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2005



New York State
Department of Environmental Conservation

TANK Bulletin

Check Out DER's Web Site . . . You'll Be Glad You Did!

First posted in 1997, the Division of Environmental Remediation's (DER) web site has been expanded and upgraded. It is user-friendly and chock full of information about DER's programs:

- Brownfield Cleanup Program (successor to the Voluntary Cleanup Program)
- Environmental Restoration Program
- Brownfield Opportunity Area Program
- State Superfund Program
- Spill Response Program
- Petroleum and Chemical Bulk Storage Programs

The address is www.dec.state.ny.us/website/der/ for the DER web site. DER's web site can also be accessed through DEC's web site. Go to DEC's web site at www.dec.state.ny.us to do this. From DEC's home page, click on *Programs*, scroll down to the Office of Air and Waste Management, and click on *Division of Environmental Remediation*.

DER's web page covers the following five major areas:

- **What's New** - includes information and links about upcoming meetings and events, projects or documents with public comment periods, highlighted DER documents and highlighted DER links.
- **Our Programs Work** - includes information about each of DER's program areas.
- **Division Information** - includes links to search DER's spill incident database and inactive hazardous waste disposal sites database, DER's organization chart, and important phone numbers.
- **Other Helpful Information** - covers Manufactured Gas Plants, the Toxic Release Inventory, regulations and guidance, tips to the public, DER publications, and acronyms and abbreviations.
- **Other Site Remediation Resources** - includes links to web sites for the United States Environmental Protection Agency (EPA), the Interstate Technology Regulatory Council (ITRC), and EPA's Technology Innovation Program (TIP).

Bulk Storage Registration Reminders

Don't wait until registration renewal time to notify DEC of important information changes.

DEC maintains files on 38,000 active Petroleum Bulk Storage (PBS) and 1,600 Chemical Bulk Storage (CBS) facilities statewide that require periodic registration with DEC. It is important to keep your registration information current and accurate by completing a PBS or CBS Application form whenever changes occur. Several common situations require notice to DEC.

Change of Correspondence Address

DEC cannot contact you if the correspondence address and contact name you provided is no longer accurate. Please make sure to inform DEC of address changes as soon as possible. If

your mailing address or contact person's name is out-of-date, correspondence (like registration renewals, tank tightness test notifications, guidance documents, etc.) that DEC sends out to the facility owner may be misdirected or returned. The owner, however, would still be legally obligated to comply with all applicable laws and regulations. Delayed compliance could result in penalties or other enforcement actions against the facility owner. As you can see, it is in everyone's best interest to keep correspondence information current.

Change of Facility Ownership

Many facilities, especially apartment buildings, are periodically sold or otherwise change ownership. The prior owner's PBS or CBS registration is not transferrable to the new owner. The new owner is required to re-register the facility in the new owner's name within 30 days of the transfer of ownership. Should the new owner decide that the bulk storage tanks are not needed and desire to permanently close the tanks within 30 days after the sale, the new owner must notify DEC before closing the tanks, must submit a completed application form when the tanks are closed, and must indicate on the form that the tanks have been substantially modified. Tank closure is one kind of substantial tank modification.

Closing a Facility

When a bulk storage facility is no longer needed, many owners mistakenly assume their responsibilities under PBS and CBS regulations have ended. In truth, however, their responsibility ends only when these facilities are permanently and properly

closed in accordance with state (and in some cases, federal) requirements. If the facility is not permanently and properly closed and reported to DEC, it is still considered to be operating, and it is still subject to all the requirements of state/federal regulations.

A good example of a federal requirement is the requirement that a site assessment be performed when an underground motor fuel storage tank is closed.

Fortunately, it is quite easy to report tank closures to DEC. You can request a Bulk Storage Application form that is pre-printed with the facility information that DEC has on file and then cross out the incorrect information and write in the new information. You can also use a blank Bulk Storage Application

form to report the facility closure to DEC.

To report a facility closure, check box "#3-Substantial Tank Modification," under "Transaction Type" in the left-hand margin of Section A of the application form (facility information). In Section B of the application (tank information), the first column asks you to indicate the "Action" being reported about a given tank. For example, the "Action" might be "#1-Initial Listing" for a newly discovered tank; or the "Action" might be "#3-Close/Remove Tank" to indicate that a tank

is being permanently closed and removed. You should also verify/correct information in the fourth column, "Status," for each affected tank, indicating whether the tank is: "#1-In Service," "#2-Temporarily Out-of-Service," "#3-Closed and Removed," "#4-Closed In Place," or "#5-Tank Converted to Non-Regulated Use." In the fifth column, entitled "Installation or Permanent Closure Date," cross out the tank installation date and enter the tank closure date.

