Part 613 Structure

- Subpart 1: General Provisions
- Subpart 2: UST Systems Subject to Both Subtitle I and Title 10 (USEPA & NYSDEC regulated)
- Subpart 3: UST Systems Subject Only to Title 10 (NYSDEC regulated)
Part 613 Structure

- Subpart 4: AST Systems
- Subpart 5: Delivery Prohibition
- Subpart 6: Release Response and Corrective Action
## Structure of Subparts 2 - 4

<table>
<thead>
<tr>
<th>Requirements for</th>
<th>Subpart 2</th>
<th>Subpart 3</th>
<th>Subpart 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td>.1</td>
<td>.1</td>
<td>.1</td>
</tr>
<tr>
<td>General Operations</td>
<td>.2</td>
<td>.2</td>
<td>.2</td>
</tr>
<tr>
<td>Leak Detection/Inspection</td>
<td>.3</td>
<td>.3</td>
<td>.3</td>
</tr>
<tr>
<td>Reporting, Investigation, and Confirmation</td>
<td>.4</td>
<td>.4</td>
<td>.4</td>
</tr>
<tr>
<td>Operator Training</td>
<td>.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Out-of Service Tanks and Tank Closure</td>
<td>.6</td>
<td>.5</td>
<td>.5</td>
</tr>
</tbody>
</table>
Subpart 1

General Provisions
Applicability

*Petroleum* means:

- Crude oil and any fraction thereof
- Synthetic forms of certain oils, complex blends of hydrocarbons, and petroleum mixtures are included
- Animal & vegetable oils and substances that are normally gases are excluded
Applicability

*Petroleum mixture:*

- 1% or more petroleum with no hazardous substance
  OR

- At least 70% petroleum with less than 30% hazardous substance
Applicability

*Tank system* means:

- Stationary device designed to store petroleum that is constructed of non-earthen materials that provide structural support, including all associated piping and ancillary equipment
Applicability

*Tank system* does not include:

- Dispenser system
- Septic tank system
- Surface impoundment, pit, pond, or lagoon
- Spill/overflow containment tanks expeditiously emptied after use
- Stormwater or wastewater collection system
- Flow-through process tank system
- Liquid trap/gathering lines related to oil/gas production
Applicability

• *Stationary device* means a device that is not mobile

• Examples of stationary devices include tank systems that are fixed or permanently in place on foundations, racks, cradles, or stilts
Applicability

*Facility* means:

- The **property** on which the tanks are located, not the tanks themselves
- Even if there is more than one tank owner at a property, all tanks may be considered one facility
- If unrelated businesses on the same property, then each business may be considered a separate facility
Applicability

*Facility* includes:

- One or more tank systems with combined storage capacity >1,100 gallons
- Certain USTs >110 gallons
Applicability

*Facility does not include:*

- Operational tank systems
- Temporary tank systems
- Wastewater treatment tank system
- Heating oil tank systems ≤1,100 gallons used for on-premises consumption*
- Tank systems ≤1,100 gallons storing motor fuel for non-commercial purposes at a farm or residence*

*unless on a property that is otherwise a facility*
Applicability

- *UST system* means:
  - tank system that has 10% or more of its volume beneath the surface of the ground, or
  - is covered by materials
- *AST system* is opposite of UST system
Subpart 2 Applicability

• Subpart 2 covers all UST systems that are part of a facility not covered by Subpart 3

• Examples:
  ▪ Motor fuels (gasoline; gasoline/ethanol; diesel; biodiesel; jet fuel; jet fuel (biofuel); aviation gasoline)
  ▪ Used oil (not used as a substitute for heating oil)
  ▪ Kerosene (retail)
Subpart 3 Applicability

- Subpart 3 covers UST systems that are part of a facility where the UST system:
  - Contains heating oil for on-premises consumption
  - Has a design capacity of 1,100 gallons or less storing motor fuel at a farm or residence
  - Is part of emergency generator at nuclear power plant
  - Consists of a field-constructed tank
Subpart 4 Applicability

