

Spill Prevention and Response

Presented by:

Division of Environmental Remediation
Bureau of Spill Prevention and Response

Kevin Kemp, PE, Region 7



Spill Prevention

Spills are prevented from occurring via
Petroleum and Chemical / Hazardous
Bulk Storage Regulations

- Registration
- Handling and storage
- Design standards for new installations



Spill Prevention

Applicable Petroleum Bulk Storage Regulations:

- **Part 610:** Certification of On-shore Major Facilities (MOSF > 400,000 gallons)
- **Part 611:** Environmental Priorities and Procedures in Petroleum Cleanup and Removal
- **Part 612:** Registration of Petroleum Storage Facilities
- **Part 613:** Handling and Storage of Petroleum
- **Part 614:** Standards for New and Substantially Modified Petroleum Storage Facilities



Spill Prevention

Applicable Chemical Bulk Storage Regulations:

- **Part 595:** Releases of Hazardous Substances
- **Part 596:** Hazardous Substances Bulk Storage Regulations
- **Part 597:** List of Hazardous Substances
- **Part 598:** Handling and Storage of Hazardous Substances
- **Part 599:** Standards for New or Substantially Modified Hazardous Substance Storage Facilities

***Windshield washer fluid, antifreeze, fertilizer,
and industrial or commercial chemical tanks?***



Spill Prevention

Other Federal Requirements ...

Spill Prevention, Control, and Countermeasure (SPCC) Plan is required if:

- AST Oil Storage Equals or exceeds 1,320 gallons
- UST Oil Storage Equals or exceeds 42,000 gallons
- USEPA includes containers 55 gallons and larger.
- USEPA definition of oil includes Lube Oils, Gasoline, Distillate Fuels, Fuel Oils, Mineral Oil, Vegetable Oils, Hydraulic Oils, Asphalt products, and Related Materials



Spill Prevention

Should the Facility be registered?



Spill Prevention

Petroleum Registration Requirements

Registration is required for Facilities with petroleum:

- In stationary tanks (“non-mobile”)
- More than 1,100 gallons of AST storage
- More than 110 gallons of UST storage
- Used oil tanks of ANY size
- On one or more contiguous tax parcels under common ownership.
- Exclusions (unless at a site that otherwise is a Facility):
 - Small heating oil tanks
 - Small, farm or residential, non-commercial motor fuel tanks
 - Asphalt (however asphaltic emulsion are included)

Petroleum:

- Crude oil and any fraction thereof
- Synthetic oils (lubricating, dielectric, insulating, hydraulic and cutting)



Spill Prevention

Chemical / Hazardous Registration Requirements

Registration is required for Facilities with chemicals:

- Containing at least 1% mixture of a substance listed in Part 597
- In containers storing more than 1,000 kilograms (2,200 pounds) for a period greater than 90 days
- In stationary tanks (“non-mobile”)
 - ASTs with a tank size 185 gallons or larger
 - USTs of any size



Alternative Fuels and Bulk Storage Programs

BIODIESEL

- Biodiesel at 100% concentration (B100) does not contain petroleum, and is not currently regulated under PBS / MOSF.
- Diesel with any biodiesel component is regulated under PBS / MOSF as diesel with an extender.
- PBS Product Code 2710 or 2711, not 0008.



Alternative Fuels and Bulk Storage Programs

ETHANOL

- Ethanol at 100% concentration (undenatured) does not contain petroleum, and is not currently regulated under PBS / MOSF. It is regulated by ATF due to the alcohol content.
- Ethanol denatured with methanol is regulated under CBS as methanol with an extender.
- Ethanol denatured with gasoline is regulated under PBS as gasoline with an extender
- PBS Product Code 2712, not 0009.



Spill Prevention

Compliance Inspections

Compliance inspections verify preventative measures, as prescribed in the Regulations, are employed correctly by the Operator and Owner to:

- Prevent releases from occurring
- Ensure the regulated entity is aware if releases are occurring
- Report spills or suspected releases



Spill Prevention

Requirements for all Registered Facilities

1. Facility Registration Certificate posted?
2. Registration Information Current and Correct?
3. Monitoring wells / observation points marked and secured?
4. Dispenser sumps been maintained?
5. Shear valves installed and operable?
6. Tanks permanently closed properly?
7. Tanks temporarily closed properly?
8. Any “spills” observed?
9. Tank top sumps been maintained?
10. Fill port catch basins been maintained?
11. Fill ports color coded?



