages, checklists, and instructions can be found on the Storage Tanks website under "Forms and Applications," or by following the link below.

Site-Specific Installation Permit Documents

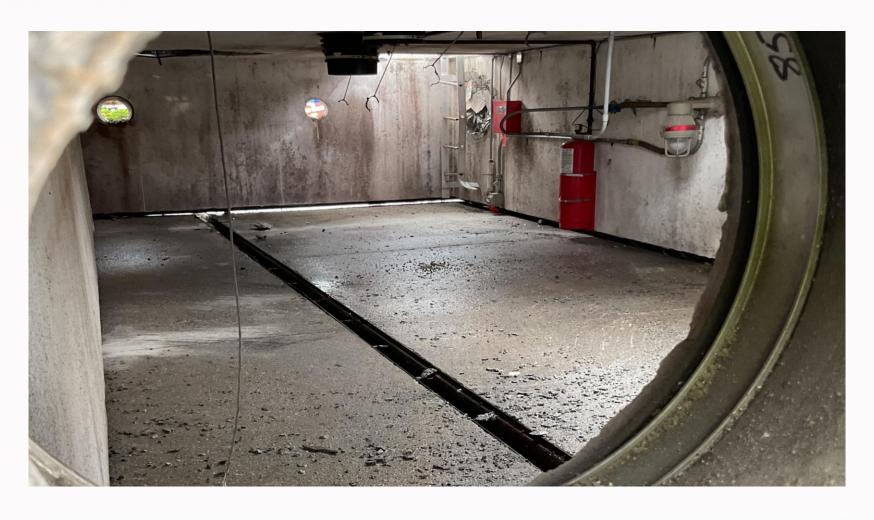


## **Questions?**





### **10- Minute Break**









Certified inspectors are the eyes and ears of DEP.

DEP certifies inspectors to complete <u>thorough</u> inspection activities and report <u>complete</u> and <u>accurate</u> information to DEP using the forms that DEP provides.

All DEP forms have associated instructions. If you don't understand the form or the instructions, please call.

Forms and instructions can be found on the Storage Tanks website under "Forms and Applications".



DEP-certification is conditional on meeting the standards of performance in Chapter 245.



**Installers** and **Inspectors** must ensure both the tank handling or inspection activity AND the DEP report form are <u>complete</u>.

- An activity is not complete until it complies with Chapter 245, and applicable codes and standards.
- Incomplete paperwork does not stop the clock on your submission deadlines.

All DEP forms have comments sections. Comments are expected.



Standards of Performance are found in § 245.132.

Except for submission deadlines and recordkeeping requirements, the Standards of Performance for certified companies and certified individuals are largely common sense.



Certified Companies and Certified Individuals are required to:

- Keep *current* standards and specifications so any work you do is in accordance with the most *current* version.
- Follow current standards, codes of practice, and equipment manufacturer's instructions to ensure you're doing the work correctly.
- Report releases and contamination to DEP.
- Conduct certified activities in such a way that you don't cause a release.



Certified Company/Individual Requirements(cont'd):

- Do not certify something is complete unless it is.
- Do not sign off on work that you didn't do or oversee.\*
- Do not certify the inspection of an installation or modification <u>unless you</u> were there to determine that it was done properly and tested properly.\*
- Do not tell an owner, operator or DEP that an activity is complete <u>unless it is</u>, and <u>it is in compliance with the regulations</u>.



#### **Document Submission**

Document	Central	Regional	Due
Integrity Inspection (IS, OS)	X	X	60 days after
Lining Inspection	X	X	60 days after
Modification Inspection	X	X	30 days after
Modification Report	X	X	30 days after
Notification of Contamination/Release		X	48 hours after
Registration Form	X		30 days after

Failure to meet submission time-frames is a violation of the standards of performance for certified individuals and may lead to enforcement action.



245.132(a)(3) (related to Standards of performance) requires certified companies, certified installers, and certified inspectors to:

Maintain <u>complete</u> records of tank handling and inspection activities for a minimum of 10 years.



245.132(a)(8) requires certified companies, certified installers, and certified inspectors to:

Adhere to accepted industry standards and applicable industry codes of practice when performing tank handling and inspection activities.



Installation, Modification, Repair, and Inspection standards have their own record generation and retention requirements.

"Complete" tank handling/inspection records are not limited to a copy of the DEP Inspection report form.