Remember that DEC cannot act on the information changes unless they are *official*. This means that the certification in Section A of the application form must be signed by the facility owner or an authorized representative, and the form must be returned to DEC. Bulk Storage Application forms that have not been signed by the facility owner or an authorized representative, or that do not contain an original signature, cannot be processed.

Forms and instructions are available on DEC's website at: www.dec.state.ny.us/website/der/bulkstor/forms/ or can be mailed, faxed, or e-mailed to you. If you have any questions or need forms, please contact your DEC regional office, or call the Bulk Storage Help Line at (518) 402-9543.

"It is important to keep your registration information current and accurate."

Management, Monitoring and Maintenance Support Leak Detection Systems



So, you've installed a leak detection system and your tank system has been upgraded to meet the federal 1998 compliance deadline. You're feeling pretty good? Well, you should feel good, but don't get too comfortable. Although more than one million unprotected steel tanks have been permanently retired and half of the nation's discovered petroleum releases have been cleaned up, state and federal regulators are far from convinced that the new generation of underground storage tanks (USTs) will be problem-free.

Fully upgraded tanks are not immune to environmental problems; they can and do leak. Leak detection serves as the front line of defense against petroleum releases, but slow leaks can elude the scrutiny of some leak detection devices. Undetected leaks can be a concern if they go unnoticed for long periods of time.

There is concern that tank owners may feel their upgraded UST systems do not require routine maintenance and monitoring. This attitude could result in another generation of leaking tanks.

Owners who take a proactive approach to tank management both remotely monitor and physically inspect their systems to ensure that releases are promptly detected and rectified. In essence, they are "troubleshooters" because they look for problems. They routinely canvass their site and inspect all accessible areas of their tank systems for telltale signs of problems. Dispenser covers and access lids for the tank fill and submersible pumps are removed so the equipment can be thoroughly inspected for signs of leakage.

Quick recognition of and response to operational problems enables proactive tank owners to protect both the environment and their "bottom line." They can minimize cleanup costs resulting from a petroleum spill, avoid negative publicity, and reduce the chances of neighbors seeking compensatory damages for unwanted product on their properties. Not only is troubleshooting an effective loss-prevention and loss-reduction practice, it's good business.

What to Look For and Where

The specific locations where problems are most likely to occur are well known. Reports from environmental contractors and EPA show that overfills are the tank owner's predominant nemesis. The dispenser area ranks second, followed by the submersible pump area, the piping system, and the storage tanks. These are the areas that owners should concentrate on when they visually inspect for signs of problems. The following information will help those who would like to become troubleshooters but are not sure what to look for.

Keep in mind that the following information is intended to point out some typical site exposures, and is not all-inclusive.

Environmental Factors

Some obvious problems include failed tank and/or line tightness tests, free product in monitoring wells, fuel and/or vapors of unknown origin, discrepancies/anomalies in inventory records, and visible indications of spills and/or overfills. Another sign is complaint from neighbors about gasoline odors coming from their basements or drinking water.

While observing the periphery of the property, look for the following warning signs of a release:

- Discolored water or a petroleum sheen on the surface of water in nearby drainage or irrigation ditches, ponds, streams, rivers, wetlands, or lakes.
- Excessive soil discoloration - the absence of vegetation, or dead or dying (distressed) vegetation (we know what happens when a lawnmower's gas tank is overfilled on grass).
- Petroleum product or vapors in underground structures such as basements, utility or sewer lines, and wells. Sometimes these odors are more evident after a rainfall.

Dispenser Problems

The dispenser area is the most overlooked source of releases, and it also has the highest incidence of leaks. When dispenser covers are removed, the inspector's nose should provide the first hint of a problem. In addition to checking for vapors, all observable fittings and valves should be examined carefully to ensure integrity. Any signs of erratic behavior in product dispensing systems should be investigated immediately.

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In terms of risk, a leak in a pressurized piping system can inflict far more damage to the environment than a leak from a suction piping system. Suction systems function with negligible operating pressure. Pressurized systems operating at 25 to 30 pounds of pressure per square inch can deliver product as much as 10 times faster than suction systems.

If product flow from the dispenser is noticeably slower than normal or if the meter spins without product delivery, there may be a leak in the piping. With pressurized systems, line leak detectors restrict the flow of the product to the pump whenever a loss of line pressure is detected.

Keep in mind that thermal contractions (the cooling and contraction of product within the piping) caused by outside temperature changes can result in loss of pressure and trigger a false alarm. Attempting to dispense product immediately after pump startup also may prompt a false alarm. The system may not be able to fully pressurize itself when the nozzle is opened too early.

