UST Regulation Changes
Handy Links

PA DEP Storage Tanks Website
www.depweb.state.pa.us (Type in Keyword: Storage Tanks)

PA Code
www.pacode.com

PA Bulletin
www.pabulletin.com

EPA
www.epa.gov

USTIF
www.insurance.state.pa.us/ustif/
717-787-0763 or 1-800-595-9887
Background

• PA adopted Federal rules – 1991
• Federal Energy Policy Act of 2005
• Last substantive technical rule changes – 2007
• Operator training requirements added – 2009
What constitutes a UST system?

- 10 percent of the tank system is underground
- Substance stored meets *de minimis* quantity of regulated substance
- Over 110 gallons
- *Was … is … or will be used*
Regulated Substance

• Hazardous (liquids gases or suspended/dissolved in liquid or gas)
  – 40 CFR 302.4 (CERCLA)
  – Includes “groups”

• Petroleum (liquids at standard temperature and pressure)
  – Derived from crude oil
  – Wood-derivative oils
  – Inedible oils from seeds
  – Synthetic fuels and oils
Line Testing

- Test manufacturer’s limitations must be adhered to
  - Some methodologies are not certified for flexible piping
  - Do not exceed maximum length or volume specified
- Requires UTT certification (by 11/10/2008)
- Report to owner within 20 days
No Delivery

- Not registered or not permitted = cannot operate (store product in) system
- Energy Policy Act prohibition handled through formal DEP order
- Registered TOS: operating permit is automatically withheld (withdrawn if previously reported); should not operate
Submission of Forms

• Facility Operations Inspections still must be submitted within 60 days
• Modification Reports must be submitted within 30 days of conducting the activity (245.108)
• Acceptable paper work is truthful, complete, correct, legible and on time
Applicability / Variances / Codes & Standards

• Newly regulated register by 1/9/2008
• Newly regulated meet technical by 11/10/2010
• Variances when technically impractical
• New technologies vetted by PE
• Standards organizations listed
• Other standards require approval
Facility Inspections

• Entire facility
• Every 3 years (phased in)
• 6 to 12 months after installation or owner change
• TOS may be delayed
• Operator training if noncompliant (and notified)
Facility Inspections Include

- Component construction
- Operation
  - Release detection
  - Overfill
  - Verify corrosion protection
  - Water monitoring and removal
- Containment status
- Recordkeeping
  - Installation
  - Corrosion protection
  - Release detection
- Operator training
  - A/B/C designated and trained
  - Emergency procedures available
Notification of Installation

- At least **30 days prior** to the installation of a new tank or a new UST system, owners and operator **shall notify** the Department of the **proposed installation** on a form provided by the Department.

- After January 9, 2008

- Form is / will be available (see web)
New UST Systems

• Total secondary containment
• Corrosion protection
• Spill
• Overfill
• Spill containment & piping sumps tested at installation (and repair)
• Unregulated to regulated must meet new standards
Routinely Contains Product

• Requires CP and release detection
• Does:
  – siphon bars;
  – piping between tanks and dispensers

• Does not:
  – vent lines (including Stage II lines);
  – remote fills
Metallic – Includes Copper

(pipe that routinely contains product)
CP Must be Testable

- Factory-fitted cathodic protection buried: no test lead
- All tank and piping CP must be tested every 3 years – usually in conjunction with facility inspection
Wrapping Not Sufficient

Simply wrapping a flex connector or pipe, without the addition of an anode, does not provide adequate protection from corrosion.
Liquid Tight Spill Buckets

• What’s wrong with this picture?
Ball Float Valves

- Not compatible with suction systems with air eliminators
- Should not be used with other suction systems (See PEI RP-100)
- Coax vapor recovery bypasses overfill protection
- Not pressure fill: may damage tank
- Can cause emergency generator explosion
- Should not be used with remote fills
Tank Liners

• Evaluation: Guidance 257-3120-001
• TL or PE (with certified help)
• Initial inspections completed soon
• No new linings
• No repairs
Major Modification

• An activity to upgrade, repair, refurbish or restore all or any part of an existing storage tank system or storage tank facility which:
  – alters the design
  – affects the integrity
  – any time there is excavation

• Dispenser pans required when major at island
System Maintenance

• Required when affects system reliability
• Required when affects release detection
• Sumps/containment – free from liquid incursion
• Monthly check for water
• Water removal and proper disposal
• Minimum rectifier readings defined
Requires Repair
Registration

• Some **moved** to subchapter A
  – Registration form is also an application for an operating permit
  – Submit new information and changes within 30 days
  – Register each compartment and manifolded tank separately
  – Appropriate fees must be paid until tank is closed (in-place or removed)
Reuse of Removed Tanks

• Must meet new tank requirements
Recordkeeping

- **“Permanent”**
  - Corrosion expert site evaluation or design
  - Installation & modification records
  - Upgrade assessment
  - System repairs

- **“Temporary”**
  - Release detection
  - CP operation
  - Containment testing
  - Operator list and training certificates
  - Emergency response instructions/procedures
Operator Training
(added 12/2009)

• Written operating procedures no later than June 28, 2010
• Class A, B and C operators defined
• Operators designated and trained no later than August 8, 2012, or cease operation
• Class A & B: formal training, pass evaluation
• Class C: less formal training
Operator Training (cont.)

- Owner may contract operator services
- Noncompliance may require additional training for A and/or B operator
- Annual refresher for C operators
- C operator present at retail sales of motor fuels to general public
- Owner must keep list of designated operators current
Interstitial Monitor

- Monthly tank & piping
  - Manufacturer’s and installer’s performance claims documented
  - Required for new installs
  - Older systems by 11/10/2009, when capable
  - Sensors or manual / visual

- LLD function
  - Must be continuous (no less than once per hour)
  - Must meet 3.0 gph criterion
  - New & upgraded piping: shut off pump
Interstitial Problems

- Test boots: must allow product to sump
- Sensors: must be connected and working
- Interference: sumps filled with water
- Improper pipe install
- Sensor installation: lowest point of sump, vertical, etc.
Inventory Control and MTG

• Less than 10 years since installation

OR

• Less than 10 years since INITIAL addition of protection to a bare steel tank

➢ Requires tank tightness testing

➢ Inventory control went away

12/22/2008
Manual Tank Gauging

- 1001 – 2000 gallon tank, installed before 11/10/2007, can use in place of Inventory Control for 10 years
- 551 – 1000 gallon tank, installed before 11/10/2007, can use indefinitely if using the appropriate 44 or 58 hour test time
- 550 gallons or less can use 36-hour test as sole methodology
ATGs

- Inventory report is not a leak test
- Help educate owner
- Only some do low product testing
- Uncertified gauges must be replaced or certified by 11/10/2008
Groundwater & Vapor Monitoring

- Requirements verified by a knowledgeable professional
- Assessment before starting monitoring
- Copy of assessment retained
Line Leak Detectors

- 3.0 gph @ 10 psig within 1 hour
- Annual test of operation
- Mechanical
- Electronic
- Continuous interstitial monitoring
- Changing type of LLD is a minor modification
TOS Limitations

- **Substandard** TOS tanks must have been closed by 12/22/1999
- Within 3 months of TOS product piping disconnected
- Owner must amend registration when in and out of TOS
- TOS tanks must be empty
- Upgraded TOS tanks must close 3 years after TOS or 11/10/2010 (whichever is later), or obtain DEP permission
Financial Responsibility

- Owners required to participate in USTIF
- Owners are responsible for USTIF deductibles
- DEP will ask when FR documentation needed
- Methods for meeting deductible are the same as those listed in Federal FR rule