2015 Underground Storage Tank (UST) Regulation Implementation
Successes and Challenges

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Session Description/Goals

• The final deadline has passed and UST facilities in Indian country are required to comply with US EPA’s revised 2015 UST regulation

• Speakers and audience participants will discuss
  – findings since implementing the 2015 regulations - what’s going well, and noncompliance issues
  – any unclear or emerging regulatory or technical issues
  – training or compliances assistance needs
Major Requirements in place since 1988 Regulation

- Corrosion protection
- Leak detection
- Spill buckets
Major Requirements in place since 1988 Regulation

- Overfill prevention
  - automatic shutoff devices
  - overfill alarms
  - ball float valves

- Financial responsibility
Why did EPA make changes to the 1988 UST regulation?

- Establish Energy Policy Act (2005) equity in Indian country for secondary containment and operator training
- Improve operation and maintenance
- Address UST systems deferred in the 1988 UST regulation
Why did EPA make changes to the 1988 UST regulation?

• November 2011 – EPA proposed changes to the regulations

• EPA adopted regulations on July 15, 2015 - with effective date of October 13, 2015
Major 2015 UST Regulatory Requirements

• Secondary Containment (April 11, 2016)
  – Applies to new and replaced tanks and piping
  – Includes interstitial monitoring (and sumps if they are used for interstitial monitoring)
  – Includes under-dispenser containment for new dispenser systems

• Operator Training (October 13, 2018)
  – Owners must designate and ensure 3 classes of operators are trained
  – Recordkeeping is required for as long as the operator is designated at the facility
  – Retraining is required for Class A and B operators at facilities determined to be out of compliance
Major 2015 UST Regulatory Requirements

- Periodic walkthrough inspections (October 13, 2018)
  - Every 30 Days
    - Check spill prevention equipment
    - Check release detection equipment and records
  - Annually
    - Check containment sumps
    - Check hand held release detection equipment
  - Keep records of the walkthrough inspection for 1 year
Major 2015 UST Regulatory Requirements

• Three year overfill prevention equipment inspections
  – Inspect to make sure overfill operates as intended
    • Applies to new installations after October 13, 2015
    • Applies October 13, 2018 for UST systems installed on or before effective date of rule
  • Keep records for 3 years
Major 2015 UST Regulatory Requirements

• Three year spill prevention equipment testing
  – 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 October 13, 2015
  • Applies October 13, 2018 for UST systems installed on or before effective date of rule
  • Keep records for 3 years
Major 2015 UST Regulatory Requirements

- **Three year containment sump testing** for sumps used for piping interstitial monitoring
  - Applies to new installations after October 13, 2015
  - Applies October 13, 2018 for UST systems installed on or before effective date of rule
  - Double-walled sumps with periodic interstitial monitoring between the containment sump walls are not required to meet the testing requirement
  - Keep records for 3 years
Major 2015 UST Regulatory Requirements

- **Annual release detection equipment testing** to make sure release detection equipment is operating properly
  - Applies beginning October 13, 2018
  - Keep records for 3 years
Compatibility

• **Notification** - notify the implementing agency at least 30 days before switching to a regulated substance containing greater than 10 percent ethanol, 20 percent biodiesel.

• **Demonstration of compatibility** – Owners and operators must demonstrate compatibility of the UST system if storing greater than E10 or B20.
  – Independent Laboratory Certification or Listing for Use with the Substance
  – Affirmative Statement of Compatibility from Manufacturer

• **Recordkeeping** - Owners and operators must maintain records for as long as the biofuel blend is stored to demonstrate compliance
From the Field…
Mike Arce - What’s going well or not so well...

What’s working:

- Owner/operator training: seeing o/o complying with new requirements. Training Class C before they assume duties and Class A/B receiving their EPA operator certificate within the 30 days

- Financial Responsibility: Insurance companies are starting to work with Tribal Nations by including specific language referencing 40 CFR along with state codes
From the Field…
Mike Arce - What’s going well or not so well…

What’s working cont’d:

- UST Boot Camps: Great success! Getting EPA’s message out there and reaching a lot of O/O, Environmental professionals, maintenance personnel, etc.
  - work stations for participants to take EPA’s online exam.
  - witness a fuel drop, sump inspection, dispenser inspection, ATG inspection, etc. and we’re lucky enough to have industry experts and professionals participate
From the Field…
Mike Arce - What’s going well or not so well…

What’s not working:
- Facilities not having their hydrostatic testing completed on time
- Maintaining 12 month’s of consecutive leak detection passing report
- Maintaining monthly walkthrough inspections
From the Field…
Mallory Miller – ATG Issue

- **Problem:** Veeder-Root TLS-350 Automatic Tank Gauge (ATG) shows “NO CSLD IDLE TIME”. This facility is very busy. There is not enough “quiet” time between dispensing cycles for the ATG’s “Continuous Statistical Leak Detection (CSLD) mode to work properly and thus cannot perform adequate release detection using the in-tank monthly monitoring method.
From the Field…
Mallory Miller – ATG Issue

- **Solution:** The facility has double wall tanks and product piping. The facility added software and re-programmed the ATG for interstitial monitoring to use as the primary release detection method for monthly monitoring for tanks. The interstitial monitoring method is independent of the total through-put and the amount of fuel in the tanks.
What’s going well or not so well/noncompliance Issues

- Operator Training
- Periodic Walk Throughs
- Three Year Spill Bucket Testing
- Three Year Sump Testing
- Three Year Overfill Protection Testing/Inspection
What’s going well or not so well/noncompliance Issues

- Annual Release Detection Equipment Testing
- Compatibility
- Financial Responsibility
- Other areas?
Common Violations Observed

- Release Detection – Tank - Failure to conduct monthly monitoring
- Release Detection – Piping
  - Missing Line tests
  - Missing Line Leak Detector functionality test
- Operator Training - Failure to get all applicable staff trained
- Walkthrough Inspection - Failure to complete
- Spill Prevention (Spill Bucket) - Failure to maintain/keep clean
- Financial Responsibility - Failure to provide appropriate mechanisms
- Containment Sump Testing not completed.
Clarifying Regulatory & Technical Issues

2015 UST Regulations Technical Compendium
• Provides applicability determinations, clarifications, and further guidance about the 2015 underground storage tank regulations

• Approximately 50 questions & answers in these categories:
  - Applicability
  - Implementation
  - Overfill protection
  - Release detection
  - Release reporting
  - Partially excluded USTs
  - Spill buckets, under dispenser containment sumps, containment sumps
  - Secondary containment and interstitial monitoring
  - Statistical inventory reconciliation
  - Airport hydrant systems related to Department of Defense facilities

Clarifying Regulatory & Technical Issues

**Double walled system installed before** April 11, 2016 – must use interstitial monitoring for piping leak detection and conduct sump testing or do they have another option?
Clarifying Regulatory & Technical Issues

• Double walled sump (or spill bucket) with dry interstice (monitor/sensor) – three year testing exemption?
For the UDC is three-year testing required?
Clarifying Regulatory & Technical Issues

• How is Containment Sump Testing conducted?
  – PEI RP 1200 – High Liquid Level testing
  – EPA procedure for Low Liquid Level testing
  – Other Test methods
Emerging Technologies

• Dri – Sump
  – https://www.dri-sump.com/

• Franklin Fueling sump technology

• Others?
Training and Compliances Assistance Resources

- OUST Website
  https://www.epa.gov/ust

- Operator Exam
  https://www.epa.gov/ust/class-a-and-class-b-ust-operator#complete

- UST Boot Camps

- Other needs?
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