Regulated Storage Tanks & Automobile Dealerships in New York State

Presented for NYSADA

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ECM

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Overview of Petroleum Storage Tank Regulations

Overview

Tanks (aboveground and underground) must meet requirements of the United States Environmental Protection Agency (USEPA) and the New York State Department of Environmental Conservation (NYDEC). Local and OSHA regulations also apply.
Overview of Petroleum Storage Tank Regulations

Primary NYDEC Regulations:

1) Petroleum Bulk Storage Program (6 NYCRR Part 612-614)

2) Chemical Bulk Storage (6 NYCRR Parts 595-599)

www.dec.ny.gov/chemical/287.html
Overview of Petroleum Storage Tank Regulations

Primary USEPA Regulation:

Spill Prevention, Control and Countermeasures

Title 40 of the Code of Federal Regulations, Part 112
(40 CFR 112)

http://www.epa.gov/oilspill/spcc.htm
Overview of Petroleum Storage Tank Regulations

ENFORCEMENT?

Primarily NYDEC for New York’s Bulk Storage Program, except:

- Five Counties (Nassau, Suffolk, Rockland, Westchester, and Cortland) enforce and these may be more stringent than NYDEC (so check local regulations if located there)
ENFORCEMENT?
NYDEC won’t enforce Federal regulations, but will inform USEPA if obvious violation.
Overview of Petroleum Storage Tank Regulations

ENFORCEMENT?

- NYDEC DEE-22: Petroleum Bulk Storage Inspection Enforcement Policy

- However, large amount of variance in fines (per NYDEC)
Overview of Petroleum Storage Tank Regulations

ENFORCEMENT?

NOV – Order of Consent

If you do get fined, can negotiate fine, but:

Must attend hearing.
Overview of Petroleum Storage Tank Regulations – Applicability

**Applicability**

Underground storage tanks (USTs) and aboveground storage tanks (ASTs) that are typically found at automobile retailers that *would* be subject to the NYDEC regulations include: motor oil, fuel oil, diesel fuel, gasoline, antifreeze, and/or waste oil.
### Applicability Chart for Regulated Storage Tanks

**Typically Found at Automobile Dealerships**

<table>
<thead>
<tr>
<th>Material Stored</th>
<th>Quantity Stored</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Heating Oil:</strong> Number 1, 2, 4, 5, 6 fuel oils, used oil (fuel), or kerosene</td>
<td>Over 1,100 gallons*</td>
</tr>
<tr>
<td><strong>Motor Fuels:</strong> Diesel and Gasoline</td>
<td>Over 1,100 gallons</td>
</tr>
<tr>
<td>Lubricating Oils</td>
<td>Over 1,100 gallons</td>
</tr>
<tr>
<td><strong>Used Oil</strong></td>
<td>Over 1,100 gallons**</td>
</tr>
<tr>
<td><strong>Antifreeze (ethylene glycol)</strong></td>
<td>185 gallons – AST Any size - UST</td>
</tr>
</tbody>
</table>

*The NYDEC Petroleum Bulk Storage Regulations contain certain exemptions for heating oil tanks used for on-site consumption.

**Used Oil storage tanks of any size need to be registered with the NYDEC.
EXEMPTIONS

Small heating oil tanks are tanks of number 1, 2, 4, 5, 6 fuel oils, used oil (fuel), or kerosene which are:

1) under 1,101 gallons,
2) used for on-premises consumption at the same site.
Overview of Petroleum Storage Tank Regulations – Requirements

Facilities with greater than 1,100 gallons of total petroleum storage capacity must register tanks.

• Exception: ALL tanks storing waste oil must be registered regardless of size (no fees are required if the tanks are under 1,101 gallons).
Overview of Chemical Storage Tank Regulations – Requirements

- Any listed chemical storage tank equal to or greater than 185 gallons.
- Over 1,000 chemicals listed.
Registration Fees – Registration fees are required for initial registrations, renewals, and changes of ownership.

