

UST Regulation Changes

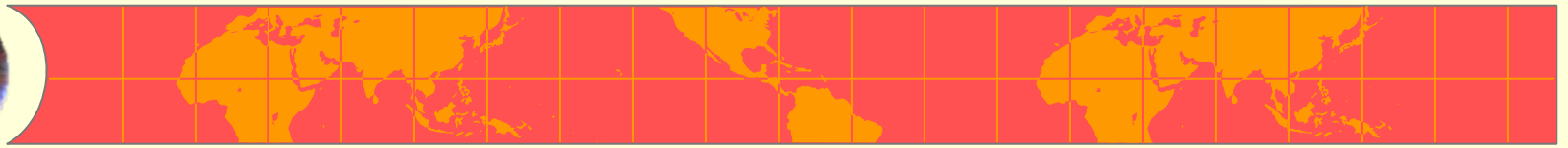
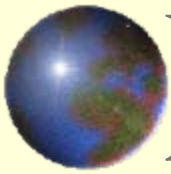


Pennsylvania
Department of Environmental Protection
www.dep.state.pa.us

Walter R. Nagel
*UST Program & Grants Management
Division of Storage Tanks*

Bureau of Land Recycling and Waste Management
Rachel Carson State Office Building
P.O. Box 8763
Harrisburg, PA 17105-8763

Office: 717-772-5599
Fax: 717-772-5598
wnagel@state.pa.us



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

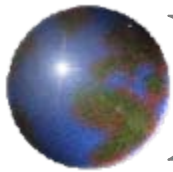
EPA

www.epa.gov

USTIF

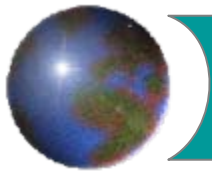
www.insurance.state.pa.us/ustif/

717-787-0763 or 1-800-595-9887



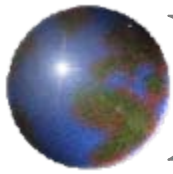
Background

- Federal law – 1974; prohibition – 1985; rules 1988
- PA adopted Federal rules – 1991
- Federal Energy Policy Act of 2005
- Last substantive technical rule changes – 2007
- Operator training requirements added – 2009



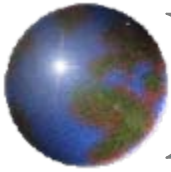
What constitutes a UST system?

- 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



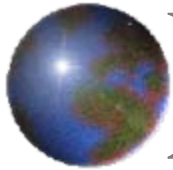
Regulated Substance

- 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



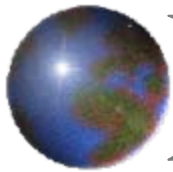
Line Testing

- 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



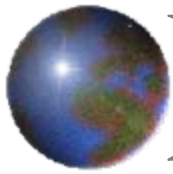
No Delivery

- ❖ 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



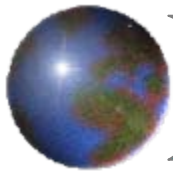
Submission of Forms

- 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



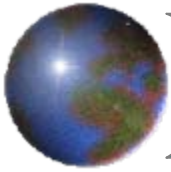
Applicability / Variances / Codes & Standards

- 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



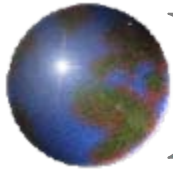
Facility Inspections

- 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)



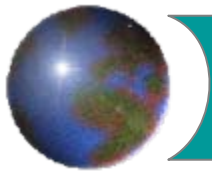
Facility Inspections Include

- 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



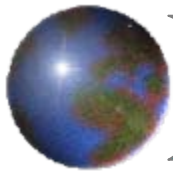
Notification of Installation

- 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)