Subpart 4 covers AST systems that are part of a facility
tank system categories

• Category 1 = tank installed before December 27, 1986

• Category 2 = tank installed from December 27, 1986 through October 11, 2015

• Category 3 = tank installed after October 11, 2015
Questions?
Subpart 2

UST Systems Subject to Both Subtitle I and Title 10
Equipment Requirements Summary

- Corrosion protected tanks/piping
- Secondary containment
- Leak detection (tank and piping)
- Spill/Overfill prevention
- Under dispenser containment
- Valves
- As-built plans
Operating Requirements Summary

• Delivery/transfer procedures must be followed
• Color coding or labeling of fillports required
• Cathodic protection monitoring required at yearly intervals
• Impressed current requires inspection every 60 days
• Compatibility of UST system for product stored
Leak Detection – General

- All UST systems must be monitored for leaks weekly
- Portion of system that routinely contains petroleum
- Tank tightness testing is **not** an option
- Double-walled USTs = interstitial monitoring
- Last 30 days of LD records must always be accessible
- Monthly operability check required
Leak Detection – Inventory Monitoring

• Inventory monitoring (10-day reconciliation) is required only for UST systems storing motor fuel or kerosene which is sold as part of a commercial transaction.

• Be aware of NYS Fire Code Section 5704.2.11.4.1 (inventory control) – “daily inventory records for underground storage tank systems shall be maintained.”
Suspected leaks must be reported within 2 hours after discovery for any of the following:

- Discovery of petroleum outside UST system
- Unusual operating conditions
- LD results, apart from inventory monitoring or SIR

If inventory or SIR indicate potential leak, you must investigate & report within 48 hours (unless results can be explained)
Operator Training

- Federal operator training requirements are incorporated
  - DER-40 (operator training policy) available: [www.dec.ny.gov/docs/remediation_hudson_pdf/der40.pdf](http://www.dec.ny.gov/docs/remediation_hudson_pdf/der40.pdf)
  - DEC has developed training material and test
Operator Training

• Test is administered online and in-person (see http://www.dec.ny.gov/chemical/102202.html for details)

• Operators had until October 11, 2016 to complete
Operator Training

www.dec.ny.gov/chemical/102202.html

Underground Storage Tank (UST) Operator Training

Under federal and state law, operators of certain underground storage tank (UST) systems must be trained in how to keep the USTs in compliance with applicable regulatory requirements. Facilities with these tanks must register the names and authorization numbers of their Class A and Class B Operators with DEC no later than October 11, 2016. To become authorized, Operators must be trained and must pass a DEC-administered exam that demonstrates their competence to operate these tank systems. As described below, DEC is offering the authorization exam online.

Operators will have one year to become authorized by passing the exam and then designated for specific facilities. Once authorized by DEC, facilities may designate them as the Operators for their specific facilities. Operators become designated for specific facilities by having the owner (or authorized representative) submit a registration application (or license application for MOSFs) to DEC that includes the Operator’s name and authorization number. This process is treated as an information update with no fee. To emphasize, only operators of certain USTs are required to become trained and pass the DEC exam. For example, this requirement does not apply to operators of USTs storing heating oil for consumptive on-site use (e.g., underground heating oil tanks in apartment buildings).

The training and testing requirements apply to operators of USTs subject to the requirements of NYS regulations 6 NYCRR Subpart 613.2 (which are applicable to Petroleum Bulk Storage (PBS) and Major Oil Storage Facilities (MOSF)) and 6 NYCRR Part 596 (Chemical Bulk Storage (CBS)). These are USTs with capacity greater than 110 gallons that are used to most commonly store a petroleum motor fuel (e.g., gasoline, diesel, jet fuel, etc.) or any UST used to store a hazardous substance (e.g., methanol, caustic soda, acetone, etc.) listed in Part 596.

In the past, facilities had a single, overall “operator.” The regulations maintain the concept of an overall facility operator but now also includes Class A, B, and C Operators which only apply to facilities with UST systems covered by the training requirements as described above. For facilities that do not have UST systems covered by the training requirements, these facilities will continue to have a single and overall facility operator.

Class A Operators are individuals who have primary responsibility for the operation and maintenance of UST systems.

