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Department
of Environmental
Conservation

TANK BULLETIN

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John P. Cahill, Commissioner

Dick Cowan, Editor

Federal UST Deadline Almost Here

Each year hundreds of underground storage tanks leak into New York's groundwater resources. These leaks not only take their toll on the environment but drain economic vitality from businesses facing unbudgeted cleanup expenses. Timely action to replace rusted underground tanks and periodic checks for leakage can prevent environmental damages and save businesses' millions of dollars annually.

State and federal laws are in place to protect the environment from leaking storage tanks. Under New York State regulations, new tanks must meet strict standards and unneeded tanks must be closed in an environmentally safe manner.

Under Federal regulations, tanks must be upgraded to meet corrosion protection, overfill prevention and leak detection standards set by USEPA. December 22, 1998 marks the Federal deadline for upgrading the nation's underground tanks to meet these standards. Owners must bring their tanks into compliance or face enforcement that could result in fines and penalties.

If you have a substandard underground storage facility, you are urged to take action now.

Upgrading should be among your highest priorities for 1998. Please contact your nearest Department of Environmental Conservation office (numbers below) for assistance on upgrading requirements.

Region 1, Stony Brook (516) 444-0320
Region 2, New York City (718) 482-4933, ext.. 7149
Region 3, New Paltz (914) 256-3121
Region 4, Schenectady (518) 357-2045
Region 5, Ray Brook (518) 897-1243
Region 6, Utica (315) 793-2554
Region 7, Syracuse (315) 426-7519
Region 8, Avon (716) 226-2466
Region 9, Buffalo (716) 851-7220
or call the Bulk Storage Helpline
at 1-888-457-4351

EPA Requires Risk Management Reports

In June 1996 the U.S. Environmental Protection Agency (EPA) published regulations titled "Risk Management Programs for Chemical Accident Release Prevention" (40 CFR Part 68) which require businesses storing certain hazardous chemicals to prepare reports discussing how accidental chemical releases can be eliminated or minimized. The reports are due to be submitted to EPA on or before June 21, 1999.

More than 100 chemicals are covered by the regulations (including chlorine, propane and ammonia) that many small businesses commonly store.

The Clean Air Act Section 112(r) required the EPA to publish regulations focusing on chemical accident risks. Congress and EPA's Chemical Emergency Preparedness and Prevention Office intended this regulation to build upon the chemical safety work begun under the Emergency Planning and Community Right-to-Know Act which requires businesses to properly plan for and respond to chemical accidents.

Information is available from EPA on; the chemicals covered, the threshold quantities regulated, scope of report, reporting methods and model risk management plans.

For more information, contact the EPA confidential hotline, 1-800-424-9346 or John Ulshoefer, EPA Region II coordinator at 1-908-321-6620. Information is also available on the Internet at http://www.epa.gov/swercepp/.

Grace period for Upgrading UST's Ends December 22,1998

A decade ago, Congress and EPA enacted laws and regulations intended to curb the cost of cleaning up the mess left by leaking underground storage tanks and pipes. In passing the federal regulations (40 CFR Part 280), the EPA provided tank owners with a 10-year period for upgrading or discontinuing use of substandard underground tanks. That 10-year period ends this year on December 22, 1998.

Applicability of the Federal Regulations

EPA's regulations are applicable to tanks storing petroleum and hazardous substances that have 10 percent or more of its volume underground and are larger than 110 gallons. There are two major exceptions to this:

1. Any tank storing heating oil (such as #2 fuel oil and kerosene) that is used consumptively on the premises is exempt. This is true regardless of the size of the tank as long as the heating oil is used on site.

2. Any tank less than 1100 gallons storing motor fuel at a residence or on a farm is exempt. The location has to be a residence where people live or a farm where crops or livestock are raised. A cemetery is not a residence and a golf course is not a farm.