- Report form is a required submission.
- DEP may request additional documentation.



Both API and STI Inspection Standards include recordkeeping requirements, **Required documentation includes:** 

- Tank nameplate data
- Tank system specific details, including components, locations, changes
- Non-Destructive Evaluation (NDE) locations, readings, results
- Pictures, drawings, tables
- Inspection findings, deficiencies, recommendations
- Fitness for service determination



245.132(a)(9) requires certified companies, certified installers, and certified inspectors to:

Provide requested records and documentation to the Department under section 107(c) of the act (35 P.S. § 6021.107(c)).



- Complete STI and API reports for all PA DEP regulated tank inspections for the last 10 years; including NDE records, drawings, pictures, etc. (as required by the relevant standard)
- Should be available to DEP upon request.



#### Signatures

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 test 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.

Your signature on reports certifies the accuracy and completeness of the information provided.



DEP accepts that the information provided by certified individuals is complete and accurate.

<u>Unless</u> it becomes evident that a certified individual is not reporting complete and accurate information to DEP.



#### Submission of Falsified Documents/Information

#### **Falsified Documents**

- Inaccurate
   Installer/Inspector
   Information
- False Testing Results
- Incorrect Dates
- Forged Records
- Omitted Violations
- Unreported Releases

#### **Potential Enforcements**

- Penalty
- Suspension
- Revocation
- Referral to AG

(Individual AND Company)



Impacts of Falsified Information

#### Receipt of falsified information from a certified individual/company requires:

- Significant follow-up and investigation
- Enforcement action
- Time to restore confidence

DEP reports are legal documents. Submission of inaccurate and/or incomplete information is not a "minor" paperwork violation.



## **Industry Standards**





### **Industry Standards (General)**

#### **NOTE:**

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

Chapter 245 is not specific/explicit about <u>all</u> aspects of AST systems. Codes and Standards fill in those gaps.



#### **Construction Standards**

**245.521(a)** Aboveground storage tank construction shall meet or exceed Nationally recognized industry association codes of practice.

**245.612(a)** Aboveground storage tanks shall be designed, constructed and installed or modified in accordance with current codes of practice developed by Nationally recognized associations and the manufacturer's specifications.





#### **Construction Standards**

**API 12-series** 

\

API 12 C 1st ed. 1936

(12A, 12B, 12C, 12F, 12P)

**API 650** 

1st ed. 1961

**ASTM D1998** 

1<sup>st</sup> ed. 1998

**UL-142** 

1<sup>st</sup> ed. 1922

**UL-2085** 

1st ed. 1994



#### **Construction Standards**

#### **Tank Inspection Form**

Regi	istra	ition	Fo	rm
116				

or o coodion car cong	1			
V. Tank Identification Owner's Tank  DEP Tank ID numberA ID Number  Nominal Capacity (gallons)  Size: diameter (ft) length/height (ft)	VI. Fire/Safety Permit  Number  Issuing Authority  Date Issued			
Original construction code  Installation Date (mm/dd/yy)	☐ Horizontal Saddle Tank ☐ Vertical Tank ☐ Shop Built ☐ Elevated Vertical Tank ☐ Field Built			
Installation Date(Illiniadryy)	Other			

#### 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



### **Construction Standards**

If original construction standard/code can't be identified by nameplate or documentation:

P.E. must certify that the tank meets or exceeds requirements of a specified applicable standard/code.

#### OR

The tank should be permanently closed.





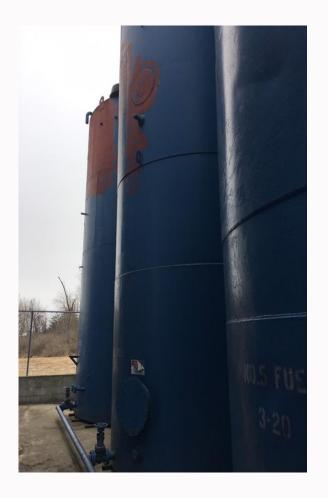
#### **Construction Standards**

If the tank was originally constructed to a non-applicable standard/code (i.e. UL-58 - UST), it should be permanently closed.

USTS for aboveground use specifically prohibited in NFPA 30.

\*Unless evaluated by a P.E. and installation date taken into consideration.







# Installation & Modification Standards

**245.521(a)** New aboveground storage tank systems shall be installed in accordance with applicable codes of practice and consistent with manufacturers or fabricator's specifications as specified in § 245.522.

