







Bureau of Environmental Cleanup & Brownfields

# 2022 ANNUAL ENVIRONMENTAL CONFERENCE

Pennsylvania Chamber of Business and Industry

October 27, 2022

Pennsylvania regulates both Aboveground (AST) and Underground (UST) Storage Tanks.

- 21,195 USTs (7<sup>th</sup> largest in U.S.)
  - 240 to 80,000 gallons in capacity
  - Allegheny County has most (1,708)
  - Forest County has least (11)
- 17,477 ASTs
  - 255 to 21 million gallons in capacity
  - Allegheny County has most (1,831)
  - Sullivan County has least (2)



Oversee over 880 certified individuals and 290 certified companies.

• Within last year, performed over 7,000 inspections at over 3,700 regulated facilities.

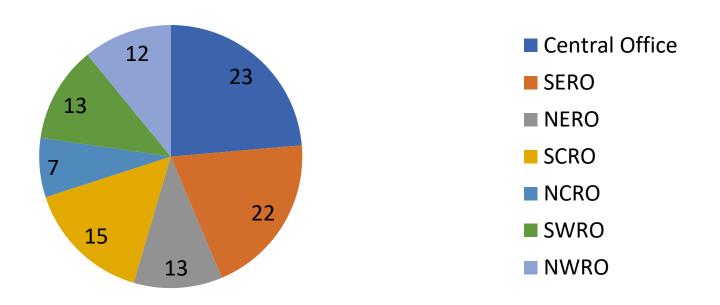
• From October 1, 2021, through March 31, 2022, Pennsylvania ranked 8<sup>th</sup> in the highest number of UST inspections performed in the nation and more than DE, MD, VA, and WV combined.

 Pennsylvania has had over 19,900 confirmed UST and AST releases and has overseen over 16,700 cleanups.

 Currently oversee 17 state-lead UST cleanup sites using USTIF allocations.



#### Personnel (105 positions)



78% of staff in Field Operations



- AST and UST Registration Fees (start 1989) \$2.8 million
- Penalties, Interest, Cost Recovery (start 1989) -\$630,000
- Reimbursement from USTIF (start 2008) up to \$7.0 million annually beginning in 2018
- EPA Grant \$2.3 million



# Final Rulemaking: Storage Tank and Spill Prevention Program

(25 Pa. Code Chapter 245)

Effective December 22, 2018

- Added UMI Certification
- Emergency generator tank systems now required to perform release detection
- Added periodic testing requirements
- Added walkthrough inspections



#### **Added UMI Certification**

- 24 Companies added UMI Certification to their qualifications
- 63 Individuals have become UMI Certified
  - 8 of these individuals went on to obtain UMX Certification



# Emergency generator tank systems now required to perform release detection

- The removal of the release detection deferral for emergency generator tanks was set to affect 605 UST systems
- 558 of the 605 UST systems remain (29 more have since been installed)
- 71% performing Interstitial Monitoring for Tank Release Detection
- 50% performing Interstitial Monitoring for Piping Release Detection



### Added periodic testing requirements

- At least every 3 years the following components must be tested:
  - Containment sumps used for interstitial monitoring
  - Spill prevention equipment
  - Overfill
- At least annually the following components must be tested:
  - Electronic and mechanical components of release detection equipment



# Containment sumps used for interstitial monitoring

- 9,103 UST systems were affected by the containment sump testing requirement
- Currently, 8,459 UST systems perform interstitial monitoring for piping release detection
- Alternate methods to using water
- Low level sump test method



## Spill prevention equipment

- Almost all UST systems affected by this requirement
- Compliance with testing both spill prevention and containment sumps

• 2020: 72.6%

• 2021: 75.1%

• 2022: 81.2%



#### **Overfill**

- At the time of the rulemaking, a total of 3,306
  UST systems were reported to have ball float valves as the current form of overfill prevention
- Today, this number is 1,126
- Compliance with testing overfill:
  - 2020: 71.4%
  - 2021: 72.3%
  - 2022: 77.8%



# Electronic and mechanical components of release detection equipment

 Almost all UST systems affected by this requirement. Compliance with testing of tank release detection equipment:

• 2020: 83.5%

• 2021: 79.3%

• 2022: 81.5%



## **Walkthrough Inspections**

 Almost all UST systems affected by this requirement. Compliance with walkthrough inspections:

• 2020: 74.2%

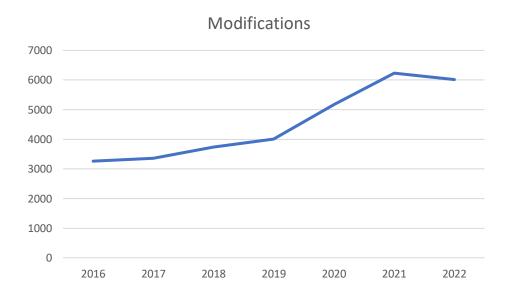
• 2021: 76.7%

• 2022: 80.2%



# **Impacts**

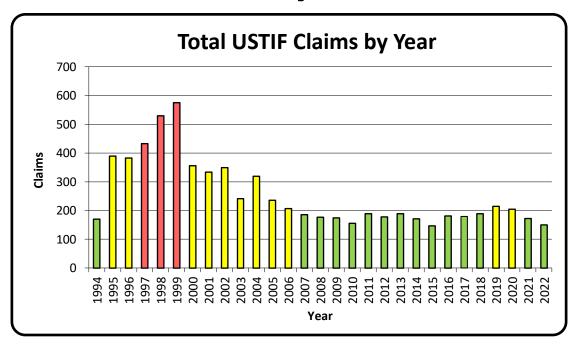
#### Increase in modifications





# **Impacts**

# Initial increase in USTIF Claims ....followed by decrease





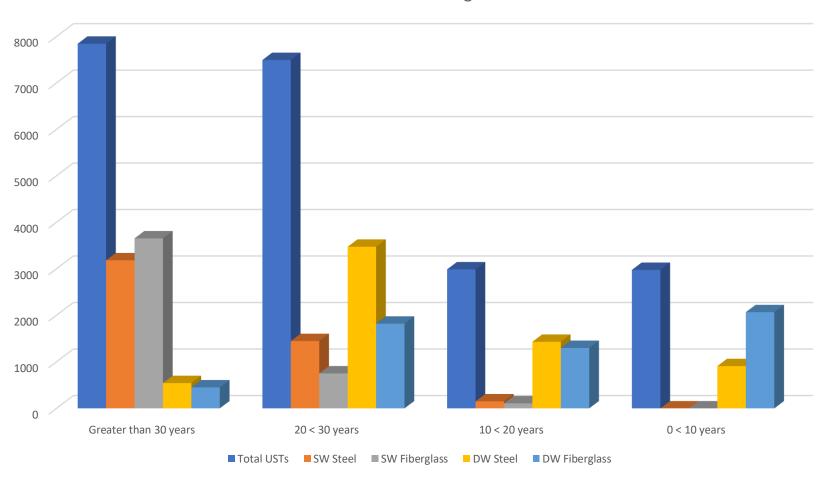
# **Current Focus**

- Improving compliance
  - Public Outreach
  - Enforcement
  - Alternate Fees
  - Public Knowledge
- Age of Systems
  - Tanks
  - Piping
  - Components



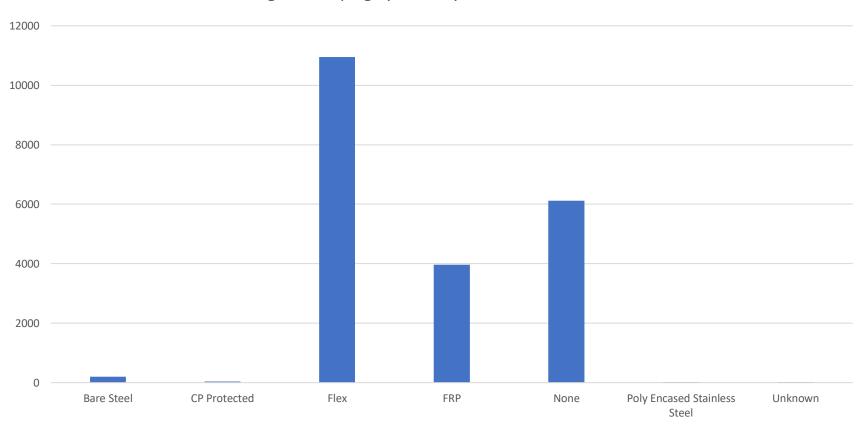
# Pennsylvania USTs

Tank Construction Through the Years



# **Piping Systems**

#### Underground Piping Systems by Outer Wall Construction





## **Current Focus**

- UST lifespan
  - Popular systems no longer being supported
- Cost Planning for Facilities
  - the increase in Evs/alternate fuels
  - the increased cost of capital
  - the risk a facility may be taking on delaying tank replacement for 10-15 years.

