



COMPLIANCE MANAGEMENT STRATEGIES



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AST vs. UST Compliance requirements




- Aboveground Storage Tanks (ASTs):
 - ▣ Misconception that ASTs are “unregulated”
 - ▣ Most are subject to federal requirements and some may also be subject to state or local requirements
 - ▣ ASTs generally have fewer compliance items to track
- Underground Storage Tanks (USTs):
 - ▣ Subject to federal, state and sometimes local requirements
 - ▣ In most cases, have more compliance requirements than ASTs



AST Compliance Background

- No single federal regulatory program for ASTs
- Several federal and state regulations, laws, codes
- Examples of requirements that may apply to ASTs:
 - Spill Prevention Control and Countermeasure (SPCC) regulations
 - Federal EPA program
 - Developed under Clean Water Act, 40 CFR Part 112
 - Purpose is to protect from discharge into water
 - Applicability depends on material stored and quantity

AST Compliance Background

- Examples of requirements that may apply to ASTs:
 - National pollutant discharge elimination system (NPDES) storm water permitting
 - Also developed under Clean Water Act
 - Developed to protect runoff to storm water from activities at industrial facilities
 - Ohio EPA program:
<http://www.epa.ohio.gov/dsw/storm/index.aspx>
 - Flammable/Combustible Liquid Storage
 - Regulated under Ohio Fire Code
 - Local fire department may also have requirements

UST Compliance Background

- 1983 - CBS's 60 Minutes aired 'Check the Water' which brought national attention to the effects of leaking underground storage tanks (USTs)
 - ▣ At this time UST's were:
 - Steel tanks unprotected from corrosion
 - Had no spill or overfill prevention/protection
 - Were not being monitored for releases
- 1984 - Congress required EPA to develop regulatory Underground Storage Tank Program (required by Subtitle I of Resource Conservation and Recovery Act (RCRA))
 - ▣ The UST Program was developed in response to the problems created by more than 2 Million USTs operating in 1984, many old and leaking, threatening groundwater.



UST Compliance Background

- ❑ 1986 Congress amended Subtitle I of RCRA and created Leaking Underground Storage Tank (LUST) Trust Fund
 - ❑ To oversee cleanups
 - ❑ To pay for cleanups at sites where owner/operator cannot or does not pay
- ❑ 1988 – EPA issued the new UST regulations
 - ❑ 40 CFR Part 280, 40 CFR Part 281 and 40 CFR Parts 280.50 – 282.105
 - ❑ Allowed approved state UST programs to operate in place of federal program
 - ❑ In Ohio, regulated by State Fire Marshal, Bureau of Underground Storage Tanks (BUSTR)

UST Compliance Background

- ❑ 1989 – New Requirements Started
 - ❑ Phase-In of Leak Detection began, including Tank/Line tightness testing
 - ❑ New tanks must have spill/overflow, corrosion protection
- ❑ 1998- Existing Tanks Upgrade Deadline
 - ❑ Spill, Overflow Prevention
 - ❑ Monthly Leak Detection
 - ❑ Corrosion Protection
 - ❑ Double Wall Tanks

**“Don’t wait
until 1998”**

UST Compliance Background

- ❑ 2002 - EPA reported 26% of USTs still had significant problems
- ❑ March 2003 GAO Report Concluded 200,000 Tanks (30%) not operated and maintained properly (May 2001)
 - ❑ Tanks significantly still leaking into environment
 - ❑ Even tanks with new equipment still leaking
 - ❑ EPA and States Reported -DID NOT have sufficient manpower and funds to inspect all tanks
- ❑ 2005 Energy Policy Act amended Subtitle I of the Solid Waste Disposal Act



- ❑ Required all regulated USTs be inspected every 3 years
- ❑ Secondary containment for new installs
- ❑ Delivery prohibition (red tags)
- ❑ Operator training (8/8/2012 deadline)

AST/UST Compliance Future



Where are we going?