**245.524(a)** Modifications performed on aboveground storage tank systems shall be designed and implemented in accordance with current codes of practice developed by Nationally recognized associations.



# Installation & Modification Standards

**245.612(a)** Aboveground storage tanks shall be designed, constructed and <u>installed</u> or <u>modified</u> in accordance with current codes of practice developed by Nationally recognized associations and the manufacturer's specifications.



# Installation & Modification Standards

**Installation:** Modification:

PEI RP 200 API 653

PEI RP 800 STI SP031

API 2610 NACE No. 11/SSPC-PA

8





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

8) Adhere to equipment manufacturer's instructions, accepted industry standards and applicable industry codes when performing tank handling, tightness testing or <u>inspection activities</u> or other non-tank handling activities on the project.



**API 653** 



**STI SP001** 



**API 570** 

As-needed for piping inspections







#### **Out of Plane Survey**

• Required at <u>each</u> Integrity Inspection conducted to API 653

245.552(b)(9) & 245.553(b)(11)

- Inspection must evaluate: tank system integrity and suitability for service.
  - API 653 4.1.3 (g) (determining suitability for service)
     "tank foundation, soil, and settlement conditions".
    - Annex C *Checklist for Tank Inspection* C.1.1 measure foundation levelness and bottom evaluation.



Tank-

Bottom

## **Inspection Standards**

# Figure B Tank Shell

Original:

Bottom

Position

#### **Edge Settlement Analysis**

Required at <u>each</u> Out-of-Service Integrity Inspection

245.552(b)(9) & 245.553(b)(11)

- 25 PA Chapter Code 245.553(b)(11) AST system integrity and suitability for service
  - API 653 6.4.1.1 (c) "identify and evaluate any tank bottom settlement"



**STI SP001** has recordkeeping/reporting requirements that are not covered in the DEP inspection report form. Primarily found in Chapters 7 and 10.

**API 653** provides minimum requirements for written inspection reports in Section 6.9.

These are part of the certified inspector and company recordkeeping requirements.



#### 245.113. Certified inspector experience and qualifications.

4 years, or college degree and 2 years <b>API 653 certification</b> of IAM <b>inspector certification</b> or Department-approved abovegroup storage tank inspector certification	
IAF	4 years, or college degree and 2 years <b>API 653 certification</b> or Department-approved aboveground storage tank inspector certification

Required to hold certification and required to follow the inspection standard(s) for that certification.



# Sound Familiar?

#### Standards of Performance

245.132(a)(8) requires certified companies, certified installers, and certified inspectors to:

Adhere to accepted industry standards and applicable industry codes of practice when performing tank handling and inspection activities.

(You'll see this again later)





# Facility Monitoring, Operations, and Maintenance







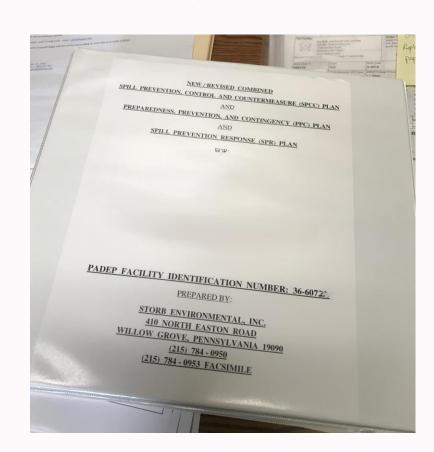
In-Service and Out-of-Service Inspections of all ASTs, regardless of capacity, include a review of the facility's records.

- 245.516
- 245.615



#### **Required Facility Records**

- Operation and Maintenance Plans
- Spill Prevention Response Plans
- Monthly Operation and Maintenance Inspections/Leak
   Detection
- 72-hour inspections
- Contractor Logs
- Installation and Modification Records
- Periodic Leak Tests
- Cathodic Protection System Specifications and Tests
- Piping Inspection Results



<sup>\*</sup>Record Review is a mandatory part of an Integrity Inspection



#### Large ASTs/Large AST Facilities:

245.511 – A storage tank facility owner and operator shall implement and have onsite a written operations and maintenance plan.

245.512 – An initial **Spill Prevention Response Plan** shall be submitted to the Department for a storage tank facility with an aggregate capacity > 21,000. A current copy shall be available at the facility at all times.