Spill Prevention

Requirements for all Registered Facilities

8. Unreported Spills? Were any unreported spills observed during the inspection (also include suspected releases from leak detection equipment and uninvestigated inventory discrepancies)?



Spill Prevention

4 API RECOMMENDED PRACTICE 1637



















GASOLINES		DISTILLATES		
	Unleaded	Ultra Low Sulfur	Low Sulfur	High Sulfur
High grade			 Diesel	
Middle grade			 No. 1 Fuel Oil	
Low grade			 No. 2 Fuel Oil	
		 Kerosene		
ALCOHOL-BASED FUELS		BIO DIESEL		
 E85		 B2		
Note: See 2.5.1 for specific labeling requirements		Note: See 2.4.1 for specific labeling requirements		
USED OIL	OBSERVATION OR MONITORING WELL		VAPOR RECOVERY	
				

Figure 1—Equipment Marking Color-Symbol System



Spill Prevention

Underground Storage Tanks



Spill Prevention Underground Storage Tanks

Heavily regulated by NYS DEC, NYSDOS, USEPA



NYS Department of Environmental Conservation



Spill Prevention

Underground Tank Construction



12. UST systems installed after 12/86 must have
- Secondary containment on tank
 - Leak monitoring for tank and piping
 - Corrosion resistant tank and piping
 - Spill Prevention and Overfill Prevention
 - Ability to monitor inventory

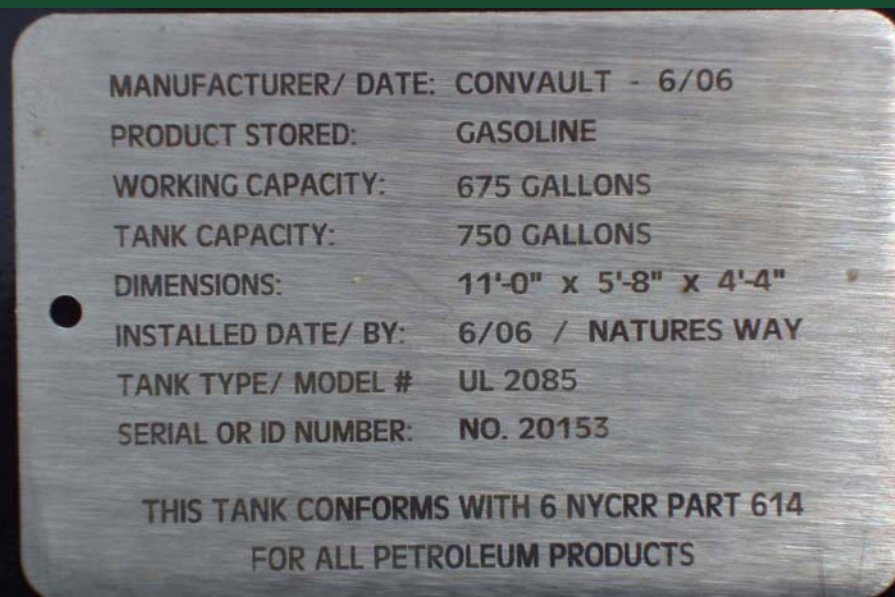


Spill Prevention

Underground Tank Construction

12. UST systems installed after 12/86 must have

- As-built plans
- Part 614 labels



Spill Prevention

Underground Tank Operations

- Daily Inventory Monitoring
- Weekly Leak Monitoring for Tanks
- 10-day Inventory Reconciliation
- Monthly Verification of Operability
- Monthly Leak Monitoring for Lines
- Annual tests for:
 - Cathodic Protection for steel tanks and lines
 - Pressurized Line Leak Detectors
- 5-Year tightness testing (should not apply to systems installed after 12/86)



Spill Prevention

Underground Tanks - NEW Requirements

- Operator Training
 - 3 levels of training – Primary responsibility, daily responsibility, and all employees
 - Must include an evaluation of knowledge
 - Single time unless tank is in non-compliance at time of inspection or as specified by regulation
 - To be completed by August 2012
- Delivery Prohibition (Red Tag)
 - Illegal to deliver or accept delivery into tank identified by State or EPA as ineligible



Spill Prevention

Aboveground Storage Tanks

Lightly regulated by NYSDEC, NYSDOS, USEPA



NYS Department of Environmental Conservation



Spill Prevention

18. Aboveground Tank Construction

- Adequate surface coating (paint),
- Cathodic Protection for bottom if in contact with soil,
- Impermeable barrier under tank, and
- Ability to monitor for leaks beneath tank.