Rattling sounds or erratic pump and/or fuel flow with suction systems indicate that air is in the system and mixing with the product. This could be caused by a loose fitting, a breach in the piping, or a faulty check valve. The same diagnosis may apply to suction systems that either lose their prime and/or are slow to prime. A sucking sound may occur when product drains back into the tank. Product hesitation may be a sign of valve or piping leakage or, in warm weather, it could mean a vapor lock.

Dispensers should be equipped with shear valves, and dispenser hoses should have break-away devices that are designed to immediately stop the flow of product and vapors if a motorist drives off without removing the nozzle from a vehicle's fill spout. The hose, nozzle and break-away device can be replaced for about \$200, whereas the bill for a damaged or destroyed dispenser could be about \$15,000.

Inventory Problems

Some common inventory problems and their probable causes include:

- **Shortages:** i.e., less product in a tank than the records show, could be attributable to a leaking tank or lines, bookkeeping problems, problems in the metering of the product, large decreases in product temperature, short deliveries, or cross-pumping to another tank.
- **Overages:** i.e., more product in a tank than records show, could be attributable to bookkeeping problems, problems in the metering of the product, large increases in the product temperature, over-deliveries, cross-pumping from another tank, or water leaking into the tank.

- Continuing differences between the recorded amount of product received and product dispensed may be a sign of a leak in the tank or piping, an inaccurate meter, theft, use of the wrong tank conversion chart, or a recurring delivery error.
- Large differences which only appear regularly between the delivered amount of fuel noted on the invoice and the measured amount in the tank after delivery may be a sign of a leak in the fill pipe, a delivery error, or a dipstick reading error.
- It is not unusual to have a small amount of water in a tank. An increasing amount over a period of days or weeks, however, may indicate that water is leaking into the tank and that product is leaking out.

Spill or Overfill Problems

The pad around the fill and dispenser areas should be checked for cracks or holes that may serve as a conduit to subsurface soils and groundwater.

Most retrofitted spill containment manholes (buckets) are clamped to the fill pipe and sealed with rubber gaskets. The gaskets should be checked regularly to ensure that they are not deteriorating. The clamps and seals also require attention to ensure their tightness. If they are not tight, they are in violation of the federal UST requirements.

Drain mechanisms should be checked to ensure that they are working properly and not stuck in the "open" position. If the drain mechanism is in the "open" position during petroleum transfer and the float vent valve closes because of an overfill, the drain mechanism will vent excess product and highly explosive vapors at ground level.

Tank overfills are a significant source of releases. Both state and federal tank regulations require tanks to have overfill prevention devices. The presence and functioning of overfill prevention devices in the delivery drop tube or float vent valve should be checked at least annually. Overfill warning devices such as alarms and lights should be checked monthly to make sure that they are operational. In order to function properly, the facility operator must be aware that overfill devices exist and pay attention to them, especially during product delivery.

Monitoring Well Problems

Cover caps on monitoring wells should display a black triangle and the label "Monitoring/Observation Well - Do Not Fill." Unmarked and unlocked monitoring wells are an invitation to disaster. They should be closed to unauthorized access so they are not inadvertently contaminated by surface activities or mis-

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taken for fill pipes by delivery drivers.

Tank fill ports must be color-coded according to American Petroleum Institute's (API's) fill port coding system [Section 613.3(b) of the state Petroleum Bulk Storage regulations] to help ensure that product is delivered to the proper tank.

To ensure that covers are returned to their correct location, many owners have painted them and extended the paint onto the pad so the covers are easily matched by color.

Piping Leakage Problems

If double-walled piping is present, open up tank top sumps periodically to see if any problems exist. Monitor for traces of petroleum at least weekly, and inspect monitoring systems monthly. Don't rely on sensors. Sensors and sumps may fail and not detect or contain a release if one occurs. Make sure that sensors are properly secured and placed where they can detect product in the sump. Lines and the submersible pump can leak. If there is water in the sump, have it removed.

If flexible pipe is present, examine it as well as looking for traces of petroleum and inspecting the monitoring system. Certain types of flex pipes have had problems that resulted in many reported failures. There are two problems that are believed to occur because of contact with petroleum. First, the flex pipe tends to grow and because it is rigidly anchored,

is stressed to the point of failure. The second problem is that the outside of the pipe may not be compatible with petroleum and hence degrades and fails. When examining flex pipe, look

“If flexible pipe is present, examine it as well as looking for traces of petroleum and inspecting the monitoring system. Certain types of flex pipes have had problems that resulted in many reported failures.”

for evidence of pipe growth (piping that is overbent or kinked, fittings or flex connectors that are twisted or misaligned) or for pipe degradation (cracking, bubbling, blistering, bulging, wrinkling, softness, delamination, flaking or fungal growth). If any of these conditions are observed, contact a tank contractor immediately.

