NAVIGATING THE NEW EPA UST REGULATIONS

What the changes mean for Indian Country UST Operators

Hosted by

(c) UST Training 2016-18
About Ben Thomas, UST Training

- In UST industry since 1986.
- First state inspector, then consultant/trainer.
- Trained more operators and for longer than anyone in the US.
- Trained 1000’s of Class AB operators, over 350,000 Class C operators.
- Member of PEI.
UST Systems

- Can leak
- Can have spills
- Can have dangerous fire
How do we know we might have a problem?

• Tank monitor alarms
• Slow flow/no flow at the dispenser
• Smell vapors
• See sheen in the nearby ditch or waterway
• Neighbors complain of gas vapors
What Might Happen if an Alarm is Ignored?

- Major loss of product
- Downtime
- Impacted neighbors and lawsuits
- Bad press
- EPA Fines
OUTLINE

• Why the changes?
• Applies to who and where?
• When must I comply?
• What’s new and different?
• What’s my action plan?
• Some closing thoughts
Why the Changes?

- Certain technologies and actions continue to cause leaks and spills at USTs.
- EPAAct 2005 documented concerns.
- 2011 draft rules developed to correct.
- Tons of industry feedback.
- UST Training supports most changes.
- Petroleum industry does too.
Applies to Who and Where?

- Federal EPA rules have changed.
- Applies to all USTs in Indian Country that EPA or tribes regulate.
Applies When?

- Some rules applied starting October 13, 2015.
- A few rules applied starting April 11, 2016.
- BUT most apply October 13, 2018.
Topic by Topic Discussion

- What it means
- What’s different?
- What’s my action plan?
UST Operator Training

- Required for all Indian Country UST sites
- First time by 10/13/2018, then ongoing
- Class A: Owner
- Class B: Manager
- Class C: Employee
- SHOULD improve compliance through knowledge
UST Operator Training

What it means

- Finally operator training a national rule.
- Feds can enforce.
- All first time training must be done by 10/13/2018.
UST Operator Training

What’s Different?

• All Indian Country UST Operators must get trained.

• Class A, B and C operators
UST Operator Training

What’s Different?

• All designated Class Cs must be trained and must be onsite.

• Customers, drivers not necessarily Cs.

• New Class A/Bs must be trained in 30 days.

• Retraining due to violations within 30 days.
What’s Different?

- Training Options:
  - EPA Exam
  - Third Party Trainers like UST Training
  - Other options
UST Operator Training

My Action Plan

- Don’t wait!
- Designate, train all Cs.
- Must comply by 10/13/2018.
- 59 days to go!
Hello Secondary Containment

What it means

- Most new UST systems after April 11, 2016, must have secondary containment w/ interstitial monitoring.
- New dispensers must have under dispenser containment.
- UDC and secondary containment better defined.
Hello Secondary Containment

What it means

- If 50%+ existing pipe replaced, all must now be secondarily contained.

- Safe suction doesn’t have to comply 😞 but we strongly recommend it. 😊
Hello Secondary Containment

What’s Different?

• USTs in Indian Country must comply for new systems.

• UDC must be liquid tight.

• Sumps must be liquid-tight.
Hello Secondary Containment

What’s Different?

- Sumps with no sensors must be easily inspectable.
- Continuous monitoring not required. 😞
Hello Secondary Containment

My Action Plan

- Assume secondary containment for nearly all USTs going forward.
- Many systems already there.
- Tribal operators must have complied by 4/11/16.
30-Day Walk Through Inspections

What it means

- Finally, a national mandate to check your site monthly.
- Walk your site monthly, look for potential problems.
- Use PEI RP 900 (must use all).
- Records for at least 1 year.
30-Day Walk Through Inspections

What it means

- Check spill buckets (unless you don’t get a delivery every 30 days), fill caps, fill pipe, interstitial areas, release detection equipment for alarms.

- Impressed current check still every 60 days. 😞
30-Day Walk Through Inspections

What it means

- Clean out/look for damage in spill buckets.
- Check fill caps.
- Check ATG for alarms.
- Check for sticks in drop tubes.
- Release detection records current.
What’s Different?

- You may already require this—just keep doing it.

- Tribal operators must comply by 10/13/2018.

- Checking release detection via remote monitoring okay.
30-Day Walk Through Inspections

My Action Plan

- Get PEI RP 900 form and start practicing.

- If you choose RP 900, you must use the entire form (daily, monthly, annually).

- Think about a third party solution if you have lots of sites.
30-Day Walk Through Inspections

My Action Plan

- Make sure you have a liquid waste disposal plan.
- Your trained A/B operator should be able to inspect.
Annual Sump Inspections

What it means

- Finally, a mandate to look for leaks in the most likely spot.
- Inspect sumps to look for leaks, water, drips, damage, etc.
- Tribal operators must comply by 10/13/2018.
Annual Sump Inspections

What’s Different?

• Might be first time for many.

