



Embracing Change

The Evolution of UST Inspector Training in South Carolina

2018 National Tanks Conference

South Carolina Department of Health and Environmental Control

Healthy People. Healthy Communities.

What are the basic goals?

Provide a basic understanding of:

- Regulatory requirements
- The inspection process
- Violations and corrective actions
- ***The reason their job is important***

Teach the inspector to recognize issues with:

- Release Prevention
- Release Detection
- Corrosion Prevention
- General equipment and suspected releases

The “Old” Process

- Training at central office (Monday - Friday)
- The following week inspection scheduling
- Three days of one-on-one training in the field/office
- ***Counted as one training course***

The Homework.....

- EPA Basic UST Inspector Training (on CD)
- Mississippi's Basic UST Inspector Training (CD)
- State Underground Environmental Response Bank Act (SUPERB)
- SC UST Control Regulations
- EPA Publications

Regulations and EPA Publications



Straight Talk on Tanks
Leak Detection Methods For
Petroleum Underground
Storage Tanks And Piping

United States Environmental Protection Agency Solid Waste And Emergency Response 5403W EPA 510-B-93-005 November 1993



Manual Tank Gauging
For Small Underground
Storage Tanks

United States Environmental Protection Agency Solid Waste And Emergency Response 5403W EPA 510-B-93-004 November 1993



Doing Inventory Control
Right
For Underground Storage Tanks

United States Environmental Protection Agency Solid Waste And Emergency Response 5403W EPA 510-B-95-009 September 1995



Introduction To Statistical
Inventory Reconciliation
For Underground Storage Tanks

United States Environmental Protection Agency Office of Underground Storage Tanks Washington, D.C. 20460 EPA/530/UST-88/008 July 1990



Musts for USTs

United States Environmental Protection Agency Solid Waste And Emergency Response 5401G EPA 510-B- August 2000 www.epa.gov



Automatic Tank Gauging
Systems For Release
Detection

Classroom Training

- Step-by-Step discussion of the regulatory requirements (Subpart A, Subpart B, etc.)
- Included equipment discussions
- In-field time at local facilities
- Other field training, as available

At Local Facilities

- General discussions regarding:
 - Equipment
 - Release Detection
 - Equipment Testing requirements
 - Paperwork review (basic)

Other field training

- Installations; and/or
- Closures

By the end of the third day....



Field Training

- ***Three days*** of inspections
- Office procedures

*Then released to work on own.

**Cell phone provided.



Inspection Paperwork

- Carbonless forms
- Procedures time consuming

Y	N	SURVEYS
<input type="checkbox"/>	<input type="checkbox"/>	ASTs _____
<input type="checkbox"/>	<input type="checkbox"/>	Vapor _____
<input type="checkbox"/>	<input type="checkbox"/>	Wells _____
<input type="checkbox"/>	<input type="checkbox"/>	Disp Sumps _____
<input type="checkbox"/>	<input type="checkbox"/>	Drop Tube Present _____
<input type="checkbox"/>	<input type="checkbox"/>	Spill buckets in good condition _____
<input type="checkbox"/>	<input type="checkbox"/>	STP Sumps _____
<input type="checkbox"/>	<input type="checkbox"/>	Leak detectors vented if required _____
<input type="checkbox"/>	<input type="checkbox"/>	Vents _____

OVERFILL PREVENTION	
<input type="checkbox"/>	Drop Tube Shut Off Valve Verified
<input type="checkbox"/>	Ball-Float Vent-Valve
<input type="checkbox"/>	Electronic Alarm Verified

TANK LEAK DETECTION	PASSING RECORDS AVAILABLE	PERMIT ID #: _____
<input type="checkbox"/> ATG: Type _____	<input type="checkbox"/> 12 most recent consecutive months _____	<input type="checkbox"/> Inches of Product in Tank(s): _____
<input type="checkbox"/> Interstitial Monitoring	<input type="checkbox"/> 8 of 12 with most recent 2 months _____	_____
<input type="checkbox"/> SIR: Vendor _____	<input type="checkbox"/> Other _____	_____
<input type="checkbox"/> MTG <input type="checkbox"/> EG	<input type="checkbox"/> Tank Tightness Test: _____	<input type="checkbox"/> EOU <input type="checkbox"/> TOS <input type="checkbox"/> Other
<input type="checkbox"/> Vapor Monitoring		
<input type="checkbox"/> Ground Water Monitoring	<input type="checkbox"/> Jan <input type="checkbox"/> Feb <input type="checkbox"/> Mar <input type="checkbox"/> Apr <input type="checkbox"/> May <input type="checkbox"/> Jun <input type="checkbox"/> Jul <input type="checkbox"/> Aug <input type="checkbox"/> Sept <input type="checkbox"/> Oct <input type="checkbox"/> Nov <input type="checkbox"/> Dec	

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How did we train for the 2008 regulation revisions?