Another problem that has been frequently observed involves test boots or reducing tees used to pressure-test the outer wall of double-walled piping. For leak detection to work, the boots must be pulled back from the secondary lines, or the reducing tee test port must be unplugged after the lines have been tested. If this is not done, any leakage into the interstitial space between the inner

and outer wall will not be able to flow back into the sump, and the operator will not know that there is a piping leak.

Interstitial Space Monitoring

Be sure to check the interstitial space. If your tank system has a sensor, be sure to test the device monthly. Once a year, have a contractor remove and physically test the sensor. Be sure to consult the operating manual for your system to obtain the manufacturer's recommendations.

The Choice is Yours

Operating a petroleum bulk storage facility today is complex. State and federal bulk storage requirements are specific and are being enforced. For these reasons, management, monitoring and maintenance are essential. Whether these activities are undertaken in a knowledgeable, proactive manner or in a more haphazard manner is the owner/operator's choice. Both methods have rewards and consequences. We hope, for the reasons outlined in this article, that you make the right choice. It usually takes only a little extra positive attitude and effort to go from mediocre to superior.

Courtesy of New England Interstate Water Pollution Control Commission and artist Hank Aho



The *Tank Bulletin* Goes Online

This issue of *Tank Bulletin* will be the last issue mass-printed and mass-mailed to our readers. We're going online to better serve our readers, and to save printing and distribution costs.

Tank Bulletin archives will be available online, so that readers may reference information in all previous issues of *Tank Bulletin*. In addition, readers may provide an e-mail address and request electronic notification when new issues of *Tank Bulletin* are available. The current issue of *Tank Bulletin*, back issues, and registration for electronic notification when new issues are available can be found at <http://www.dec.state.ny.us/website/der/bulkstor/bulletins/> online. For readers without internet access, DEC will also make a limited number of printed copies available. If you require a printed copy, please send a request with your name and address to: Editor, *Tank Bulletin*, New York State Department of Environmental Conservation, Bulk Storage Program, 625 Broadway, 11th Floor, Albany, NY 12233-7020.

Reminder: PBS Registration Fees Increase

The department reminds facility owners that Petroleum Bulk Storage (PBS) registration fees were doubled in October 2003 — the first increase since February 1992. Environmental Conservation Law Section 17-1009(2) was amended to increase PBS registration fees, superceding the PBS registration fees in 6NYCRR Part 612.3 as follows:

Combined Storage Capacity at Facility	New 5-Year Fee for Facility
Greater than 1,100 to 2,000 gallons	\$100 per storage facility
Greater than 2,000 gallons to less than 5,000 gallons	\$300 per storage facility
5,000 gallons to less than 400,000 gallons	\$500 per storage facility

If you have a copy of the PBS regulations dated December 27, 1985 (on the cover), you are encouraged to note this change.

All new and renewal PBS applications received by DEC require the increased fee. Note that the fee increase does not affect facilities in the five delegated counties (Nassau, Suffolk, Cortland, Rockland, and Westchester) that are regulated by county regulations.

Questions regarding the new fee structure should be directed to your DEC regional office or the Bulk Storage Help Line (518) 402-9543.

Small Heating Oil Tanks — How Are They Regulated in New York State?

In 1996, the NY State Legislature changed subdivision 1 of section 17-1003 of the State Environmental Conservation Law (Petroleum Bulk Storage Act) which deregulated some small heating oil tanks. This was accomplished by revising the definition of “facility or storage facility.”

The definition now reads as follows (bold text added): “Facility or Storage Facility” means one or more stationary tanks, including any associated pipes, lines, fixtures and other equipment, which are used singularly or in combination for the storage or containment of more than one thousand one hundred gallons of petroleum at the same site, but shall not include facilities licensed under article twelve of the navigation law or regulated under the federal natural gas act, **or a heating oil tank used for on premises consumption at the same site which is not interconnected to any other heating oil tank and is used to store or contain less than one thousand one hundred gallons of petroleum.**”

For example, a site that presently has a 1,000-gallon gasoline tank and a 275-gallon heating oil tank would not be regulated since the small heating oil tank is no longer included in the site’s combined storage capacity. The combined storage capacity would no longer exceed 1,100 gallons.

Regulated Heating Oil Tanks

Even with this exemption, there are a number of instances when small heating oil tanks are regulated. In the following instances, all heating oil tanks (including small heating oil tanks) at a facility would be regulated:

- One or more heating oil tanks are located at a facility, and at least one tank has a capacity of more than 1,100 gallons;
- One or more small heating oil tanks piped together (manifolded) if the resulting combined capacity is greater than 1,100 gallons; and
- The combined storage capacity of other petroleum products (gasoline, diesel fuel, lubricating oil) is more than 1,100 gallons.