Fees are based on the Total Storage Capacity at the Facility and cover a five-year period. Fees are as follows:

<table>
<thead>
<tr>
<th>Total Storage Capacity at Facility</th>
<th>5-Year Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 1,101 gal.</td>
<td>$ - No Fee Required</td>
</tr>
<tr>
<td>1,101 – 2,000 gal.</td>
<td>$ 100 Per Facility</td>
</tr>
<tr>
<td>2,001 – 4,999 gal.</td>
<td>$ 300 Per Facility</td>
</tr>
<tr>
<td>5,000 – 399,999 gal.</td>
<td>$ 500 Per Facility</td>
</tr>
</tbody>
</table>
Overview of Petroleum Storage Tank Regulations – RECENT CHANGES

- New York State Environmental Conservation Law was amended in July 2008 which caused changes to the Petroleum Bulk Storage (PBS) program. A summary of changes that affected the PBS program include:
  - broadening the definition of "petroleum" to include all fractions of crude oil;
  - changing the definition of "facility" to include underground tanks greater than 110 gallons;
  - requiring tanks that are newly regulated due to the changes in the definitions of "petroleum" and "facility" to be registered with the NYSDEC and be in compliance with existing Petroleum Bulk Storage Regulations (6 NYCRR Parts 612, 613, and 614) requirements by July 21, 2009; and,
  - manifold (interconnected) tanks are regulated as single tanks. For example, two 1,000 gallon tanks connected by piping are regulated as a single 2,000 gallon tank.
Overview of Petroleum Storage Tank Regulations – RECENT CHANGES

• As described above, changes to the law required that certain tanks not previously registered under the PBS program be registered and come in compliance with existing regulations by July 21, 2009. As a result, the following tanks would be subject to PBS Regulations:
  • Tanks storing product for operational purposes (e.g. transformers, hydraulic machines, electric cable reservoirs, etc.)
  • Tanks storing asphaltic emulsions

➤ NYDEC Enforcement Directive Issued – April 2009
  • NYDEC will not subject the tanks listed above to PBS requirements until such time as the regulations under 6 NYCRR Pars 613 and 614 are revised.
Overview of Petroleum Storage Tank Regulations – RECENT CHANGES

• To assist in evaluating applicability of fees, definitions and registration requirements, a Petroleum Bulk Storage Registration Worksheet (updated in 2009) is available on NYDEC website at:

www.dec.ny.gov/docs/remediation_hudson_pdf/pbsform.pdf
PBS Registration Worksheet 2009

The New York State Environmental Conservation Law was amended on July 21, 2008. Applicability, fees and the definition of petroleum have changed. You may need to register some tanks that were not registered in the past and possibly pay different fees accordingly. Examples of regulated petroleum products and the new definition of petroleum are on other side of this page.

Please note: Manifold (interconnected) tanks are regulated as single tanks. For example, two 1,000 gallon tanks connected by piping are regulated as a single 2,000 gallon tank.

A) List the total storage capacity of all tanks storing petroleum. A) ____________

B) List the total storage capacity of tanks less than 1,100 gallons each storing heating oil (see product list on back) used for on-premises consumption. B) ____________

C) List the total storage capacity of tanks less than 1,101 gallons each used to store motor fuel (see product list on back) for non-commercial purposes (not for resale) at a farm or residence. C) ____________

D) Subtract Lines B & C from A A-B-C= D) ____________

If Line D is 1,101 gallons or greater, then all tanks at this site MUST be registered and fees must be based upon the total storage capacity in Line A using the fee schedule below.

If Line D is less than 1,101 gallons but greater than 0 (zero) gallons and any Line D tanks are Underground Storage Tanks (tank location code “5”) greater than 110 gallons or any Aboveground Storage Tanks with 10% or more of volume below ground (tank location code “4”) greater than 110 gallons then all tanks MUST be registered and the fee must be based upon the total storage capacity in Line A using the fee schedule below.

If Line D is less than 1,101 gallons, tanks storing used oil or used oil(heating), if any, MUST be registered but NO fee is required.