For example, if a person owns a 2000-gallon tank that stores heating oil used consumptively on the premises, and a 2000-gallon gasoline tank for automotive use, the heating oil tank is exempt from the federal UST regulations while the gasoline tank is not. Or another example, if a farmer owned a 3000-gallon tank storing lube oil and a 1000 gallon tank storing diesel for his farm equipment, the lube oil tank is covered by the federal UST regulations while the motor fuel tank is not covered. One last example would be a person who owned a tank storing diesel fuel for an emergency power generator and a tank storing heating oil used in a generator. The tank storing diesel is covered by the regulations while the tank storing heating oil is not covered.

Although some tanks are exempt from the federal UST regulations, they may not be exempt from the State's Petroleum Bulk Storage Regulations. Call 1-888-457-4351 for a copy of the State regulations and to discuss State requirements.

Options

There are basically four options for complying with the federal UST regulations:

Option #1. Replace the tank and piping system;

Option #2. Upgrade the tank and piping system;

Option #3. Permanently close the tank and piping system; or

Option #4. Temporarily close the tank.

For each of these options, the federal standards (and the State DEC standards where applicable) must be followed. It is important to review the DEC standards for new construction, especially if a new AST is being installed.

(continued next page)

Tank owners should remember that pipe upgrading is also required. If a tank owner has a piping system that is bare steel, galvanized steel or other piping system not protected from corrosion, it is best to replace the piping system. If the tank owner wants to upgrade the piping system with cathodic protection, a site specific design is needed by a corrosion expert.

For more information on option #1 and #3, see the article *Beating the 1998 Deadline-Upgrading Alternatives* in *Tank Bulletin,* Issue Number 16, Fall of 1995. For more information on option #2, see article *1998 UST Deadline - Tank Upgrading Options* and the Question and Answer section in *Tank Bulletin,* Issue Number 19, Winter of 1997.

Tank Closure

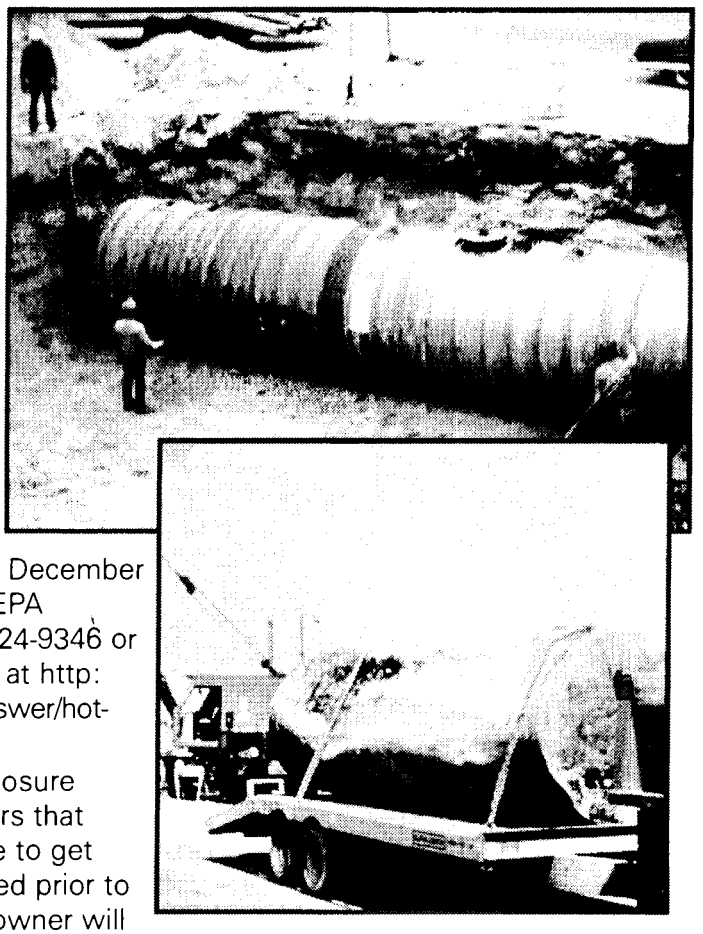
EPA has notified owners who decide not to upgrade their tanks that they must close their USTs by December 22, 1998. To permanently close a tank, owners should empty and clean the system and remove all fill lines, pipes and the tank. Once properly cleaned, a tank can be brought to a salvage yard where it will be recycled along with other scrap metal. If removal is physically not possible, a tank may be closed in place by filling it with a solid inert material such as sand.