Applicable Regulations

Whether heating oil tanks are regulated or unregulated, certain notice requirements apply. All petroleum releases (leaks and spills) must be reported with the exception of small controlled releases — see the article entitled, “DEC’s Petroleum Spill Reporting Guidance” in this issue of the *Tank Bulletin*. In other words, thou shall not leak or spill. Petroleum releases are regulated.

Tank Tightness Test Notification

New York State law requires DEC to provide owners of petroleum bulk storage (PBS) tanks a minimum of 45 days advance notice before a tank is due for tank tightness testing.

In order to comply with this requirement, DEC has developed a notification package. It includes a cover letter with site/tank information, regional office contact and address, and a listing of Frequently Asked Questions (FAQs). DEC sends these tank tightness test notifications 60 to 90 days ahead of the test due date, to the correspondence address on your tank registration. Be sure DEC has your current correspondence address on file.

Tank tightness tests are required for underground tanks only. This includes buried tanks, and tanks enclosed in concrete vaults with no access. The tightness test due date is determined from the testing schedule included in Section

613.5 of state PBS regulations and the information that you already provided on your PBS application form. To demonstrate compliance, you must have the tank tested before the due date and submit a copy of the test results to your DEC regional office within 30 days after the test date. You also must keep a copy of the test results for your records.

Failure to perform the required tightness testing by the specified date and/or to promptly submit proof of testing is a violation of state PBS regulations, and you may be liable for penalties. Any failed tightness test must be reported to DEC within two hours of discovery by calling the NY State Spill Hotline at 1-(800) 457-7362 from within New York State, or (518) 457-7362 from outside the state.

For more information or a copy of the FAQs, please call the Bulk Storage Help Line at (518) 402-9543.

PBS Application Form, Instructions, and Data Tracking System Updated

When the department updated its Petroleum Bulk Storage (PBS) tracking system (the computer system that tracks PBS facilities and tanks statewide) in 2004, it converted the tank data stored in the old system to new coding in the new tracking system. The department also decided that some old data fields should no longer be tracked, and that some new data fields and expanded choices for information coding should be added. As a result, the Petroleum Bulk Storage (PBS) Application Form and instructions were updated as well.

One new feature of the new PBS application form is the “automatic” population of certain data fields based on tank and pipe models. The new instructions include a tank and piping model chart, listing some commonly used tank models and piping models for which the model description defines the related equipment. For any given tank, if you enter codes for the type of tank model and piping model on the application form, you will save time and effort by not having to enter three codes for tank information (tank type, tank external protection, and tank secondary containment) and three codes for piping information (piping type, piping external protection, and piping secondary containment).

The new PBS Application Form must be used for any new PBS transactions submitted to DEC, including new registrations, ownership transfers, renewals, tank closures, new tank installations, substantial tank modifications, and information corrections. Obsolete application forms will no longer be accepted. Anyone (including consultants, contractors, management agents, operators and owners) with an inventory of the old blank appli-

cation forms should discard them. New PBS applications and instructions are available on DEC’s web site at www.dec.state.ny.us/website/der/bulkstor/forms/. If you don’t have internet access, you can contact DEC’s regional office in your area, or the Bulk Storage Help Line at (518) 402-9543, to obtain copies of the new PBS Application Form and instructions.

Renewals for PBS registrations will continue to be pre-printed and mailed from DEC’s Albany office, using the new form, two to three months prior to a facility’s expiration date. This should allow plenty of time to renew your registration. Please pay special attention to the new data coding and new instructions. If you see “ZZ” in any data field on your registration renewal, it indicates that the old data was missing or not valid, and you should supply new data for that field. The department may return incomplete applications to the tank owner. Furthermore, missing or invalid information may result in DEC notifying you to perform a tank test that may otherwise not have been necessary if the information you submitted about your tank was complete and accurate.

Also, one gentle reminder to facility owners: be aware of your registration expiration date. If a renewal package does not arrive as expected, it is not a valid excuse to let your registration expire. DEC is not mandated to send out renewal packages; we do it as a courtesy to you. Unfortunately, some renewal packages do not reach their intended destinations (for example, due to out-of-date addresses). If you need new forms or have questions about how to complete the new forms, please call the appropriate regional office, or the Bulk Storage Help Line.

Aboveground Storage Tanks (ASTs) — Tank Design & Certification - ULI42

The Chemical Bulk Storage (CBS) regulations under 6 NYCRR Part 599.8(b) require that all Aboveground Storage Tanks (ASTs) be designed, constructed and installed or certified by a qualified engineer or technician.