Spill Prevention

18. Aboveground Tank Construction



Welded steel UL 58 / 142



Plastics UL 2258



Spill Prevention

Aboveground Tank Operations

- Monthly Inspections (by Owner / Operator)
- Ten-Year Inspections (by certified 3rd party)
- smaller tanks are usually exempted
- Gauge
- Labeling
- Secondary Containment Dike Valve closed and locked



Spill Prevention

Aboveground Tank Construction

21. Secondary Containment is required for:
Case 1 - All AST's > 10,000 gallons.



Spill Prevention

Fully Compliant AST



NYS Department of Environmental Conservation



Spill Prevention

Non-compliant AST's



NYS Department of Environmental Conservation



Alternative Fuels and Bulk Storage Programs

petroleum equipment institute

Alternative Fuels Equipment Compatibility Guide

Equipment by Fuel

Select a fuel blend below to view compatible items:



- [E10](#)
Gasoline with 10% ethanol
- [E20](#)
Gasoline with 20% ethanol
- [E85](#)
Gasoline with 85% ethanol
- [E100](#)
Pure ethanol
- [B5](#)
Diesel with up to 5% biodiesel
- [B20](#)
Diesel with up to 20% biodiesel
- [B100](#)
Pure biodiesel

These listings are compiled by the manufacturer. PEI is not responsible for accuracy of listings or the suitability of equipment for use with various ethanol-blended fuels.



[Guide Home Page](#)

- All system components need to be verified for compatibility. Certain first generation fiberglass products and certain metal products are not compatible. PEI lists compatible and incompatible products.

<http://resource.pei.org/altfuels/guide.asp>



Spill Prevention

Compliance Inspections - Enforcement

Following the inspection, the violations are listed on a “Notice of Violation” (“NOV”). Three formats of NOV’s may be issued:



Spill Prevention

Compliance Inspections - Enforcement

Short form NOV (by DEC Spills)

New York State Department of Environmental Conservation
Division of Environmental Remediation, Bureau of Spill Prevention and Response
615 Erie Boulevard West, Syracuse, New York 13204-2400
315-426-7519
www.dec.ny.gov

NOTICE OF VIOLATION

PBS Number: 7-059218 Date: 20 JULY 2007 A- 09 00 AM ☒ PM ☐

Facility Name: BARNES & COBE INC. Property/Plant/Owner Name and Address: SAME
Company Name: SAME
Phone: 315-437-0505
Address: 5994 COURT ST RD. Operator Name and Address: SAME
City: SYRACUSE State: NY F or 13206 County: ONONDAGA

Violation	Description of Violation
612.2(e)	Registration not current and/or expired. Registration expired. Unregistered tank x 1. Registered vs tank products.
613.8	Unreported spill in dispenser sump x 1
613.3(b)	Fill pots not properly color coded x 3
613.3(d)	Shear valve not secured x 1
614.7(d)	No inventory statement for asphalt plants x 1
613.4(d)	Inventory not reconciled every 18 days x 1
613.3(b)	Pressurized line leak detector not tested annually x 1 (Also 40 CFR 262.41(b))

End of Report

PLEASE TAKE NOTICE THAT based upon this inspection, there is reason to believe that you are in violation of Article 17 and/or Article 19 of the New York Environmental Conservation Law and the regulation promulgated thereunder (NYCRR Part 612, 613, 614 and/or 260). PLEASE TAKE FURTHER NOTICE THAT according to § 11-0229 of the ECL, the sanctions for each violation include a CIVIL PENALTY of up to \$37,500 per day for each violation and according to § 11-013 of the ECL, the sanctions for each violation include a CIVIL PENALTY of up to \$1,000 per day for each violation. DEC reserves the right to take further enforcement action for any violation noted in this NOTICE or any other violation of the Environmental Conservation Law.

Technical questions for PBS Violations, contact: Kevin Kemp, 315-426-7464

Inspection Performed By: Kevin Kemp
DEC Representative's Signature: *[Signature]* Date: 20 JULY 2007

I, Rick Roach, have been told of the alleged violations and the need to remedy these violations. Except where a shorter time frame is expressly required, within 30 calendar days from the date of this notice you must submit either documentation that the violations have been corrected or a Corrective Action Plan to achieve compliance, to the Regional Office listed above or at the settlement conference if indicated below. In accordance with any Corrective Action Plan, you must submit documentation after compliance is achieved.