- New state and federal UST regulations
 - Mandatory removal requirements for single-wall systems
 - More stringent requirements for monitoring and testing of secondary containment
- New regulations allowing decommissioning of Stage II vapor recovery
- New regulations requiring periodic testing of Stage I vapor recovery

Ohio Petroleum Underground Storage Tank 2012 Annual Report

- Statistics required by 2005 US Energy Policy Act
- 2012 Annual Report info posted April 2, 2013
 - ▣ Covers period October 1, 2011 through September 30, 2012
 - ▣ Total number of UST facilities at the end of the reporting period: **7,596**
 - ▣ Total number of underground storage tanks at the end of the reporting period: **22,144**
- Inspection info:
 - ▣ Number of facilities inspected: **2,877**
 - ▣ Percent of UST facilities inspected meeting release prevention (corrosion protection, spill and overfill) and release detection requirements: **89%**

Ohio Petroleum Underground Storage Tank 2012 Annual Report

- Release info:
 - Covers release reporting period October 1, 2011 through September 30, 2012
 - Only UST releases that were identified to have taken place during the reporting period were included in this report.
 - Total new UST releases that took place during the reporting period: ***72**
 - *There are 12 multiple sources identified for the reported 72 releases

Ohio Petroleum Underground Storage Tank 2012 Annual Report

- Release info: Detail about source of releases

- Tanks: 9 releases (13% of 72 releases)

- Physical/Mechanical Damage: 1 (11% of 9 releases)
- Corrosion: 1 (11% of 9 releases)
- Unknown: 7 (78% of 9 releases)

- Piping: 18 releases (25% of 72 releases)

- Physical/Mechanical Damage: 8 (44% of 18 releases)
- Unknown: 10 (56% of 18 releases)



Ohio Petroleum Underground Storage Tank 2012 Annual Report

- Release info: Detail about source of releases



- Dispenser: 13 releases (18% of 72 releases)
 - Physical/Mechanical Damage: 7 (54% of 13 releases)
 - Other: 1 (8% of 13 releases)
 - Unknown: 5 (38% of 13 releases)
- Submersible Turbine Pump (STP): 3 releases (4% of 72 releases)
 - Unknown: 3 (100% of 3 releases)

Ohio Petroleum Underground Storage Tank 2012 Annual Report



- Release info: Detail about source of releases
 - ▣ Delivery problem: 3 releases (4% of 72 releases)
 - Spill: 1 (33% of 3 releases)
 - Overfill: 2 (67% of 3 releases)
 - ▣ Unknown: 25 releases (35% of 72 releases)
 - Unknown: 25 (100% of 25 releases)
- To view report, or for past reports:
<http://www.com.ohio.gov/fire/BUSTRAnnualReports.aspx>

Why Maintain Compliance?

- Reduce environmental risks
 - ▣ Fumes from leaks can cause explosions or fire
 - ▣ Leaking USTs and ASTs contaminate groundwater, surface water and soils
- Be prepared for inspections
 - ▣ The number of compliance requirements is increasing
 - ▣ Inspections have increased. BUSTR inspects UST facilities every 3 years
 - ▣ Once issues found, may be subject to increased scrutiny

Why Maintain Compliance?

- Avoid fines and penalties

- ▣ Fines and penalties could be the result of not maintaining compliance
- ▣ A reminder from the BUSTR Operational Compliance Guide: **IF YOUR UST SYSTEM IS NOT EQUIPPED AND OPERATED IN COMPLIANCE WITH FEDERAL AND STATE REGULATIONS, THE FIRE MARSHAL HAS THE AUTHORITY TO FINE YOU UP TO \$10,000 FOR EVERY DAY YOU REMAIN IN VIOLATION.**

- Stop station disruption

- ▣ Avoid “red tag” shutdowns
- ▣ Also from the BUSTR Operational Compliance Guide: **THE FIRE MARSHAL HAS THE AUTHORITY TO PLACE A RED TAG ON YOUR UST AND PROHIBIT DELIVERY OF FUEL TO YOUR UST.**



Why Maintain Compliance?