The design, construction, installation and certification must be in accordance with a consensus code, standard or practice developed by a nationally recognized association or independent testing laboratory that meets the requirements of the regulations.

While this section of the regulation identifies six specific consensus codes, the listing was never intended to be all-inclusive. Other codes not listed at the time that the CBS regulations were promulgated, or which were developed after the CBS regulations were implemented, may be acceptable to DEC for use by the regulated community. One example of this is ULI42 - “Standard For Steel Aboveground Tanks For Flammable and Combustible Liquids.” This consensus code applies to horizontal and vertical welded steel tanks intended for the outside storage of flammable and combustible liquids that are non-corrosive, stable, and have a specific gravity not exceeding that of water. If an owner purchases a tank that has been constructed in accordance with ULI42, DEC will accept it as satisfying the requirements of Section 599.8(b).

DEC's Petroleum Spill Reporting Guidance

Do I have to report small petroleum spills on paved areas?

What is the reporting threshold for petroleum?

When do I have to report a petroleum spill?

These and other questions are addressed in DEC's petroleum spill reporting guidance. For a copy, call the Bulk Storage Help Line at (518) 402-9543.

Petroleum Spill Guidance at a Glance

Petroleum spills must be reported to DEC within two hours of discovery, with one minor exception involving small spills. To fit within the exception, a small spill must meet all of the following criteria:

- The spill is known to be less than five 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; and
- The spill is cleaned up within two hours of discovery.

If a spill does not satisfy all of these criteria, it must be reported to the DEC Hotline at 1(800) 457-7362 within New York State, 1(518) 457-7362 from outside New York State within two hours of discovery. For a petroleum spill not deemed reportable, it is strongly recommended that the facts concerning the incident be documented by the spiller and a record be maintained for one year.

Other federal and local agencies may need to be notified, including the National Response Center at 1(800) 424-8802, and your local fire and emergency response corps.

DEC's Hazardous Substance (Chemical Bulk Storage) Spill Reporting Guidance

Each chemical on the state's list of Hazardous Substances (6 NYCRR Part 597) has a corresponding "reportable quantity." For each release, spill or overfill of the "reportable quantity" of a regulated chemical, you must report the event to DEC. To report these events, call the DEC Hotline at 1(800) 457-7362 within New York State, 1(518) 457-7362 from outside New York State, generally within two hours of the release, spill or overfill.

In addition, you must, within two hours, report releases of **any** amount (i.e., less than the "reportable quantity") of a listed chemical which may enter the environment and result in:

- a fire with off-site impacts,
- an explosion,
- contravention of air quality standards,
- vapors, dust and/or gases that may cause illness or injury to people outside the facility; or
- runoff from fire control or dilution waters that may cause or contribute to a contravention of water quality standards.

In the event of a release (spill which enters the environment), the owner or operator must also take immediate action to protect human health, safety and the environment. Appropriate spill response, investigation, and corrective action are needed.

You do not have to notify DEC within the two-hour time frame if a spill or overfill is captured in an appropriate secondary containment system, you contain the hazardous substance, and you expect to recover or account for the total volume of the spill within 24 hours. If the spill or overfill will not be completely contained and recovered or accounted for in 24 hours, however, or if the secondary containment allows the "reportable quantity" of chemical to reach the environment, DEC must be notified within 24 hours from the time the spill or overfill occurred. Suspected or probable releases to the environment also must be reported to the DEC hotline within 24 hours of discovery.

Testing and Inspection of New Aboveground CBS Tanks at Installation

Section 599.11(f) of the state's Chemical Bulk Storage (CBS) regulations requires that new aboveground tanks and ancillary equipment be inspected and tested by a qualified inspector. This requirement can be broken down into three parts:

1. A visual inspection to determine if there are visible defects such as weld breaks, punctures, scrapes of protective coatings, cracks, corrosion, structural damage or improper installation.
2. A test for tightness. This is typically accomplished by using a pneumatic (air pressure) test where all fittings, welds and joints on the tank and piping are coated with a soap solution and inspected for bubbles. Bubbles would indicate air leaks.
3. A multi-faceted inspection in accordance with a consensus standard:

- Ensure that the tank and piping system have been constructed in accordance with a consensus standard. If the manufacturer has constructed and certified the tank or piping as meeting an acceptable standard and has provided the information necessary to allow future five-year inspections to be conducted, then the inspector can rely on this information. If the tank manufacturer has not provided this certification, then the tank must undergo a five-year type of inspection to demonstrate compliance with a construction standard.

- Inspect the ancillary equipment to ensure compliance. This involves inspecting piping and other associated system equipment.

- Inspect the tank system installation to ensure that the tank and equipment have been installed in strict accordance with the manufacturer's instructions and industry standards.