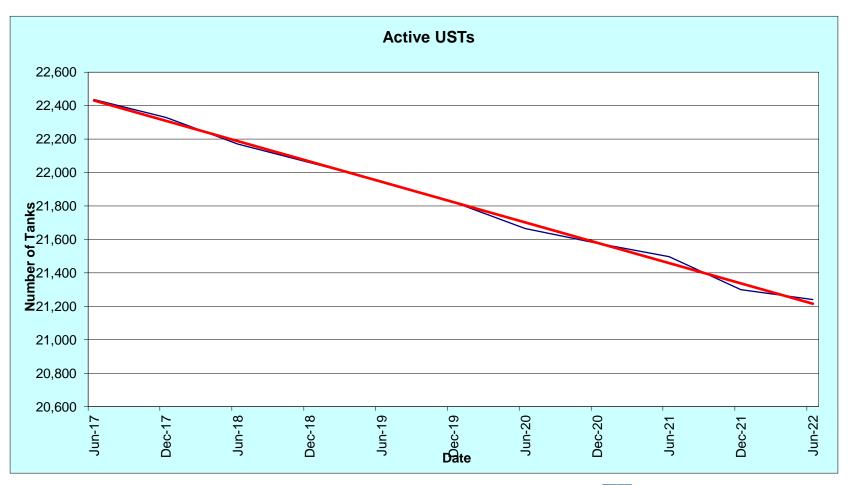


# What the Numbers Say

UST Active Tanks as of 06-30-2022														
Tank Capacity in Gallons	6/30/2017	12/31/2017	6/30/2018	12/31/2018	6/30/2019	12/31/2019	6/30/2020	12/31/2020	6/30/2021	12/31/2021	6/30/2022	% Change 5 Years	% Change 3 Years	% Change 1 Year
111 to 5,000	5,697	5,657	5,594	5,523	5,439	5,340	5,238	5,199	5,136	5,045	5,011	-12.04%	-7.87%	-2.43%
5,001 to 10,000	11,506	11,422	11,316	11,209	11,122	11,035	10,938	10,865	10,808	10,712	10,649	-7.45%	-4.25%	-1.47%
10,001 and Greater	5,232	5,250	5,259	5,327	5,387	5,449	5,488	5,513	5,552	5,542	5,580	6.65%	3.58%	0.50%
Total for UST Tanks	22,435	22,329	22,169	22,059	21,948	21,824	21,664	21,577	21,496	21,299	21,240	-5.33%	-3.23%	-1.19%
Total AST/UST Tanks	40,271	40,066	39,874	39,788	39,796	39,676	39,458	39,339	39,172	38,820	38,694	-3.92%	-2.77%	-1.22%



# What the Numbers Say





# What are we seeing

- Alternate to replacement
  - Rigid bladders
  - Stand alone systems
- Tank shortage in the industry
- Trained staff shortage
  - Certification requirements vs. safety
  - Suspicious activity
- Biofuels Tank Upgrade
  - Compatibility proposal at Federal level
- Addressing water in tanks



# **Looking Forward**

- Funding
  - Storage Tank Fund
  - Regulated Community
- Staffing
  - DEP
  - Regulated/Certified Community
- Technology
  - OnBase Public Upload
  - Tank Handling App
  - E-permitting



# Online Storage Tank Registration & Fee Payment System

#### **Currently:**

- Pay storage tank registration fees
- Register a new facility for a current tank owner
- Amend registration information for an existing facility (add/remove tanks, change substances, etc.)
- Update contact information, both individually and en masse

#### **Coming Soon:**

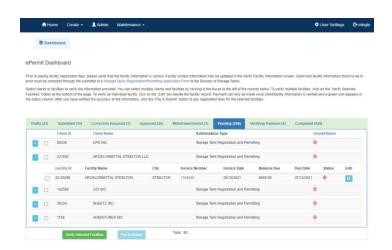
Facility ownership changes



#### How does it work?

- Create a DEP Greenport account
- Enroll in the e-permitting application
- Use the e-permitting application







### Example – New facility registration

Applicant creates submission in e-permitting



Appears on DEP dashboard for review



DEP reviews, determines if any correction needed



If correction needed, notice sent back to applicant. If good, application processed



Applicant receives email that submission is processed



Applicant logs into e-permitting, pays fee if necessary, receives certificate



#### What did we eliminate?

- Mail/email handling
- Data entry time
- Temporary registration letter generation time
- Invoice generation and mailing time
- Payment generation and mailing time
- Certificate generation and mailing time



### Who can use e-permitting?

- Storage tank owners and their employees
- DEP-certified tank installers and removers
- DEP-certified company representatives



#### Who does it benefit?

#### **Storage Tank Owners:**

- Registration certificate issued immediately following payment
- Registration submissions processed quickly certificate in hand, selling fuel

#### **Storage Tank Installers/Removers:**

- Value-added service to customer
- Tracked submission of installation and removal activities

#### DEP:

- Reduced review/staff time; eliminates 90% of data entry
- Allows more time to work on conventional submissions
- Less follow-up for incomplete submittals
- Significant reduction in registration fee processing time no mail, no proofing, no data entry



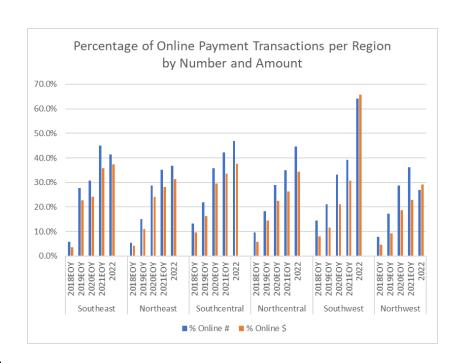
#### Usage so far

#### **Registration Fees:**

- Over \$3.1 million collected since going live in early 2018
- Steadily increasing usage; approaching 40% utilization currently

#### **Registration Submissions:**

- Over 250 submissions to date
- Mostly large tank owners to this point





### **Challenges**

- Large corporate accounting processes that require paper check payment
- "Old-school" tank owners who don't trust the internet
- Difficulty of account creation and application navigation



### Where do we go from here?

- Completion of ownership change functionality (coming soon!)
- Marketing, training, push for widespread adoption and usage
- Enhancements focused on simplicity, ease of use, user input
- Expansion of capabilities

#### **Questions/comments?**



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