245.513 – **Routine maintenance inspection procedures** shall be established and implemented. This includes a visual inspection every 72 hours and a monthly maintenance inspection.



#### **Small ASTs:**

245.613 – A storage tank facility owner and operator shall assure that a maintenance and general operations check of the storage tank system is performed at least monthly.



XI.	Record Review				
	1. Written operations and maintenance plan available on site:				
	2. Spill prevention response plan is current and available on site:				
	If yes, date of Spill prevention response plan:(mm/dd/yy)				
	3. Monthly inspection records available for the past twelve months:   Yes   No				
[	4. 72-hour inspection records available for the past twelve months:  Yes No Not required				
	5. Does the facility have complete contractor log records?				
	6. Is a leak test required at the time of this inspection?				
	If yes, did the test indicate a possible leak?				

**245.514(b)** The owner and operator of an aboveground storage tank facility with an aggregate aboveground storage capacity greater than 21,000 gallons shall maintain a written or electronic log. At a minimum, each log entry must identify the name of the individual performing tank handling and inspection activities, the individual's signature or equivalent verification of presence onsite, the company name, the date of work, start and end times, and a brief description of work performed, including tank identification.

Also found in **245.603(c)** for small ASTs.



#### **Contractor Logs**

- Required at facilities with an aggregate capacity > 21,000 gallons
- Must include:
  - Certified individual's name
  - Certified individual's signature (or equivalent)
  - Certified individual's company name
  - Date of work
  - Start and end times
  - Description of work (incl. Tank ID)
- Facility must retain for entire life of Tank System(s), and 1 yr. after closure.



XI.	Record Review	
	<ol> <li>Written operations and maintenance plan available on site:</li> </ol>	☐ Yes ☐ No ☐ Not required
	2. Spill prevention response plan is current and available on s	ite:
	If yes, date of Spill prevention response plan:	(mm/dd/yy)
	3. Monthly inspection records available for the past twelve mo	nths: Yes No
	4. 72-hour inspection records available for the past twelve mo	nths:
	5. Does the facility have complete contractor log records?	☐ Yes ☐ No ☐ Not required
	6. Is a leak test required at the time of this inspection?	☐ Yes ☐ No
	If yes, did the test indicate a possible leak?	No Which method was used?

#### **All ASTs:**

Monthly Inspections

#### **Large ASTs Only:**

Written operations and maintenance plan

72-Hour inspection records

#### Facility Aggregate volume > 21,000

Spill Prevention Response Plan Contractor Logs



#### Monthly Operations and Maintenance Checks

- Facility required to keep 12 months of records.
- Review for completeness and applicability to that tank system/facility.
- Should include the following (as applicable):
  - 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 that pose an environmental hazard.



- Monthly Operations and Maintenance Checks (continued):
  - 8. Observation for evidence of a release of regulated substance from the tank system.
  - 9. Aboveground storage tank grounding/bonding/lightning protection.
  - 10. Fuel monitoring (check for presence of water/microbes).
  - 11. Cathodic Protection Rectifiers.
  - 12. Thermal and pressure relief systems.
  - 13. Insulated ASTs check for areas of moisture, external corrosion.
- Evaluate the applicability and appropriateness of the checklist (Should it contain anything else?)
- Did the facility follow up on unsatisfactory conditions?