- Review the entire tank system to ensure that all components work together correctly. The tank and the ancillary equipment may all meet standards when considered separately, but the system could be in danger of failure if, for example, the tank had an undersized vent or lacked an emergency vent.

Once the inspection has been completed, the inspector must provide a report that includes a statement certifying compliance and the results of all tests and inspections. This report must be made part of the Spill Prevention Report for at least five years after the tank is installed.

Aboveground FRP Tanks and Piping Recommended Practice for Conducting a Five-Year Inspection

All aboveground storage tanks (ASTs) and piping, including fiberglass-reinforced plastic (FRP) tanks and piping, are subject to the five-year inspection requirement under 6 NYCRR Section 598.7(d) of the state's Chemical Bulk Storage (CBS) regulations.

Owners/operators are required to inspect ASTs and piping systems on a five-year cycle. An exception is made when thinning of one millimeter per year or greater occurs on the pipe or tank walls, or when the expected remaining useful life (as determined by inspection) is less than ten years. Then, reinspection must be performed on the tank or pipe at one-half of the remaining useful life. Under these conditions, subsequent reinspection could become more frequent than the usual five-year cycle.

The primary purpose of this inspection is to assess and evaluate system tightness, structural soundness, corrosion, wear, foundation weakness and operability. The CBS regulations require the inspection to:

- be consistent with a consensus code, standard or practice which is developed by a nationally recognized association or independent testing laboratory; and
- meet the specifications of the regulation.

The department has identified a recommended practice for

inspection of aboveground FRP tanks and piping, which was developed by the Technical Association of the Pulp and Paper Industry (TAPPI), as embodied in TAPPI's Technical Information Paper (TIP) entitled "Guidelines for Inspecting Used FRP Equipment," TIP 0402-28, 1999. If an owner has an inspection conducted in accordance with this recommended practice, DEC will accept it as satisfying the requirements of Section 598.7(d) for FRP tanks/piping.

A word of caution ... in searching the internet for consensus codes, standards, or recommended practices, one finds many related articles on the subject such as:

- specific test methods (e.g., acoustic emissions);
- industry overviews; and
- in-depth company guidance documents that are well-developed and may even be titled "Inspection Guide for FRP Equipment."

Under the CBS program, these items either do not qualify as a consensus code developed by a nationally recognized association or independent testing laboratory and meeting the specifications of this subdivision, or do not serve as a complete resource on defining a comprehensive inspection program, including the frequency of inspection.

Anyone aware of other consensus codes, standards, or practices which address FRP tank systems, or having a question on whether a particular code, standard, or practice is acceptable under the state's CBS program, is urged to contact Cynthia Leece, P.E., of DEC's Spill Prevention and Bulk Storage Section, at (518) 402-9553.

Bulk Storage Forms, Publications and Regulations Now Available on DEC's Internet Web Site or via E-Mail

Many bulk storage forms, publications and regulations are available at www.dec.state.ny.us, DEC's web-site. To access this material, click on the Programs button. Scroll down to the Office of Air and Waste Management, and click on Division of Environmental Remediation. On the next web page, scroll down to Our Programs Work, and click on Petroleum and Chemical Bulk Storage Program. You can also go to www.dec.state.ny.us/website/der/bulkstor/ directly. On this page, scroll down to one of the following areas: Regulations, Helpful Information (which includes forms and instructions), or Frequently Asked Questions (FAQs).

Information is available for download from the web site, or via e-mail by contacting your DEC regional office (see map on back cover) or the Bulk Storage Help Line at (518) 402-9543. Content changes periodically, so please check our web site often.

Translucent Aboveground Storage Tanks and Level Gauges

Owners and operators of aboveground translucent tanks (plastic, fiberglass, etc.) frequently telephone DEC to ask if their tanks are required to have level gauges. Often, construction of tanks using these unique materials leads to a vessel that is semitransparent, allowing the liquid level to be visible.

New York State Chemical Bulk Storage (CBS) regulations require that all aboveground tanks "...be equipped with a gauge or other monitoring device which accurately determines the level or quantity of the substance in the tank. The gauge must be accessible to the operator or carrier and be installed so that it can be conveniently read ... Where filling or emptying is remotely operated, all gauges, gauge labeling, and alarms ... must be located at the remote operating station." [6 NYCRR 599.17(b)(1)(iii)].

For tanks where the level of the regulated substance is clearly visible through the translucent tank shell, the tank itself may serve the same purpose as a level gauge. Where translucent tanks satisfy the following characteristics, the requirement for a level gauge is fulfilled:

- The operator/carrier must be in a location that allows direct visual observation and control of the filling operation (as defined in written transfer procedures); and
- The design and working capacity on the receiving tank is clearly, boldly, and permanently marked on the tank's exterior; and
- Graduated markings indicating volume are permanently attached to the side of the tank; and

- The tank is translucent so that the liquid level is clearly visible.