• You might do doing this anyway so keep doing it.

• Also must check hand held release detection equipment.
Annual Sump Inspections

My Action Plan

• Get to know PEI RP 900 annual inspections.

• Consider hiring a third party.

• Safety concerns: injury zone!

• Get ready to be surprised.
New Equipment Testing/Inspection

What it means

• Finally, checking the last remaining untested/uninspected parts.
• Tightness test spill buckets.
• Function test or “inspect” overfill equipment.
• Tightness test sumps.
• Function test ELLDs and other leak detection equipment.
New Equipment Testing/Inspection

What’s Different?

• Most states don’t required these tests but a few states do.

• Tribal operators must comply by 10/13/2018.

• Testing every year for release detection equipment.

• Testing every 3 years for spill buckets, overfill equipment, sumps, UDCs.
New Equipment Testing/Inspection

What’s Different?

• No spill bucket testing if double-walled and periodically tested.
  • Otherwise it’s vacuum, liquid or pressure testing.

• Recognizes PEI RP 1200.

• Keep test records for 3 years.
New Equipment Testing/Inspection

What’s Different?

- Secondary containment testing for piping sumps only every 3 years, not tanks and piping interstices 😞 unless after repair or release. 😊

- Sumps and penetrations must be liquid tight.

- H/P/V systems don’t need to test.
New Equipment Testing/Inspection

What’s Different?

• Sumps/interstices NOT used for secondary containment don’t have to be tested 😞.

• Continuous monitoring still not required 😞.

• Can use PEI RP 1200 for testing standards.
New Equipment Testing/Inspection

What’s Different?

- Automatic Tank Gauge Testing every year:
  - Test alarm.
  - Verify system configuration.
  - Test battery backup.

- Inspect overfill equipment every 3 years via PEI RP 1200.
New Equipment Testing/Inspection

What’s Different?

- Probes and Sensors every year:
  - Visual inspection for buildup.
  - Floats, shaft and cables working properly.
  - Alarm/communication operability.
New Equipment Testing/Inspection

What’s Different?

• ALLDs every year:
  • Simulate leak test 3 GPH
  • ALLD for all pressurized lines

• Vacuum Pump and Gauges every year:
  • Proper communication with sensors and controllers.
New Equipment Testing/Inspection

My Action Plan

• Start getting ready by working with contractors about pricing, schedule and retrofits.

• Consider double-wall spill buckets when replacing.

• Get familiar with www.NWGLDE.org.

• Get to know PEI RP 1200.
Goodbye Ball Float Valves

What it means

• Finally, the one overfill device that can cause an overfill is being eliminated (but slowly).
Goodbye Ball Float Valves

What’s Different?

- Tribal operators must have complied by 10/13/2015.
- Immediately no longer allowed if replaced.
Goodbye Ball Float Valves

My Action Plan

• 3 year test will determine if working.

• Whether required or no, remove them ASAP and replace with high level alarm AND automatic shut off device.
Compatibility Revised

What it means

- Compatibility rule in place since 1988 but now:
  - Must notify your UST agency 30 days before storing greater than E10 gasoline and B20 biodiesel.
  - Tribal operators must have complied by 10/13/2015.

- Now must “demonstrate” system compatibility.
- Maintain records of compatibility for certain regulated substances.
- Questionably compatible tank and piping material still allowed.

(c) UST Training 2016-18
“Repairs”

What it means

• Broadens definition to include more than fixing a tank or pipe that leaked.

• Now includes components, that, if not repaired may eventually leak.

• Like spill/overfill equipment.
“Repairs”

What it means

- Also expands tests or inspections of components after repairs.
- Includes testing secondary containment areas.
- Done up to 30 days after repair.
Hello Interstitial Alarms

Summary

• Finally, a rule to respond to that darn “L4” Alarm.

• Liquid in sump must be investigated.

• Follow-up testing may be required depending.

• Tribal operators started complying by 10/13/2015.
Emergency Generator Tanks

What it means

- Finally, generator tanks no longer deferred from release detection.
- Start looking for leaks in tank and piping if you aren’t already.
What Was Due October 13, 2015?

- No new ball float valves.
- Testing following a repair.
- Notification of ownership change.
- Newly installed EGTs must start doing release detection.
- Demonstrate compatibility.
- Notify UST agency if storing E10+ and/or B20+.
What Was Due Starting 4/11/16?

- New Under Dispenser Containment (UDC) when installing new dispensers.
- Secondary containment and interstitial monitoring for new installs.
- New pressurized lines must have line leak detectors (sump sensors alone don’t qualify).
What’s Due in 10/13/2018?

- Operator training (all designated Class Cs).
- Secondary containment with interstitial monitoring for all new systems (a few exemptions).
- Spill prevention equipment testing every 3 years.
- Overfill prevention equipment inspections every 3 years.
- Containment sump testing every 3 years.
- Annual release detection equipment testing.
What’s Due 10/13/18?