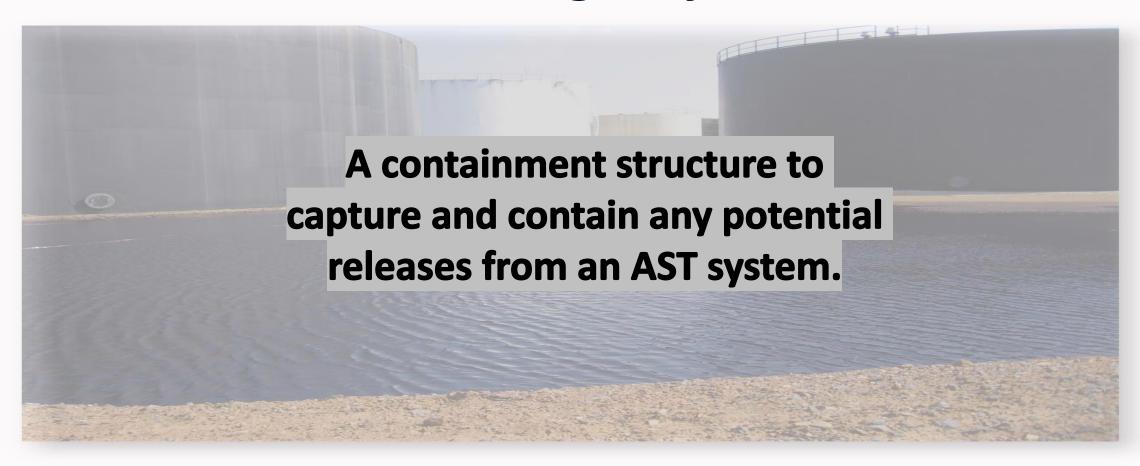
2630-	FM-BECB0170 2/2012 COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTIVE DEPARTMENT OF ENVIRONMENTAL CLEANUP AND BROWN			
	SAMPLE MONTHLY MAINTENANCE OPERATION OF SMALL ABOVEGROUND ST			
	ITEM	SYN	IBOL	REFERENCE
I.	Visual Check for Deterioration			
	Condition of tank exterior	S	U	
	Condition of aboveground piping	S	U	
	Condition of foundations and supports	S	U	
	Condition of containment structures	S	U	
11.	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	
111.	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			
	Overfill 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	
Facil	lity I.D.# Inspection Completed By:		Date:	
Com	ments:			
	Symbols S - Satisfactory U - Unsatisfactory Y - Yes	N - No		
	S - Satisfactory U - Unsatisfactory Y - Yes	14 - 140		L.



### **Containment**









#### **Containment Capacity**

#### Large ASTs:

110% capacity of the largest AST in the containment.

#### **Small ASTs:**

Sufficient capacity to contain possible releases, such as overfills, leaks, and spills. Generally, that's also 110% of the AST capacity!



#### **Containment Capacity Problems?**







#### **Permeability**

#### Large ASTs:

#### Installed after 10/11/1997

•1x10<sup>-6</sup> cm/s for the substance stored

#### Installed before 10/11/1997

- •P.E. Verification OR
- •1x10<sup>-6</sup> cm/s for the substance stored

#### **Small ASTs**:

Sufficiently impermeable to contain any potential release for a minimum of 72 hours AND until it can be fully recovered



P.E. Verification for Permeability of Large ASTs

- Only valid for ASTs installed before 10/11/1997

Written statement sealed by a P.E. that the containment structure, coupled with the tank monitoring program and response plan is capable of detecting and recovering a release, and is designed to prevent contamination of the waters of the Commonwealth.

Verification of Emergency Containment TGD



P.E. Verification for Permeability of Large ASTs



P.E. Certification of a Facility's SPCC Plan.



P.E. statement that the containment structure, paired with the facility's monitoring and response plan is capable of containing the entirety of a potential release until it can be fully recovered and is designed to protect the waters of the Commonwealth. The "entirety of a potential release" is a catastrophic failure of a full AST!



#### **Compatibility**

- All AST systems
- AST systems, including emergency containment structures, must be compatible with the substance(s) stored.
  - **245.2(c)(3):** (c) A person may not install a storage tanks system regulated under the act unless the system does the following:
  - (3) Is constructed or lined with material that is compatible with the stored substance.



Compatibility –
Substance not
compatible with
containment





### **Secondary Containment**

An additional layer of impervious material creating a space in which a release of a regulated substance from a storage tank may be detected before it enters the environment.

Secondary containment also known as *Release Prevention Barrier (RPB)* 





### **Secondary Containment**

#### **Requirements:**

- o Impermeable (245.542(c) [Large ASTs] defines as  $1x10^{-7}$  cm/s)
- Space for Leak Detection
- Monitored Monthly

Compatible with the substance stored

#### **Emergency Containment**

#### Compatibility

- All AST systems
- AST systems, including emergency containment structures, must be compatible with the substance(s) stored.

**245.2(c)(3):** (c) A person may not install a storage tanks system regulated under the act unless the system does the following:

(3) Is constructed or lined with material that is compatible with the stored substance.



