



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Environmental Cleanup & Brownfields

# Overview of Revisions to the Federal Underground Storage Tank (UST) Regulations

Storage Tank Advisory Committee

Harrisburg, PA

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# Federal UST Regulation Revisions

## Why is EPA making changes to the UST regulations?

- The Energy Policy Act of 2005 imposed secondary containment and operator training on owners and operators in states but not in Indian country. In order to ensure these requirements are implemented in Indian country, EPA needed to update the federal regulations.
- The 1988 Federal UST regulations were successful in requiring equipment, but the 2015 revisions focus on improving operation and maintenance of that equipment as well as addressing previously deferred tanks and updating for new technologies.

# Federal UST Regulation Revisions

## What is the history of the rulemaking?

- In November 2011, EPA published proposed changes to the UST regulations. A 5 month public comment period followed.
- EPA received many comments during the public comment period that helped shape the Final Rule.
- EPA feels the Final Rule finds an appropriate balance between protecting the environment and minimizing the cost to owners and operators who are primarily small businesses.

# Federal UST Regulation Revisions

## What do these new requirements mean for owners and operators?

- In **states without state program approval (SPA) and in Indian country**, these new requirements will apply according to time frames specified.
- In states **with SPA**, none of the new requirements will apply until the state adopts the federal requirements or if a state does not adopt the requirements, until EPA withdraws approval of SPA for that state. Owners and operators in states with SPA must meet the state UST requirements.
- States have 3 years to submit a revised SPA application.
- SPA requirements provide states with flexibility to be considered no less stringent than the federal requirements

# Federal UST Regulation Revisions

## Secondary Containment and Operator Training Requirements

Since Pennsylvania has already implemented these requirements, EPA's rule will generally mean no change for most owners and operators. EPA primarily wrote this section to ensure parity in Indian country and in a state without SPA.

- **Operator Training**
  - Within 3 years after effective date of rule, owners must designate & ensure 3 classes of operators are trained
  - Recordkeeping, including names of currently designated operators and proof of their training is required for as long as the operator is designated at the facility
  - Retraining is required for Class A and/or B operators at facilities determined to be out of compliance
- **Secondary Containment**
  - Applies to new and replaced tanks and piping beginning 180 days after effective date of rule
  - Includes interstitial monitoring (and sumps if they are used for interstitial monitoring)
  - Includes under dispenser containment for new dispenser systems

# Federal UST Regulation Revisions

## New Operation and Maintenance Requirements

- **Periodic walkthrough inspections** (changed somewhat from proposal)
  - Visual inspection of spill buckets (clear of debris, etc.) and release detection every 30 days
    - If UST receives deliveries less frequently than every 30 days, then spill buckets may be inspected before each delivery
  - Visual inspection of sumps and hand held release detection devices annually
  - Applies beginning 3 years after the effective date of the rule
  - Keep records for 1 year
  - Regulation allows a code of practice (e.g. PEI 900) to be used instead of specific requirements listed in the rule; the implementing agency may also establish comparable requirements

# Federal UST Regulation Revisions

## New Operation and Maintenance Requirements

- **Three year spill prevention equipment testing**
  - Revised from annual in proposal
  - To make sure the spill bucket will hold drips and small spills when the delivery hose is disconnected from the fill pipe
    - Double-walled spill buckets with periodic interstitial monitoring between the spill bucket walls are not required to meet the testing requirement
    - Applies to new installations after effective date of rule
    - Applies three years after effective rule date for UST systems installed on or before effective date of rule
    - Keep records for 3 years
- **Three year overfill prevention equipment inspections**
  - Inspections to make sure overfill operates as intended
    - Applies to new installations after effective date of rule
    - Applies three years after effective rule date for UST systems installed on or before effective date of rule
    - Keep records for 3 years

# Federal UST Regulation Revisions

## New Operation and Maintenance Requirements

- **Three year containment sump testing** (revised from proposal to not include tanks and piping) for sumps used for piping interstitial monitoring – since sumps must be tight for release detection to work properly
  - Double-walled sumps with periodic interstitial monitoring between the containment sump walls are not required to meet the testing requirement
  - Applies to new installations after effective date of rule
  - Applies three years after effective rule date for UST systems installed on or before effective date of rule
  - Keep records for 3 years
- **Annual release detection equipment testing** to make sure release detection equipment is operating properly
  - Applies beginning 3 years after the effective date of the rule
  - Keep records for 3 years



# Federal UST Regulation Revisions

## Addressing Deferrals - Emergency Generator USTs

- Previously Emergency Generator USTs did not have to meet the release detection requirements.
- The new regulations require release detection just like other regulated USTs
  - Required three years after effective date of rule for systems installed on or before the effective date of the UST rule
  - Required immediately for UST systems installed after the effective date of the UST rule