FEE SCHEDULE:

<table>
<thead>
<tr>
<th>Total Storage Capacity</th>
<th>5-Year Fee for Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>111 - 1,100 gallons</td>
<td>$0 - Fee not required.</td>
</tr>
<tr>
<td>1,101 - 2,000 gallons</td>
<td>$100 per storage facility</td>
</tr>
<tr>
<td>2,001 - 4,999 gallons</td>
<td>$300 per storage facility</td>
</tr>
<tr>
<td>5,000 - 399,999 gallons</td>
<td>$500 per storage facility</td>
</tr>
<tr>
<td>400,000 gallons and greater</td>
<td>Registration not required but license is required under the Major Oil Storage Facilities Program</td>
</tr>
</tbody>
</table>
Petroleum and Petroleum Products

1. Crude Oil and Crude Oil Fractions
2. Motor Fuels including Biofuel Blends (<100% Biofuel)
   a. Gasoline
   b. Diesel Fuel
   c. Jet Fuel
   d. Aviation Gasoline
3. Fuel Oils/Heating Oils including Biofuel Blends (<100% Biofuel)
   a. Distillate and Residual Oils (heating oils # 2, 4, 5, 6)
   b. Kerosene (heating oil #1)
   c. Clarified Oil
   d. Used Oil (heating)
4. Lubricating and Cutting Oils (including synthetic forms)
   a. Motor Oil
   b. Gear and Spindle Oils
   c. Hydraulic Oil (including Transmission Fluid and Turbine Oil)
   d. Cutting Oil
   e. Petroleum Greases (including axle, engine and gear greases)
5. Oils Used as Building Materials
   a. Asphalt and Road Oils (for example, Asphalt Cutback or Emulsions)
   b. Form Oil
6. Petroleum Spirits
   a. White Spirits (Stoddard Solvents/mineral spirits)
   b. Naphtha
7. Mineral and Insulating Oils (including synthetic forms)
   a. Mineral Oil
   b. Insulating Oil (including Dielectric Oils)
8. Used Oil

Definition of Petroleum (Environmental Conservation Law 17-1003.5)

"Petroleum" means:
   a. crude oil and any fraction thereof;
   b. any mixture containing crude oil or any fraction thereof; and
   c. synthetic forms of lubricating oil, dielectric oils, insulating oils, hydraulic oils and
cutting oils.
Such term shall not include:
   (1) hazardous waste defined pursuant to section 27-0903 of this chapter [ECL];
   (2) substances meeting the definition of hazardous substance pursuant to section
40-0105 of this chapter [ECL];
   (3) animal or vegetable oils that do not contain crude oil or fractions thereof; or
   (4) substances that are gases at standard temperature and pressure.
Registration Fees –
Registration fees are required for initial registrations, renewals, and changes of ownership.

Fees are based on the Total Storage Capacity per tank and cover a two-year period. Fees are as follows:

<table>
<thead>
<tr>
<th>Total Capacity Per Tank</th>
<th>2-Year Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than or equal to 550 gallons</td>
<td>$50 per tank</td>
</tr>
<tr>
<td>551-1,100 gallons</td>
<td>$100 per tank</td>
</tr>
<tr>
<td>Greater than 1,100 gallons</td>
<td>$125 per tank</td>
</tr>
</tbody>
</table>
Overview of Petroleum & Chemical Storage Tank Regulations – Requirements

WHERE TO GET ALL THESE FORMS & INSTRUCTIONS?

http://www.dec.ny.gov/chemical/4767.html

ECM:

seh(ecm@att.net

ay(ecm@att.net
Overview of Petroleum Storage Tank Regulations – Requirements

IF YOU ADD A TANK:

- Renewal application
- Notify within 30 days
Common Deficiencies Noted During Regulatory Compliance Inspections

Monthly Inspections (ASTs)

(1) KEEP RECORDS FOR TEN YEARS
Common Deficiencies Noted During Regulatory Compliance Inspections