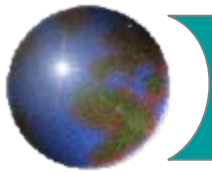
New UST Systems

- 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

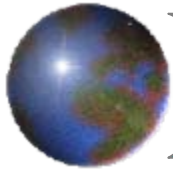
- Requires CP and release detection
- Does:
 - siphon bars;
 - piping between tanks and dispensers
- Does not:
 - vent lines (including Stage II lines);
 - remote fills



Metallic – Includes Copper

(pipe that routinely contains product)

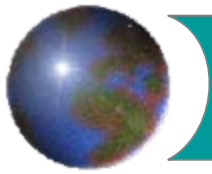




CP Must be Testable

- 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

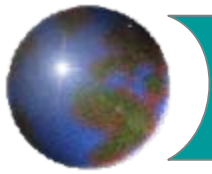




Wrapping Not Sufficient



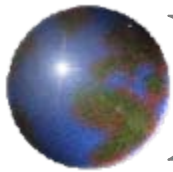
Simply wrapping a flex connector or pipe, without the addition of an anode, does **not** provide adequate protection from corrosion



Liquid Tight Spill Buckets

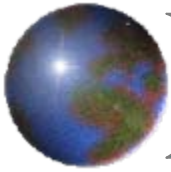
- What's wrong with this picture?





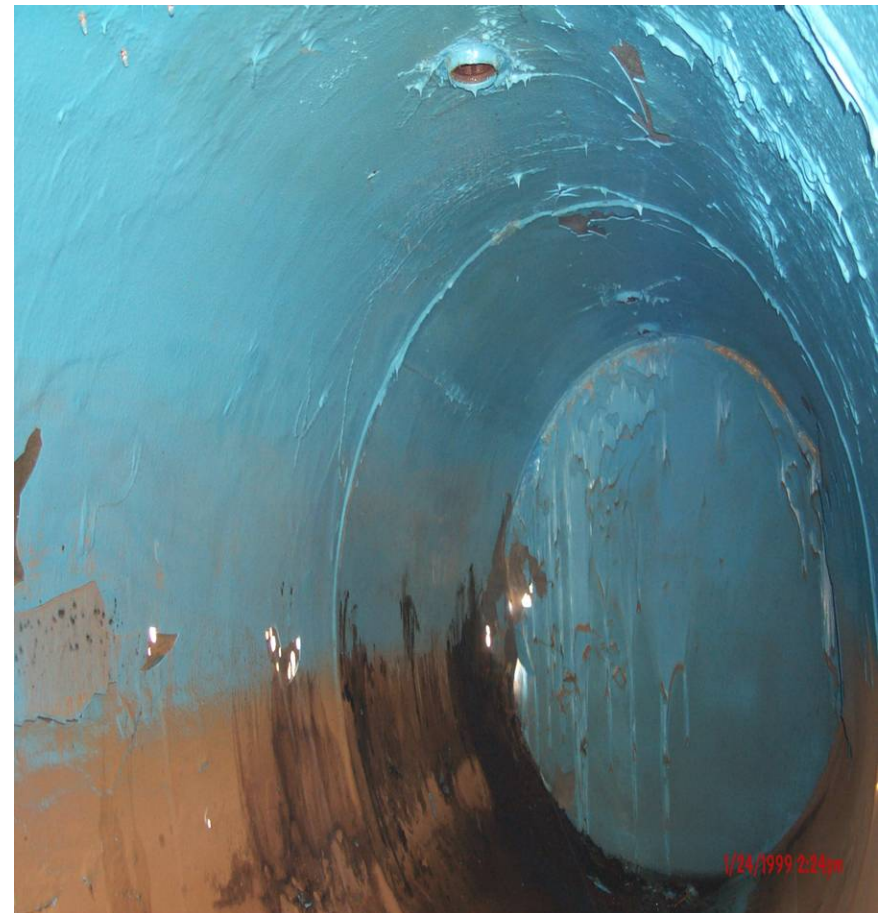
Ball Float Valves

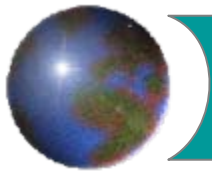
- o Not compatible with suction systems with air eliminators
- o Should not be used with other suction systems (See PEI RP-100)
- o Coax vapor recovery bypasses overflow protection
- o Not pressure fill: may damage tank
- o Can cause emergency generator explosion
- o Should not be used with remote fills