# Federal UST Regulation Revisions

## Addressing Deferrals - Field-Constructed USTs (FCT) and Airport Hydrant Fuel Distribution Systems (AHS)

- EPA previously deferred AHS and FCT from meeting release prevention and detection requirements.
- EPA is removing the deferral, however given the unique nature of these systems, EPA created more specific and appropriate requirements for these systems.
  - Exceptions to meeting secondary containment requirement for FCT & AHS piping
  - Provides unique options for meeting release detection requirements
  - One-time notification within 3 years for these systems
  - Implementation depends on requirement
    - Effective date: release reporting, response, and investigation; financial responsibility; closure, notification (except one-time )
    - 3 years after effective date: Spill and overfill prevention, corrosion protection, general operating requirements (including compatibility and repairs), release detection, and operator training
  - Partially excludes aboveground tanks associated with these systems

# Federal UST Regulation Revisions

## **Addressing Deferrals - Wastewater Treatment Tank Systems (WWTS), USTs Containing Radioactive Materials, and Emergency Generator USTs at NRC facilities**

- These previously deferred systems are reclassified as partially excluded from the 2015 UST rule (original proposal was to regulate WWTS and continue deferral of radioactive and Emergency Generator USTs at NRC facilities)
  - As with 1988 rule, EPA will continue to regulate installation under subpart A and cleanup under subpart F.

# Federal UST Regulation Revisions

## Compatibility

- Notification - owners and operators must notify the implementing agency at least 30 days before switching to a regulated substance containing greater than 10 percent ethanol, 20 percent biodiesel, or any other regulated substance identified by the implementing agency
  - In addition, owners and operators storing these blends must either
    - Demonstrate compatibility of the UST system through a nationally recognized testing lab listing or manufacturer approval of UST equipment or components; or
    - Use another method determined by the implementing agency to be no less protective of human health and the environment than the compatibility demonstration methods above
- To help owners and operators to be able to demonstrate compatibility of their UST systems with biofuel blends, EPA is requiring owners and operators maintain records to demonstrate compliance when storing greater than 10 percent ethanol, greater than 20 percent biodiesel, or any other regulated substance identified by the implementing agency
  - Keep the record for as long as one of these fuels are stored

# Federal UST Regulation Revisions

## Groundwater and Vapor Monitoring

- Requiring ***groundwater and vapor monitoring*** to have a site assessment for as long as one of these methods is used (proposal eliminated these options as release detection)
  - Site assessments needed not later than 3 years after effective date of rule

# Federal UST Regulation Revisions

## Additional Requirements

- **Flow restrictors** - flow restrictors in vent lines (ball floats) are no longer an option for overfill protection in new UST systems and when these devices need to be replaced
- **Internally lined USTs** - if the periodic internal lining inspection shows that the lining fails and cannot be repaired according to a code of practice, then that UST system must be permanently closed
- **Notification** – new owners must notify implementing agency within 30 days of acquiring ownership of a UST

# Federal UST Regulation Revisions

## Additional Requirements

- **Repairs** – 1988 UST regulation linked a repair to a release to the environment
  - 2015 UST regulation removes this link so that fixes not associated with releases are also repairs. Adding testing after repairs to spill, overfill and secondary containment equipment.
- **Interstitial monitoring results** – EPA added language about an interstitial alarm being an unusual operating condition and added interstitial integrity testing as part of release investigation and confirmation

# Federal UST Regulation Revisions

## Implementation of the 2015 Revisions to the Federal UST Regulations - General Updates

- Added newer technologies to the rule
- Updated codes of practice
- Removed references to old compliance deadlines
- Made editorial and technical corrections



# Federal UST Regulation Revisions

## What's Next for EPA

- OUST updated website to highlight the new regulations and different requirements
- Revising guidance documents
- Developing additional outreach and educational materials
- Always open to meeting with stakeholders

# Federal UST Regulation Revisions

## What's Next for PA

- Meet with EPA representatives in October 2015
- Provide STAC with key concepts of Chapter 245 changes and provide any additional clarification on federal UST regulations changes at December 2015 meeting
- Tentatively provide draft language of Chapter 245 changes at the STAC March 2016 meeting

A long wooden pier extends from the foreground into a calm body of water. The sky is filled with dramatic, dark clouds, suggesting a sunset or sunrise. The water reflects the light from the sky, creating a shimmering effect. The pier is made of dark wood and has a central pole with a light fixture at its end. The overall mood is serene and contemplative.

Thank you for your  
attention.

Any Questions?



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