- ❑ Ensure cleanup fund eligibility
 - ❑ Eliminate the possibility of rejection, due to noncompliance, by state cleanup fund

- ❑ Improve facility performance
 - ❑ Improve facility recordkeeping and employee training
 - ❑ Identify maintenance or risk issues before they become a problem



How to Achieve Compliance?



- Understand what is required
 - ▣ Agencies
 - ▣ Regulations



- Establish a compliance program
 - ▣ Review options, determine best for you

Important Aspects of Compliance

- Equipment inventory
 - ▣ Know what you have
- Permitting and fees
 - ▣ UST related: BUSTR registration,
 - ▣ fees, UST permits for work, out of service, etc.
 - ▣ State fund: PUSTRCB certificate, financial responsibility
 - ▣ Air quality: Ohio EPA Permits to install and operate (PTI and PTO) or Permit to install/operate (PTIO), Permit by rule (PBR, if applicable), emissions related filings and fees
 - ▣ Local (if applicable)
 - ▣ Federal (if applicable)



Important Aspects of Compliance

- Testing and inspections
 - ▣ Determine requirements for periodic testing and inspections
 - ▣ Keep track of due dates
 - ▣ Make sure required testing and inspections are performed
- Maintenance and equipment info
 - ▣ Keep equipment in good working order
 - ▣ May be specific inspection forms / checklists
 - BUSTR Operational Compliance Form
 - Stage II equipment inspection and maintenance logs
 - Impressed current rectifier check logs



Important Aspects of Compliance



- Training
 - ▣ Class A, B and C UST operator training
 - ▣ Stage I/II vapor recovery training
- Release detection
 - ▣ Need passing result each month
 - ▣ ATG, interstitial monitoring or other approved method (Statistical Inventory Reconciliation (SIR))
 - ▣ Next steps for non-passing results
 - ▣ Alarm management (ATG)
 - ▣ Release reporting



Important Aspects of Compliance

- Recordkeeping
 - ▣ Maintain organized records related to all aspects of compliance management
- NOV resolution
- Regulatory changes
 - ▣ Follow and understand



Compliance Management Options

- How can owner/operator manage all compliance requirements?
 - ▣ Do it yourself
 - ▣ Some third-party assistance
 - ▣ Mostly third-party assistance



Compliance Management Options

□ Do it yourself

▣ How to do it:

- Understand aspects of compliance management
- Develop own program

▣ Pros:

- Little cost (if compliance is maintained)

▣ Cons:

- Requires time investment, discipline, organization, well-trained employees



Compliance Management Options

- Some third-party assistance
 - How to do it:
 - Different vendors for managing different aspects: testing contractor, maintenance contractor, release detection
 - Pros:
 - Can pick and choose which aspects need most assistance
 - Cons:
 - Multiple parties involved, possible communication issues, more costly than DIY

Compliance Management Options

- Mostly third-party assistance
 - How to do it:
 - Use one vendor to assist with all aspects:
 - Maintain equipment inventory
 - Track, renew, maintain permits, pay required fees
 - Scope, dispatch, maintain required tests and inspections
 - Manage and/or perform release detection
 - Document storage (recordkeeping)
 - NOV resolution
 - Regulatory guidance
 - Owner still maintains responsibility

Compliance Management Options

- Mostly third-party assistance (continued)



- Pros:

- Higher level of compliance, fewer parties involved, all info in one place, requires less involvement and time investment by owner/operator

- Cons:

- More costly than DIY

Consequences of Non-Compliance

- ❑ **Threat to health and environment**
- ❑ **Fines and penalties**
- ❑ **Station disruption or shutdown**
- ❑ **Cost of cleanup if a release occurs**



Conclusion

- Determine best approach
- Understand what is required
- Achieve and maintain compliance



Thank You

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