I have also been told that a settlement conference has been set for 22 August 2007 at 1:00pm at the Regional Office in Syracuse. I have been given directions to the Regional Office and understand that if I do not appear at the settlement conference, the Department will refer these violations to Environmental Enforcement for a formal enforcement proceeding. I also confirm that I have been notified that I will be meeting with an attorney from the Department to discuss settlement and that I may bring my own attorney to the settlement conference. If I, or my attorney, have any questions relating to the alleged violations and/or the settlement conference, contact DEC's Division of Environmental Enforcement at 518-402-9510.

Owner/Operator Signature: *Rick Roach* Title: Pres Date: 07-20-07

NYS Department of Environmental Conservation



Spill Prevention

Compliance Inspections - Enforcement

Letter format NOV (by DEC Spills)

New York State Department of Environmental Conservation
Spill Prevention and Response, Region 7
615 Erie Boulevard West, Syracuse, New York 13204-2400
Phone: (315) 426-7519 • FAX: (315) 426-2653
Website: www.dec.ny.gov



June 14, 2007

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

MICHAEL T. MCGOWAN
MIRABITO FUEL GROUP
44 GRAND ST.
SIDNEY, NY 13838

Re: **NOTICE OF VIOLATION**
Petroleum Bulk Storage (PBS) Program Site Inspection -6NYCRR Parts 612-614
PBS# 7-600077, Inspection# 11227
CONVENIENCE EXPRESS STORE #64
RT. 69 & 81
PARISH, NY 13131

Dear Mr. McGowan:

On June 13, 2007 Department staff inspected the CONVENIENCE EXPRESS STORE #64 facility to determine compliance with New York State's PBS regulations. The following violations were identified during that inspection and need your immediate attention to bring your facility into compliance. Citations to the applicable regulations are noted in brackets and pertain to the tanks listed. A copy of the inspection checklist is enclosed for your reference.

The law requires that you comply fully with the PBS regulations. You must correct all of the violations noted below within the stated time frames and submit required documentation.

PBS Registration Certificate - Accuracy of information - [Section 612.2]. The registration information is not current and valid. Enclosed is a PBS application form that you may use to correctly inform the Department of the status of your facility and/or the status of any particular tank. Return the completed form within 30 calendar days from the date of this letter.

The tank leak detection (Registration Section B, Column 12) is listed as "01-Electronic Interstitial", when in fact the Facility uses "02-Manual Interstitial".

NYS Department of Environmental Conservation



Spill Prevention

Compliance Inspections - Enforcement

Appearance ticket (by an ECO)



NYS Department of Environmental Conservation



Spill Response

Accidents and Spills happen ...

- "Spill" or "spillage" means any escape of petroleum from the ordinary containers employed in the normal course of storage, transfer, processing or use [6 NYCRR 612.1(c)(24)].
- Does not require a release into the ground or water
- No violation under the PBS Regulations for a release, only for a failure to report a release



Spill Response

Accidents and Spills happen ...

Per ECL 17-1001, petroleum spills must be reported to the **DEC SPILL HOTLINE (800-457-7362)** unless they meet ALL of the following criteria:

- The spill is known to be less than 5 gallons (petroleum) or less than the RQ (chemical / hazardous); AND
- The spill is contained and under the control of the spiller; AND
- The spill has not and will not reach the State's water or any land; AND
- The spill is cleaned up within 2 hours of discovery



Spill Response

Accidents and Spills happen ...

EXAMPLES OF SPILLS ...

- Product in sumps or containment
- Product spills at or near dispensers
- Inventory discrepancies noted in 10-day reconciliation

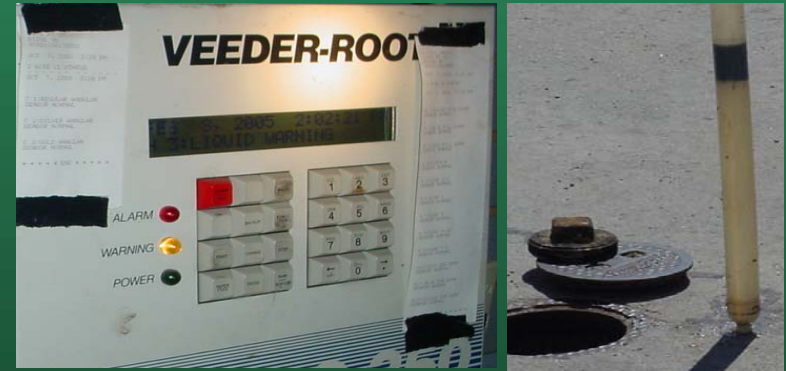


Spill Response

Accidents and Spills happen

MORE EXAMPLES OF SPILLS ...