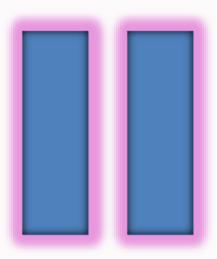


# **Secondary Containment**

XV.	V. Secondary Containment				
	Impermeable layer	Yes No Describe:			
	2. Space for release detection	Yes No Describe:			
	3. Monitored at least monthly for evidence of a release?   Yes   No   Not Secondarily Contained				



# **Pause for Questions**

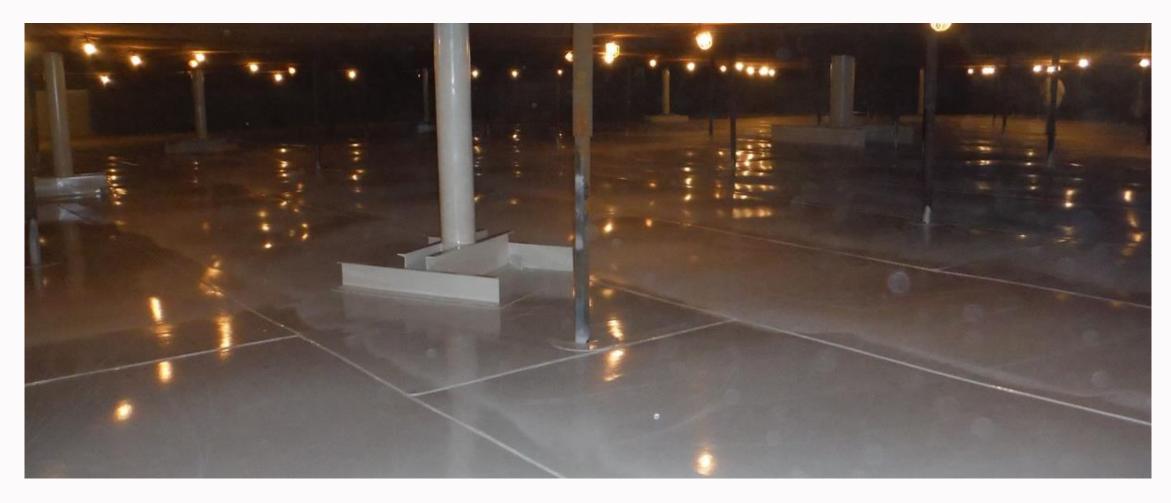




## 10- Minute Break









- Must be chemically compatible with stored substance.
- Must be applied and cured in accordance with the manufacturer's specifications.
- Must extend up the side of the tank a minimum of 18 inches when used to protect the bottom of a tank.
- Must be examined for blisters and air pockets and tested for pinholes. Defects must be repaired prior to placing tank back in service.



- o Installation and modifications need to be performed by a DEP-certified **TL.**
- Inspections of linings need to be performed by a DEP-certified IAF.
- Installation, Modification, and Removal of Internal Linings are Major Modifications, requiring a <u>Modification Inspection</u>.



### **Lining Inspections**

- Required for Large, internally-lined Tanks ( > 21,000 gallons)
- Maximum 10-year interval
  - \* Unless approved for an extended interval by DEP
- Required part of an Out-of-Service Inspection
  - Submit the Lining Inspection Summary with the Integrity/Installation Inspection Summary



2630-FM-BECB0014 12/2018
Form

Pennsylvania

DEPARTMENT OF ENVIRONMENTAL
PROTECTION

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

FOR DE	P USE ONLY
Reviewer	
Date	
Entered by	
Date	

#### ABOVEGROUND STORAGE TANK LINING INSPECTION SUMMARY

I. Facility Information  Facility I.D. Number  Facility Name  Facility Address  Municipality	II. Inspector Information Name Certification number Phone E-mail Employer Employer certification number
III. Tank Identification  DEP Tank ID numberA  Owner's Tank ID Number  Nominal Capacity (gallons)  Size: diameter(ft) length/height(ft)  Substance stored  Original construction code  Installation Date	IV. Inspection Date(s)  Completion of this inspection Lining system installed Last lining inspection  Next lining inspection due  Next inspection date to be determined after repairs and before tank is returned to service.  Horizontal Saddle Tank Vertical Tank Elevated Vertical Tank



### **Lining Inspection Summary Form**

- The lining inspection summary form is for Periodic Lining Inspections.
- A lining installation or repair is a Major Modification, and as such requires use of the Modification Inspection Report form.