Remember, while the level gauge is a key element in preventing spills and overfills, the following items are also required when transferring hazardous substances:

- Mated couplings are installed (to prevent mixing),

written transfer procedures for each substance are followed (to prevent delivery of a substance to the wrong tank and prohibit transfer of incompatible substances at the same time within the same transfer station), and written procedures are documented in the facility's Spill Prevention Report [§598.4(b)(7)]; and

- Tanks must be equipped with one of the following [§599.17(b)(1)(i)]: a high-level warning alarm; a high-level trip; or an automatic bypass to an overflow tank if the overflow tank is equipped with overflow protection or other equivalent systems for preventing overfills; and

- The tank [Part 599.9] and transfer station [§599.17(c)] must have a permanently installed secondary containment system that meets Part 599 requirements.

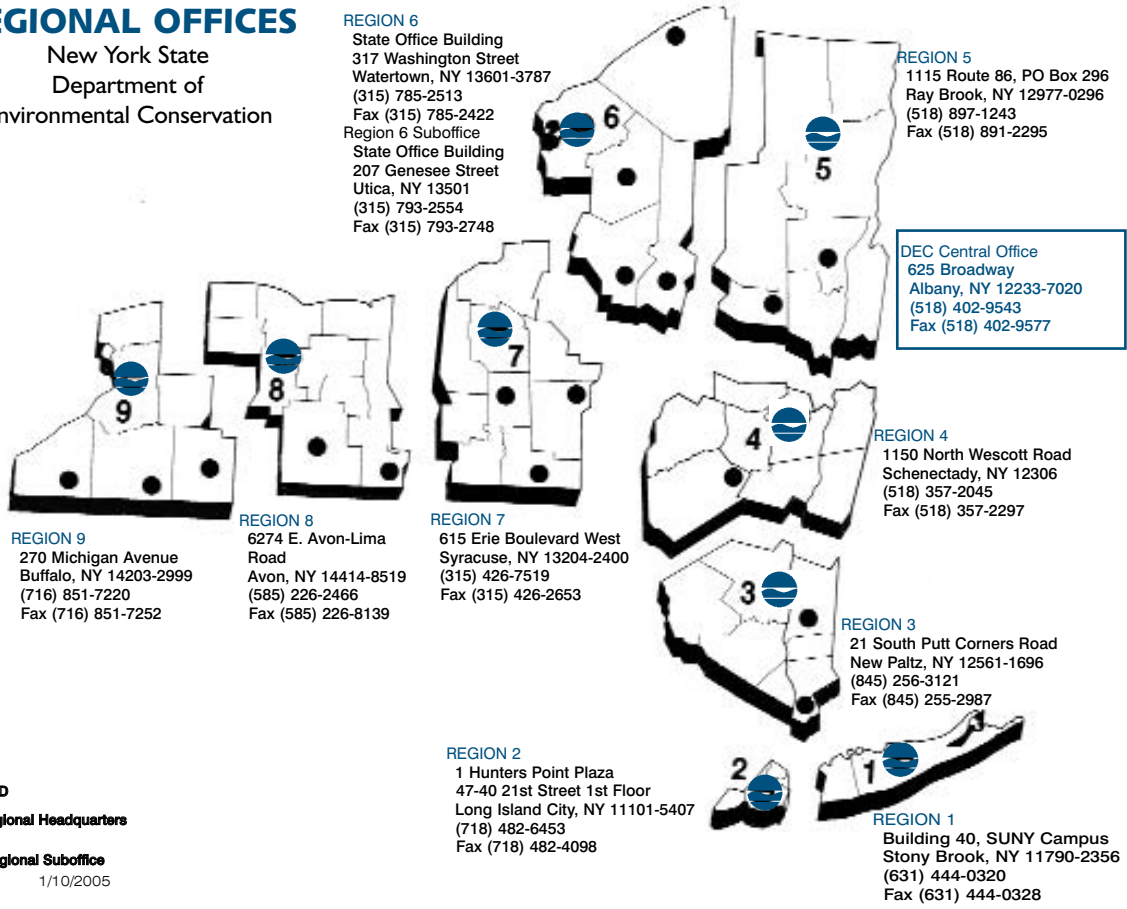
If you have questions, please call Cynthia Leece, P.E., of DEC's Spill Prevention and Bulk Storage Section, at (518) 402-9553.

“New York State Chemical Bulk Storage (CBS) regulations require that all aboveground tanks be equipped with a gauge or other monitoring device which accurately determines the level or quantity of the substance in the tank.”

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625 Broadway,
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