- Product found in a monitoring well or u-tube
- Tank overfills
- Tank test failures
- Any other petroleum release or suspected petroleum release



Spill Response

Accidents and Spills happen ...

MORE EXAMPLES OF SPILLS ...

- Criminal mischief, vandalism, “Senior pranks”
- Excavate and dispose of affected materials



Spill Response

Accidents and Spills happen ...

MORE EXAMPLES OF SPILLS ...

- Unsecured Loads – controlled with absorbents and pads



NYS Department of Environmental Conservation



Spill Response

Accidents and Spills happen ...

- Traffic Accidents / Vehicle Fires
- Controlled with absorbents (sand, pads, booms)



Spill Response

Accidents and Spills happen ...

- Solid chemical / fertilizer spills
- Product reclaimed by sweeping up



Spill Response

Accidents and Spills happen ...

- Sheens or free product on surface waters
- Controlled with absorbents and booms



Spill Prevention and Response

Available Resources



Spill Prevention and Response Resources

- Contact appropriate bulk storage representative in DEC Region where Facility is located.
- **Bulk Storage Help Line:
518-402-9543**
- www.dec.ny.gov



Spill Prevention and Response Resources: www.dec.ny.gov



Outdoor Recreation

Hunting • Trapping • Fishing • Boating • Camping •
Shellfishing • Skiing • Hiking & Rock Climbing •
Snowmobiles & ATVs • Accessible Recreation •
Places to Go

Animals, Plants, Aquatic Life

Mammals • Birds • Amphibians & Reptiles •
Nuisance & Invasive Species • Species
Conservation Programs • Freshwater Fishes •
Marine Life • Insects & Other Species • Plants •
Injured, Sick or Distressed Animals

Chemical & Pollution Control

Air • Acid Rain • Water • Environmental Cleanup
Brownfields • **Chemical and Petroleum Storage** •
Waste Management • Recycling & Composting •
Pesticides • Radiation • Mercury Management

Lands and Waters

Forests • Open Space • Submerged Heritage

Conserving, improving, and protecting New York's natural resources and environment



DEC's New Public Website Goes Live

In 2006, more than 9.2 million people came to DEC's public website for important environmental information. The site has been redesigned to make it easier for people to find the information they want and need.



Plan for Reducing Energy Costs, Curbing Pollution and Addressing Global Climate Change

The state's aggressive efforts to achieve energy efficiency and to significantly reduce greenhouse gas emissions are key to realizing our economic and environmental goals.



Mercury Reduction Plan for New York and New England Waters

The Northeast Regional Mercury TMDL

ENVIRONMENT DEC
Online Newsletter

Dates to Remember

Website Survey



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Spill Prevention and Response (scroll down to ...)

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addresses the link between mercury emissions and mercury pollution in water and stresses the need for a nationwide mercury-reduction strategy.



Owners of Flood-Damaged Property to Receive Tax Relief

New legislation will provide tax relief to those whose property sustained significant flood damage last summer.



Catskill Trails Closed Due to Hazardous Conditions

Recent storms have created hazardous conditions on certain hiking trails in the Catskill Mountains which has resulted in some trail closures.



Hudson River Estuary Program Grants Available

Grants will range from \$10,000 to \$100,000 for eligible projects, and the deadline for applications is June 29, 2007.

[Regulations in Response to VHS](#)

[Northeast Regional Mercury TMDL](#)

[Employment Opportunities in Summer Recreation](#)

[2007 Campground Schedule](#)

Photo Credit:

The [DEC website banner](#) photo depicts the [Hudson River](#) and was taken by [Carl Heilman III](#).

Spill Prevention and Response Resources

- Call or email the Region where the Facility is located ... only a few of us bite!



Spill Prevention and Response

Questions?

Kevin Kemp

315-426-7464

KCKemp@gw.dec.state.ny.us