٧.	Lining System Design/Installation Information	
	Lining System Manufacturer Name:	Lining System Product Name:
	Lining System Material:	Lining Standard Used:
	Original design/installation specifications were	Lining installed by "TL" certified installer   Yes   No
	available?  Yes  No	"TL" Name:
		Certification number:

Documentation of this information is part of the facility's recordkeeping requirements.



fied Inspector, have inspected the entire lining, review of examination and test respected in 18 Pa. C.S.A. Section 490 ded by me is true, accurate, and complete can cannot be returned to section 190 cannot 190 canno	esults and information provided by the 04 (relating to unsworn falsification to ete to the best of my knowledge and
gnature	Date
have reviewed the completed inspection 904 (relating to unsworn falsification to a o the best of my knowledge and belief.	
Title	Phone Number
ture	Date
<ul><li>☐ Low-Voltage Holiday Testing</li><li>☐ High-Voltage Holiday Testing</li><li>☐ Other</li></ul>	
Describe the results of the evaluation modules, and number and location of holidays	( )
	the lining, review of examination and test respectively in the provided in 18 Pa. C.S.A. Section 490 and be the provided by me is true, accurate, and complete the can cannot be returned to support the can cannot be returned to support the provided in the



#### What forms do I need to submit?

**New Lining Installation/Repair** – Modification Report (Installer), Modification Inspection (Inspector)

**10-year Lining Integrity Inspection** – Lining Inspection

**OS integrity Inspection for tank with Liner** – Lining Inspection, OS Integrity Inspection Report



### **Extended Interval Lining Inspection**

We require a signed letter from the manufacturer, stating that their specific liner, installed in that specific tank, is adequate for a 20-year lining inspection interval.
 Quality assurance and quality control measures during installation are more stringent for these linings.

#### NOT...

- A letter from the manufacturer stating only that the liner will last for 20 years.
  - \* Contact DEP regarding extended interval lining inspection approvals.



### For a 20-year lining inspection interval, the following are required:

- Qualifications and Certifications held by the lining manufacturer's QA/QC inspector(s).
- Lining manufacturer's installation instructions and product specifications.
  - Specifications should include, blast requirements, anchor pattern requirements, recoat windows, acceptable DFT (dry film thickness) of installed product, temperature and humidity requirements, suitability for particular services/product compatibility (immersion in x,y,z product) etc.
- Detailed inspection notes from the manufacturer's QA/QC inspector(s).



For more information on 20-year lining inspection requests, contact DEP.



#### Requirements

- Galvanic
  - Must be surveyed at least every 3 years.
  - Records of the last 2 surveys must be kept.
- Impressed Current
  - Must be surveyed at least annually.
  - Must be checked for functionality at least every 60 days.
    - Facility must keep records of the last 3 checks.
- All cathodic protection systems must be surveyed within 6 months of installation or repair.



### Depleted Galvanic Cathodic Protection (CP) in a dead shell

- Depleted Galvanic CP between bottoms of double-bottom large AST.
  - DEP's position on all equipment, including CP, must function as designed.
  - When galvanic CP systems fail, the CP system can be repaired or the AST can be evaluated by a corrosion expert to determine if the AST is acceptable to operate without CP, and the CP system is properly "decommissioned".



### Depleted Galvanic Cathodic Protection (CP) in dead shell

- When a system like this fails periodic testing, the facility has 3 options:
  - Fix the galvanic CP system;
  - With CP expert verification that CP is not required, decommission CP system (Major Mod);
  - 3. If decommissioning is impractical or infeasible because there is no external access to the CP system, **Option 3**.



### Depleted Galvanic Cathodic Protection (CP) in dead shell

- Option 3 "abandonment"
  - A. Corrosion expert evaluation
    - Determine whether space requires CP
    - Signed statement from corrosion expert:
      - CP is not required, and it is acceptable to operate tank with non-functional/depleted CP system between bottoms
      - Corrosion expert signature
      - Corrosion expert credentials

AND...



### Depleted Galvanic Cathodic Protection (CP) in dead shell

- Option 3 "abandonment"
  - B. "IAF" inspection due date determination
    - In collaboration with corrosion expert
    - Signed letter from "IAF":
      - Recalculated remaining service life (API or another standard)
      - Due date for next OS Inspection, based on remaining service life. Not to exceed established date or 10-years from failing CP test (whichever occurs first)
      - "IAF" signature and certification number
      - Corrosion expert signature