Tank Liners

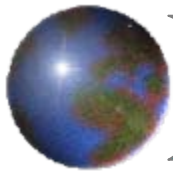
- Evaluation: Guidance 257-3120-001
- TL or PE (with certified help)
- Initial inspections completed soon
- No new linings
- No repairs





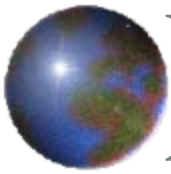
Major Modification

- 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



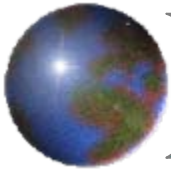
System Maintenance

- 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



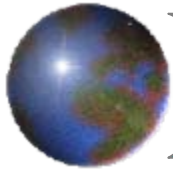
Requires Repair





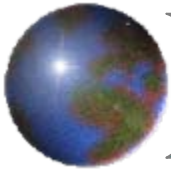
Registration

- 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)



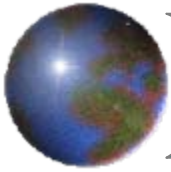
Reuse of Removed Tanks

- Must meet new tank requirements



Recordkeeping

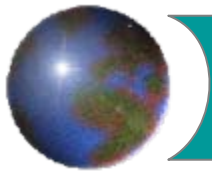
- “Permanent”
 - Corrosion expert site evaluation or design
 - Installation & modification records
 - Upgrade assessment
 - System repairs
- “Temporary”
 - Release detection
 - CP operation
 - Containment testing
 - Operator list and training certificates
 - Emergency response instructions/procedures



Operator Training

(added 12/2009)

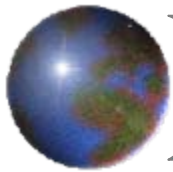
- Written operating procedures no later than June 28, **2010**
- Class A, B and C operators defined
- Operators designated and trained no later than August 8, 2012, or cease operation
- Class A & B: formal training, pass evaluation
- Class C: less formal training



Operator Training

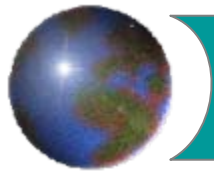
(cont.)

- 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

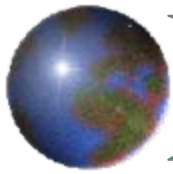
- Monthly tank & piping
 - Manufacturer's and installer's performance claims documented
 - Required for new installs
 - Older systems by 11/10/2009, when capable
 - Sensors or manual / visual
- LLD function
 - Must be continuous (no less than once per hour)
 - Must meet 3.0 gph criterion
 - New & upgraded 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

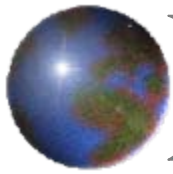
OR

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

➤ Requires tank tightness testing

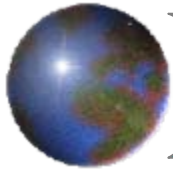
➤ Inventory control went away

12/22/2008



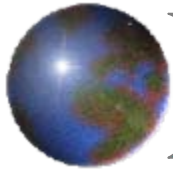
Manual Tank Gauging

- 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



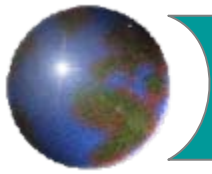
ATGs

- 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**



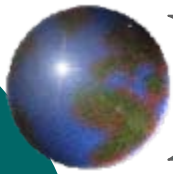
Groundwater & Vapor Monitoring

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



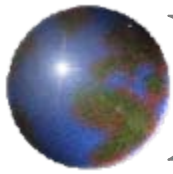
Line Leak Detectors

- 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