- Special training event
- Handouts, handouts, handouts.....
- 2009: A/B operator training was required



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Realizations:

- New inspectors –like online training/homework
- If training isn't tracked, some less likely to do it
- Immediate supervisor involvement is key
- Recognized need for increased one-on-one training time

And we needed to embrace change.....

Issue: Homework

- The Problems:
 - Not completing homework; and/or
 - Boredom (“Old” training was mostly reading)
- The Fix:
 - Make some homework required
 - Include optional homework (mainly on-line)
 - Track progress
 - Supervisor involvement

Issue: Too much information, too little time

- The Problem:
 - Inspectors unable to learn in timeframe given
- The Fix:
 - Increase training time
 - Increase supervisor involvement
 - Provide extra training, as needed

Requirement for Approved Training Plan

- Revised our existing outline (updated)
 - Required homework
 - Added/revised courses
 - Outlined individual responsibilities
 - ***Required refresher training***

*Note – Expanded tracking of training.

Refresher Training Required

- Provided every two years
- Auto-assigned by the learning system.

Goal: ***Vary how the refresher training is provided to keep it “new”***

*Note – We opted to provide the refresher training to all inspectors at once.

A Summary -How did we evolve?

- Greater use of on-line training
- Increased one-on-one training (in field)
- Assigned homework
- Assigned courses
- Refresher training (every 2 years)

Prerequisite homework

- EPA Basic UST Inspector Training
- South Carolina A/B Operator Training Program

****Both are required prior to start of the UST Inspector Classroom Training.***

*Training is tracked in a tracking system.

*Immediate supervisor assists in tracking homework completed.

Expanded Optional Homework

- ***On-line training opportunities***
 - Tank Savvy Minute (Ben Thomas & Associates)
 - NEIWPCCC – New England Interstate Water Pollution Control Commission
 - “L.U.S.T. Line” articles
 - NEIWPCCC Archived Webinars
- Use of photos/videos

UST Inspector Classroom & Core Training

- Increased one-on-one field time
From 3 days to 2-3 weeks minimum!
***The inspector is not released to work on their own until they are ready.**
- Required homework prior to training reduces time spent on basic information.

The Result.....

- More relaxed atmosphere.
- More confidence at the end of training
- More supervisor involvement

Other Impacts to Training

- Electronic Inspection Program
- Budgetary Issues *Cost of fuel
- **Regulation revisions**
 - **2008**
 - **2017**

Electronic Inspection Program

- Reduced handling of paperwork
- Increased use of E-mail
- Increased consistency
- Reduced data entry in office

***More time on regulation requirements and hand-on field training.**

Budgetary Issues

- Past (11 years ago) – Monthly inspector training in central office
- Fuel prices went up – Inspector meetings reduced to quarterly
- ***Increased use of “GoTo” on-line meetings***

Current Evolution:

- Training plan update
- Electronic Inspector Handbook (In Process)

Ongoing Difficulties in Training.....

- The inspector:
 - Interest
 - Attitude
 - Physical
 - Type of learner
- Schedules in Central Office

Recognizing Difficulties in Learning

- Find a solution
- Get creative

Future Evolution

- Periodic evaluation of training needs
- Continued/Increased use of online training tools
- Periodically research what other programs are doing

And.....

What you believe is the proper training method/process may not apply to the next generation of inspectors.

But keep in mind.....

The older generation of inspectors may not adapt easily to changes meant for the next generation.



**CLINGING TO THE PAST IS
THE PROBLEM.
EMBRACING CHANGE IS
THE ANSWER.**

GLORIA STEINEM

PICTUREQUOTES.COM



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CONTACT US

Carolyn L. Keisler, EHM III
Regulatory & Compliance Section
UST Management Division, BLWM

803-898-0669

keislecl@dhec.sc.gov

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