Class B Operators are individuals who have day-to-day responsibility for implementing the applicable requirements.

Class C Operators are employees having primary responsibility for addressing emergencies generated by a spill or release from an UST system.
Operator Training

Authorization Exam

To assist Class A and Class B Operators as they prepare for the DEC exam, DEC has prepared an Operator Training Guide (PDF) (0 MB) also known as "Tank-O." The exam is open book and is available online or on paper (by request to DEC). Paper exams will be scheduled by DEC, proctored, and likely held at DEC Regional Offices (depending upon the number of examinees). Examinees who do not pass the exam may retake it, but no more than a total of three times in the three years after the date of the first attempt. Examinees may not be retaken more than once every 24 hours.

- New York State UST Operator Exam - Online Website - Create an account and take the exam online. (The UST Operator Exam is supported by all modern web browsers including Google Chrome, Mozilla Firefox, Apple Safari and Microsoft Internet Explorer. View the requirements for navigating the exam.

(Some issues have been reported with Internet Explorer: Users should either disable "Compatibility View" under the "Tools" tab, or try a different browser. DEC is currently working on a solution.)

- UST Operator Exam Tutorial (PDF) (1.5 MB) - Learn how to navigate the online exam website.

States and Territories with Acceptable Operator Training Programs

If a Class A/B Operator is currently authorized by another state whose operator training program has been reviewed by the United States Environmental Protection Agency (USEPA) and is listed on their website, they may apply for reciprocity through the DEC online exam website.

<table>
<thead>
<tr>
<th>States and Territories with USEPA-Acceptable Operator Training Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
</tr>
<tr>
<td>Colorado</td>
</tr>
<tr>
<td>Guam</td>
</tr>
<tr>
<td>Iowa</td>
</tr>
<tr>
<td>Maryland</td>
</tr>
<tr>
<td>Montana</td>
</tr>
<tr>
<td>North Dakota</td>
</tr>
<tr>
<td>Rhode Island</td>
</tr>
<tr>
<td>Utah</td>
</tr>
<tr>
<td>West Virginia</td>
</tr>
</tbody>
</table>

Persons may also request an in-person, paper-based authorization exam by sending a request by mail:

NYSDEC
UST Operator Training Exam
025 Broadway
Albany, NY
Operator Training

Retraining / Retesting
• Not required unless facility has significant non-compliance

Reciprocity
• Any state with EPA-acceptable Operator Training program (initial authorization only)

Exemptions
• NONE
“Who is my Class A/B/C Operator?”

- **Class A**
  - Manages resources & personnel to achieve/maintain compliance

- **Class B**
  - More technically oriented toward operation & maintenance of USTs

- **Class C**
  - Responds to emergencies
Out-of-Service USTs

Tanks are either *in-service* or *out-of-service*

- Must maintain CP & LD for OOS UST systems
- No LD if system is empty (<1 inch of residue)
- Systems OOS between 3-12 months have add’l requirements
- Systems OOS >12 months must be closed
- Need OOS date on registration form
UST Closure

When UST system is out-of-service for more than 12 months, UST system must be closed:

• Regardless of whether Category 1, 2 or 3
• To be consistent with Fire Code

Closure report due no more than 90 days after permanent closure
Questions?
Subpart 3
Requirements
UST Systems Subject
Only to Title 10
Subpart 3 Applicability

UST systems:

- **Heating oil for on-premises use**
- 1,100 gallons or less storing motor fuel (farm or residence)
- Emergency generator at nuclear power plant
- Field-constructed tank
Equipment Requirements Summary

- Corrosion protected tanks/piping
- Secondary containment (tank)
- Leak detection
- Overfill prevention
- Valves
- As-built plans
Operating Requirements Summary

- Delivery/transfer procedures must be followed
- Color coding or labeling of fillports required
- Cathodic protection monitoring required at yearly intervals
- Compatibility of UST system for product stored
Leak Detection – General

- All Category 2 and 3 UST systems must be monitored for leaks weekly
- Portion of system that routinely contains petroleum
- Tightness testing is not an option
- Double-walled USTs = interstitial monitoring
- Last 30 days of LD records must always be accessible
- Monthly operability check required
Leak Detection – General