Monthly Inspections (ASTs)
(1) inspecting exterior surfaces of tanks, pipes, valves and other equipment for leaks and maintenance deficiencies;
(2) identifying cracks, areas of wear, corrosion and thinning, poor maintenance and operating practices, excessive settlement of structures, separation or swelling of tank insulation, malfunctioning equipment and structural and foundation weaknesses; and
(3) inspecting and monitoring all leak detection systems, cathodic protection monitoring equipment, or other monitoring or warning systems which may be in place at the facility.
Common Deficiencies Noted During Regulatory Compliance Inspections

Inventory Record Keeping and Reconciliation (USTs)

1. EVERY TEN DAYS FOR USTS
2. TANK STICK OR CONTINOUS MONITOR
3. KEEP RECORDS FOR FIVE YEARS
4. UNEXPLAINED LOSS, NOTIFY NYDEC
Common Deficiencies Noted During Regulatory Compliance Inspections

Integrity Testing (every 5 years for USTs; 10 years for ASTs on grade);

Any method that evaluates tank construction material

- Tightness tests, thickness tests
- Ultrasonic, hydrostatic, radiographic
- Aprox. $400
Common Deficiencies Noted During Regulatory Compliance Inspections

NEW TANKS - ASTs

- Must be steel, and
- If rests on ground, must have cathodic protection and monitoring
- So, ....... don’t rest on ground!!
Common Deficiencies Noted During Regulatory Compliance Inspections

Color Coding and/or proper Labeling of Fill Ports (ASTs and USTs)

1. High gasoline: Red
2. Middle gasoline: Blue
3. Lower gasoline: White
4. High unleaded gasoline: Red w/white cross
5. Middle unleaded gasoline: Blue w/white cross
6. Lower unleaded gasoline: White w/black cross
7. Vapor recovery: Orange
8. Diesel: Yellow
9. #1 fuel oil: Purple w/yellow bar
10. #2 fuel oil: Green
11. Kerosene: Brown
Common Deficiencies Noted During Regulatory Compliance Inspections

Labeling (ASTs)

- The product ID (contents);
- design capacity;
- working capacity; and
- identification number of the tank.
Common Deficiencies Noted During Regulatory Compliance Inspections

LABELING (CONTINUED)

SAFETY INFORMATION
Common Deficiencies Noted During Regulatory Compliance Inspections

Secondary Containment

(ASTs greater than 10,000 gallons, USTs installed after December 1986, or any tank that could discharge to a water body)
Common Deficiencies Noted During Regulatory Compliance Inspections

Secondary Containment

What do they mean by “any tank that could discharge to a water body”?

“A spill that can permeate, drain, infiltrate or otherwise escape to the groundwaters or surface waters before cleanup occurs.”
Common Deficiencies Noted During Regulatory Compliance Inspections

Secondary Containment

MAY CONSIST OF:

Combination of dikes, liners, pads, ponds, impoundments, curbs, ditches, sumps, receiving tanks and other equipment capable of containing the product stored.
Common Deficiencies Noted During Regulatory Compliance Inspections

Overfill Protection (USTs AND ASTs)

MINIMUM FOR AST: GAUGE, OR
1. Overfill Alarm
2. Automatic Shutoff Device

MINIMUM FOR UST:
1. Overfill Alarm
2. Automatic Shutoff Device
Common Deficiencies Noted During Regulatory Compliance Inspections

SPILL PROTECTION

1. Shutoff valves at dispensers (ASTs and USTs)
Common Deficiencies Noted During Regulatory Compliance Inspections

Corrosion Protection (USTs and ASTs)
- Cathodic Protection (USTs)
- Non-Corrodible Materials (USTs)
- Corrosion Resistant Lining (USTs)
- Adequate surface coating, e.g. paint (ASTs)
Common Deficiencies Noted During Regulatory Compliance Inspections

Annual Inspection of Cathodic Protection Systems (USTs and ASTs)

1. Certified Individual
2. Annual Test Report (Minimum Protection -850mV)
Common Deficiencies Noted During Regulatory Compliance Inspections

Leak Detection (USTs)