# **AST Closures**

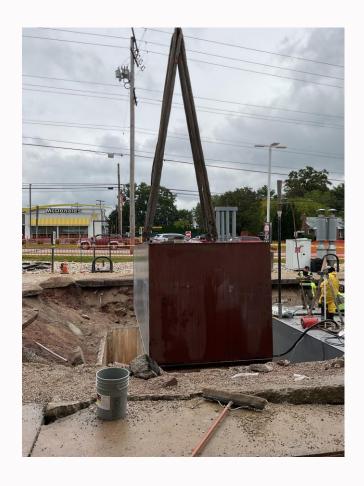




## **AST Closures**

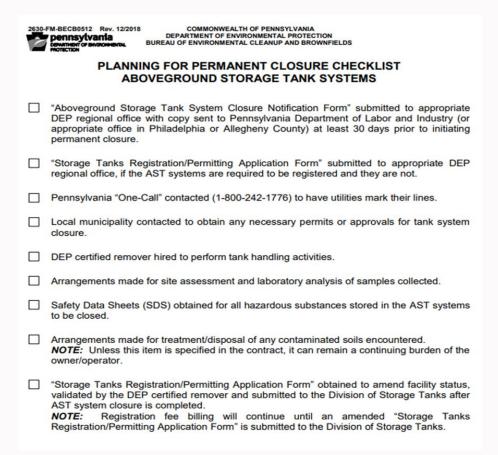
### **Different Types of Closure:**

- Temporary Closure (TOS Status)
- Permanent Closure/Removal
- Permanent Closure-in-Place
- Change-in-Service (Regulated to Exempt)





## **AST Closure Checklist – Large ASTs**



AST Planning for Permanent Closure
Checklist



## **Closure Activities**

#### **ALL ASTs:**

Closure activities, including tank cleaning (when part of a tank closure) must have direct onsite supervision and control by a DEP-certified AST remover.

AMR, AFR, AFMX (as appropriate)

#### Follow:

- Applicable industry codes/standards
- Standards of performance for certified companies & individuals in Chapter 245.





Closure Notification Form

\* Must be submitted **30** days before planned closure activities

Aboveground Storage Tank System Closure Notification Form

Online submission is available through the Public Upload Portal system.



#### **Technical Guidance Document:**

Closure Requirements for Aboveground Storage Tank Systems

- Methods of Closure
- Site Assessment
- Elements of Closure

- Sampling/Analytical Requirements
- Tank Handling Activities
- Closure Records



Waived/Limited Sampling Requirements

The AST Closure Guidance allows regional offices to waive or limit sampling requirements for AST system closures if certain conditions are met.

Must be requested <u>and</u> approved by DEP.



#### **DEP "Book"**

Site Assessment Requirements at Regulated Storage Tank System Closures

- Test Methods
- Test Parameters
- Action Levels (select contaminants)



### **Closure Report**

 Clean closure: Complete Closure Report Form can be maintained at the Facility OR Submitted to DEP

- Contamination Observed/Discovered: Complete Closure Report Form should be submitted to DEP.
  - Release should be reported to DEP and Corrective Action initiated (Chapter 245, Subchapter D)

Aboveground Storage Tank System Closure Report Form



### Tank:

- Cleaned
- Purged <u>AND</u>
- Vented (if remaining onsite)
   OR
- Emptied and removed from site according to applicable Codes, Standards and Waste Regulations.







### Piping:

Removed or capped

#### Fill Ports:

• Secured, capped, or dismantled



#### **Site Assessment:**

Owner to conduct a visual examination of the following for indications or evidence of a release of regulated substance:

- Surface
- o Soil
- Area surrounding and underlying the storage tank system



#### **Site Assessment:**

- Suspected releases: Investigated according to § 245.304
- Confirmed releases: Reported to DEP Regional Office according to § 245.305

NOTE: These are requirements for Owners/Operators. Certified Individual reporting requirements are different (see next slide).



## **Closure - Records**

#### **All ASTs:**



- Storage Tank Registration/Permitting Application
  - Submit within 30 days of completing tank system closure.
- Facility Records:
  - Results of the Site Assessment completed at closure .
    - [and completed Closure Report for large ASTs]
  - Documentation of Release Investigations.



# **Questions?**





### **Get in Touch**

Magen Majeski
DEP / Bureau of Environmental
Cleanup and Brownfields
400 Market Street
Harrisburg, PA 17101

•••

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The Department of Environmental Protection's mission is to protect Pennsylvania's air, land and water resources and to provide for the health and safety of its residents and visitors, consistent with the rights and duties established under the Environmental Rights Amendment (Article 1, Section 27 of the Pennsylvania Constitution).