- Annual sump inspections.
- 30-Day walk through inspections.
- Release detection for emergency generator tanks.
- Many of these things happen on a three-year cycle and can happen during one service visit 😊
For typical UST Owners, the impact might looks like this:

- Monthly Walkthrough Inspections
- Equipment Testing
- Edits, Updates, admin stuff
- Compatibility
- Interstitial stuff
- Banning/allowing certain technologies
- Operator Training
- Deferred Tanks

(c) UST Training 2016-18
How Do I Prepare?

- Breathe, it’s not all happening at once.
- Look at phase-in schedule.
- Starting budgeting.
- Determine if you or a third-party will do monthly inspections.
- Get ready for more testing.
- Train all your Class Cs, not just a few.
- Get on mailing and trade journal lists.
- Get to know PEI RP 900 and 1200.
- Get ABC trained ASAP.
- Stop by for updates!
In General Terms

- Some rules have bigger operational impacts than others.
- Most technical rules address known industry problems.
- Testing problem parts traditionally not tested (leaking spill buckets).
- Some rules just clarify.
- Overall major step forward.
- We’ve recommended most of these for years.
# Four Types of Learners

<table>
<thead>
<tr>
<th>They know they don’t know</th>
<th>They don’t know they know</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student is aware that knowledge is lacking.</strong>&lt;br&gt;“<em>I have an ATG but I don’t know what it does</em>”</td>
<td><strong>Student is unaware they already know something.</strong>&lt;br&gt;“<em>You mean that 0.2 gph test means my tank is tight? I guess I knew that.</em>”</td>
</tr>
<tr>
<td><strong>They know they know</strong></td>
<td><strong>They don’t know they don’t know</strong></td>
</tr>
<tr>
<td><strong>Student knows they know the material.</strong>&lt;br&gt;“<em>How often do I look for leaks? My ATG has CSLD so I test all the time.</em>”</td>
<td><strong>Student is unaware that knowledge is lacking</strong>&lt;br&gt;“<em>Why do I need a tank gauge? If there was a leak it’s show up in my inventory!</em>**”</td>
</tr>
</tbody>
</table>
## How Are We Doing Compliance-Wise?

### Signification Operational Compliance in Indian Country

<table>
<thead>
<tr>
<th>Region / State</th>
<th>% in Significant Operational Compliance with Release Prevention Regulations</th>
<th>% in Significant Operational Compliance with Release Detection Regulations</th>
<th>% of UST Facilities in SOC w/UST Release Detection and Release Prevention</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AK</td>
<td>82%</td>
<td>80%</td>
<td>75%</td>
</tr>
<tr>
<td>ID¹</td>
<td>93%</td>
<td>84%</td>
<td>76%</td>
</tr>
<tr>
<td>OR</td>
<td>93%</td>
<td>92%</td>
<td>87%</td>
</tr>
<tr>
<td>WA</td>
<td>89%</td>
<td>87%</td>
<td>80%</td>
</tr>
<tr>
<td>SUBTOTAL</td>
<td>90%</td>
<td>88%</td>
<td>81%</td>
</tr>
<tr>
<td>INDIAN COUNTRY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REGION 1</td>
<td>DNA³</td>
<td>DNA³</td>
<td>DNA³</td>
</tr>
<tr>
<td>REGION 2</td>
<td>82%</td>
<td>82%</td>
<td>82%</td>
</tr>
<tr>
<td>REGION 3</td>
<td>N/A⁴</td>
<td>N/A⁴</td>
<td>N/A⁴</td>
</tr>
<tr>
<td>REGION 4</td>
<td>100%</td>
<td>78%</td>
<td>78%</td>
</tr>
<tr>
<td>REGION 5</td>
<td>73%</td>
<td>64%</td>
<td>59%</td>
</tr>
<tr>
<td>REGION 6</td>
<td>95%</td>
<td>93%</td>
<td>88%</td>
</tr>
<tr>
<td>REGION 7</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>REGION 8</td>
<td>67%</td>
<td>81%</td>
<td>60%</td>
</tr>
<tr>
<td>REGION 9</td>
<td>94%</td>
<td>79%</td>
<td>77%</td>
</tr>
<tr>
<td>REGION 10</td>
<td>84%</td>
<td>84%</td>
<td>75%</td>
</tr>
<tr>
<td>SUBTOTAL</td>
<td>83%</td>
<td>80%</td>
<td>72%</td>
</tr>
<tr>
<td>NATIONAL TOTAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>84.4%</td>
<td>79.0%</td>
<td>71.6%</td>
</tr>
</tbody>
</table>
Positive Motivators

- Clear explanation of consequences and impacts of failing to comply.
- Incentives for compliance (rewards, affirmations, promotions)
- New mobile device apps like EZZELY
Thanks! More at USTTraining.com

- Lots of technical support documents.
- Indian Country Class A/B and C training available.
- Free monthly newsletter.
- More at www.PEI.org