- Secondary Containment
- Automatic Tank Gauging
- Vapor/GW Monitoring
- Statistical Inventory Reconciliation
Common Deficiencies Noted During Regulatory Compliance Inspections

Temporarily Out-of-Service (>30 days)

- Tanks must be drained and capped/locked;
- Continue required testing, inspections, and registration
Common Deficiencies Noted During Regulatory Compliance Inspections

Tank Closure

What if I no longer want to use my tank?
Common Deficiencies Noted During Regulatory Compliance Inspections

Closure Requirements for Tanks Permanently Out-of-Service

- Notify the DEC 30 days prior to closing the regulated tank.
- The tank and connecting lines must be emptied and waste products disposed of in accordance with applicable State and Federal requirements.
Common Deficiencies Noted During Regulatory Compliance Inspections

Closure Requirements for Tanks Permanently Out-of-Service

- The tank must be rendered free of petroleum vapors.
- Manways must be securely fastened in place.
Common Deficiencies Noted During Regulatory Compliance Inspections

Closure Requirements for Tanks Permanently Out-of-Service

- USTs must be either removed or filled with inert material (e.g., sand or concrete slurry).
- ASTs must be stenciled with the closure date and protected from flotation.
Common Deficiencies Noted During Regulatory Compliance Inspections

Closure Requirements for Tanks Permanently Out-of-Service

- USTs – Post-closure samples must be collected in accordance with DEC regulations.
- USTs – A closure report must be prepared in the appropriate format and submitted to DEC.
Common Deficiencies Noted During Regulatory Compliance Inspections

Closure Requirements for Tanks Permanently Out-of-Service

As previously mentioned, Nassau, Suffolk, Rockland, Westchester and Cortland County administer the program locally.

Closure requirements (e.g., sampling and reporting) may be more stringent in these counties so the county should be contacted directly to learn of specific local requirements.
Spill Prevention, Control, and Countermeasure (SPCC) Plan

• Spill Prevention, Control, and Countermeasure (SPCC) Regulations (total AST capacity greater than 1,320 gallons)

• Reach a “Navigable Waterway”
Common Deficiencies Noted During Regulatory Compliance Inspections

If SPCC Rules are applicable,

**MAJOR Item:**

- Prepare SPCC Plan;
- Install Secondary Containment;
- Conduct inspections; and,
- **Provide Training.**
Common Deficiencies Noted During Regulatory Compliance Inspections

Ways to avoid applicability:

• Move tanks,
• Berms.
SPILLS

SPILL HOTLINE

To Report a Petroleum or Chemical Spill

call the DEC 24 Hour Spill Hotline

1-800-457-7362 (within NY State) or
(518) 457-7362 (outside NY State)
How to Survive a New York State Department of Environmental Conservation Compliance Inspection
Surviving a NYSDEC Compliance Inspection

• Set the tone - A cordial, cooperative attitude with the DEC inspector may go a long way.
Surviving a NYSDEC Compliance Inspection

• Documentation - Have your documentation in order and readily available at your facility.
Surviving a NYSDEC Compliance Inspection

- Housekeeping – Although DEC may be entering your site for a regulated storage tank inspection, sloppy housekeeping could lead to further inspection of the facility.
Get on Track BEFORE a NYSDEC Compliance Inspection is Conducted

💡 Solutions/Suggestions:

- Confidential Audit
- Identify/Prioritize Deficiencies
- Delegate and Implement Corrective Actions
Get on Track BEFORE a NYSDEC Compliance Inspection is Conducted

Benefits:
- Worker Safety
- Loss Prevention
- Employee Morale
- Enforcement Relief
- Community Perception
- Financial and Insurance Resources
Get on Track BEFORE a NYSDEC Compliance Inspection is Conducted

Questions and Answers
Get on Track BEFORE a NYSDEC Compliance Inspection is Conducted

Contacts:

- NYADA 518-463-1148
  - Peter Marthy  x206
- ECM 908-874-0990
  - Alex Yankaskas, CPG
  - Scott Hubbard, CHMM