Category 1 UST systems must be tightness tested annually (exempt if storing #5/6 oil or have acceptable leak detection)

Weep holes are allowed as leak detection for concrete-encased tanks (NYC design)
Leak Detection – General

Annual line testing required for suction piping that is part of Category 1 system

No leak detection required for suction piping that is part of Category 2 or 3 system
Leak Detection – Tank Options

- Tank Tightness Testing for Category 1 USTs
- Interstitial Monitoring for most Category 2 and 3 USTs
- Monitoring of Weep Holes
- Automatic Tank Gauging (ATG)
- Groundwater Monitoring
- Vapor Monitoring
Leak Detection – Piping Options

- Pressurized
  - ALLD
  - Annual line test (category 1)
- Suction
  - Category 1 – annual line testing
Reporting

- Suspected leaks must be reported within 2 hours after discovery for any of the following:
  - Discovery of petroleum outside UST system
  - Unusual operating conditions
  - Leak detection results indicating potential leak
Out-of-Service USTs

Tanks are either *in-service* or *out-of-service*

- Must maintain CP & LD for OOS UST systems
- No LD if system is empty (<1 inch of residue)
- Systems OOS between 3-12 months have add’l requirements
- Systems OOS >12 months must be closed
- Need OOS date on registration form
UST Closure

When UST system is out-of-service for more than 12 months, UST system must be closed:

• Regardless of whether Category 1, 2 or 3

• To be consistent with Fire Code
UST Closure

As in former regulations, closure site assessments are not required for Subpart 3 USTs

However, they are strongly recommended
Questions?
Subpart 4
Requirements

AST Systems
Equipment Requirements – Tanks

New tank construction standards (UL 80, UL 2258) allow for new technologies.
Equipment Requirements – Tanks

Tanks not constructed of steel are allowed:

- for storage of Class IIIB petroleum in areas that would not be exposed to spills or leaks of Class I or Class II petroleum;

  OR

- if dictated by properties of petroleum stored, but only with prior DEC approval
Equipment Requirements – Tanks

Tank secondary containment requirements are clarified

- Secondary containment required for ASTs ≥10,000 gallons
Equipment Requirements – Tanks

- ASTs <10,000 gallons within 500 horizontal feet of sensitive receptor must either have secondary containment or utilize a design/technology such that a release is not reasonably expected to occur.
Equipment Requirements – Overfill

ASTs must be equipped with a gauge* which:

- accurately shows product level in tank;
- is accessible to carrier;
- can be conveniently read

* Can also use high-level alarm, high-level liquid pump cutoff controller, or equivalent device
Equipment Requirements – Valves

- Shear valve for pressurized piping (motor fuel AST)
- Solenoid valve for AST that causes gravity head on motor fuel dispenser
- Operating valve for each connection on gravity-drained AST
- Check valve to prevent backflow from pump-filled AST
Operating Requirements – Spill / Overfill

• One of the transfer procedures described in NFPA 385 or API RP 1007 must be used (available on respective websites)

• Unless those procedures are technically infeasible (must still have procedure to prevent spills & overfills)
Operating Requirements – Spill / Overfill

Tank labeling requirements:

• Tank ID number
• Design capacity
• Working capacity

Fill port color coding or marking
Operating Requirements – CP

• Annual monitoring for adequacy of cathodic protection required
• Impressed current systems must be monitored every 60 days for operation
• Cathodic protection monitoring records must be maintained for 3 years

* Monitoring by 10/11/16; records by 10/11/18
Inspections & Leak Detection

• “Reasonably expected to discharge” has changed to “in close proximity to sensitive receptors”

• Monthly inspections, 10-year inspections (where applicable) are still required

• Tightness testing of ASTs (alternative to 10-year inspection) is allowed
Tank Closure

- ASTs OOS >12 months at an active site NOT required to be permanently closed

- Active site = one or more other tanks not OOS
Questions?
Questions?


Email:  russ.brauksieck@dec.ny.gov

Phone:  518-402-9543 or 9553