Petroleum Storage Compliance

Important Note: The following text is excerpted directly from the New York State Department of Environmental Conservation's publication, *Environmental Compliance*, *Pollution Prevention*, *and Self Assessment Guide for the Marina Industry*. New York State Department of Environmental Conservation Pollution Prevention Unit. March 2003. The only changes that have been made are the addition of links to pertinent resources or regulations and Editor's Notes, where appropriate.

If your facility utilizes solvents, corrosives, degreasers, petroleum products, etc., you may have to comply with State and federal bulk storage regulations. These bulk storage regulations pertain to tank registration, upgrades, and inspections for the safe handling of petroleum products, and the storage of over 1,000 different hazardous substances as well as stringent design standards for new construction.

The bulk storage regulations consist of petroleum bulk storage and chemical bulk storage regulations. The storage of hazardous substances are regulated under the Chemical Bulk Storage (CBS) program.

PETROLEUM PRODUCTS

The Petroleum Bulk Storage (PBS) regulations became effective on December 22, 1985. The regulations apply to Underground Storage Tanks (USTs) and Aboveground Storage Tanks (ASTs) at PBS facilities with a combined storage capacity of over 1,100 gallons.

The PBS regulations are contained in 6 NYCRR 612-614. http://www.dec.state.ny.us/website/regs/part612.html Under these regulations, owners were required to register existing facilities with DEC by December 27, 1986. Facilities must re-register every five years. Registration fees vary from \$50 to \$250 per facility, depending on combined storage capacity of the facility. New facilities must be registered before being placed into service. DEC must be notified within 30 days prior to substantial facility modification (adding, permanently closing or replacing a tank).

Nassau, Suffolk, Rockland, Westchester, and Cortland Counties administer the program in these localities, pursuant a delegation agreement with DEC. Because these counties may have more stringent requirements than those of the State, owners and operators should contact the county to learn of specific local requirements.

All facilities regulated under PBS program must meet certain storage and handing requirements established by DEC. These include color coding of fill ports, spill and over fill prevention devices, and secondary containment for aboveground tanks. Aboveground tanks must be inspected monthly visually and operators of USTs must keep, reconcile and maintain daily inventory records. In the event of an unexplained inventory loss, DEC and the tank owner must be notified within 48 hours. Substandard tanks and piping systems must be tested

every five years and leak detection devices must be monitored weekly. Ten-year structural inspections are required ASTs which are 10,000 or more in capacity and rest directly on the ground.

Tanks that are temporarily out-of-service (30 days or more) must be drained of product to the lowest draw off point. Fill lines and gauge openings must be capped or plugged. Inspection and registration must continue. Tanks which are permanently out-of-service must be emptied of liquid, sludge and rendered vapor free and must either be removed or filled with solid inert material, such as sand or concrete slurry. DEC must be notified within 30 days of filling or removal.

Part 614 http://www.dec.state.ny.us/website/regs/part614.html applies to all new and substantially modified facilities. New USTs must corrosion resistant and have secondary containment. Although there are several options for secondary containment listed in the regulations, a double-walled tank with monitoring in the interstitial space is the most effective and is recommended. Although interstitial space monitoring must be used with a double-walled tank, other leak detection options which may be used include an automatic tank gauging (ATG) system, or one or more observation wells are available within secondary containment. New ASTs must be constructed of steel. If their bottom rests on the ground, the tank must have cathodic protection. An impermeable barrier must be installed under the tank bottom, with monitoring between the barrier and the tank bottom. New underground piping systems must be corrosion resistant and designed with a 30-year life expectancy. Piping systems must be constructed of fiberglass-reinforced plastic or other non-corrodible materials.

Secondary Containment Secondary containment defines any structure that is designed to prevent leaks and spills from reaching the land or water outside the containment area. All aboveground tanks with a capacity of 10,000 gallons or more must be equipped with secondary containment. All aboveground tanks smaller than 10,000 gallons are required to be equipped with secondary containment if the facility is within close proximity to ground or surface waters of the state. Facilities within 500 feet of the following resources may be considered in close proximity to ground or surface waters:

- perennial or intermittent stream;
- public or private well;
- primary or principal aquifer;
- wetlands as defined in 6 NYCRR 664, http://www.dec.state.ny.us/website/regs/part664.html
- lake, pond, estuary, etc.; or
- storm drain.

FEDERAL UST REGULATIONS

If you store motor fuels, used oil, or lubricating oil in USTs that are over 110 gallons in capacity, these storage systems my be subject to the federal Underground Storage Tank (UST) regulations (40 CFR 280

http://www.access.gpo.gov/nara/cfr/waisidx_99/40cfr280_99.html). These regulations are similar to the State PBS regulations, but exceed requirements of the State regulations in several areas. These include the December 22, 1998 deadline for upgrading, replacing or permanently closing an UST system. Upgraded systems are required to have corrosion resistant tanks and piping, leak detection, and spill and overfill prevention devices.

When an UST system is permanently closed, a site assessment must be preformed to check for contamination. DEC guidance for performing a site assessment is found in SPOTS (Spill Prevention Operations Technology Series) #14, http://www.seagrant.sunysb.edu/marinabmp/section4/pdfs/spots14.pdf. For more information on the federal UST program, go to EPA's web site: www.epa.gov/OUST, or call the RCRA/Super Fund Hotline at 1-800-424-9346.

WHEN TO REPORT A SPILL?

Reporting spills is a crucial first step in the response process. There may be several different state, local, and federal laws and regulations that require spillers to report petroleum and hazardous materials spills.

Hazardous Substances Associated with each regulated hazardous substance under Part 597 http://www.dec.state.ny.us/website/regs/part597a.html is a Reportable Quantity (RQ); one for a release to air and one for a release to land or water. Appropriate parties are required to take prompt remedial action to protect human health and the environment in the event of a spill. A spill that exceeds the RQ but is contained by effective secondary containment, and which is cleaned up within 24 hours, is not reportable unless it could result in a fire or explosion or pose a health risk to adjacent parties. When a spill cannot be contained, it is considered a release to the environment. When a release exceeds the RQ for that substance, the facility must report the release to the DEC Spill Hotline (800) 457-7362 within two hours of discovery. Part 595 http://www.dec.state.ny.us/website/regs/part595.html applies to all releases, including those from chemical process tanks, chemical fires, explosions, and non-registered facilities.

Petroleum Products Petroleum spills must be reported to DEC unless they meet **all** of the following criteria:

- The spill is known to be < 5 gallons.
- The spill is contained and under the control of the spiller.
- The spill has not and will not reach the State's water or any land.
- The spill is cleaned up within two hours of discovery.

All reportable spills must be reported to the DEC spills Hotline at 1-800-457-7362.