To temporarily close a tank, the tank must be emptied and the fill line capped and locked so that no product can be delivered to the tank. The tank and piping system must either be upgraded or permanently closed with 12 months.

When permanently closing a tank, owners need to assess the site for contamination and maintain a written report containing the findings of the assessment. Once work is scheduled for closure, the tank owner should notify the DEC on the tank registration form that the tank is being closed. If the tank is temporarily closed, the owner will need to keep the tank registered with the DEC.

If you are uncertain if your tank is covered by the EPA regulations and needs to be upgraded by December 22, 1998, call the EPA helpline at 1-800-424-9346 or visit their web site at http: www.epa.gov/epaoswer/hotline.

The temporary closure option helps owners that have not been able to get their tanks upgraded prior to the deadline. The owner will not be able to operate the tank after the deadline but is given up to 12 months to either get the tank/piping system upgraded or permanently closed.



(top) New UST installation
(inset) Removal of a substandard tank

Update Tank Registration Information with DEC

Owners are reminded that they must notify the DEC and update their tank registration when any of the following work is done:

- permanent tank closure (in-place or by removal)
- temporary tank closure
- new tank installation
- new piping installation
- retrofit of cathodic protection to the tank or piping
- tank re-lining
- installation of spill prevention devices, overfill prevention devices or leak detection devices

By December 22, 1998, operating underground storage systems must have:

- *corrosion resistant tanks and pipes;*
- *a catchment basin installed around the fill port; and*
- *an overfill prevention device such as a high level alarm or automatic shut off valve*

Tanks cannot be in service after December 22 without meeting all of the upgrade requirements.

Spill Prevention Strategy at Kodak Park

By James M. Gerek, Eastman Kodak Company

Three steps are key to Kodak's strategy.

Step 1 - Study processes for potential problems

Step 2 - Upgrade storage equipment and handling procedures

Step 3 - Analyze accidents to prevent recurrence

Editors Note: Eastman Kodak has a significant number of tanks regulated by DEC's Chemical Bulk Storage Program. DEC invited Eastman Kodak to share its expertise and strategy for spill prevention in this issue of *Tank Bulletin*.

Eastman Kodak strives to be a good steward of the environment, and to protect the health and safety of its workers, customers and the communities in which it operates. In doing so it sets targets and tracks environmental performance in many areas, such as spills and releases that have the potential to impact the environment. Over the past decade Kodak has been successful in reducing these incidents at its Kodak Park facility in Rochester, New York through a process of continual improvement.

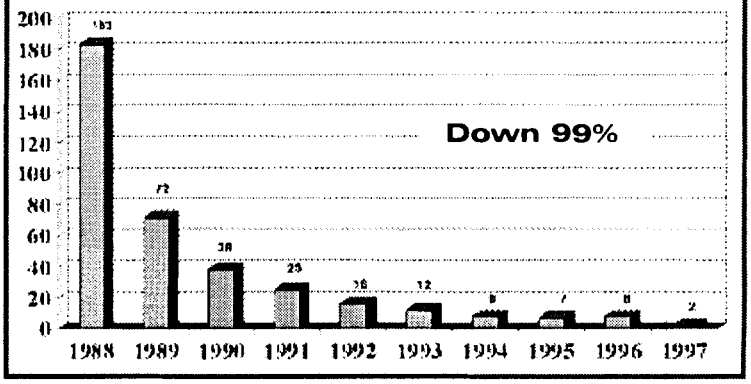
Kodak Park is the largest photographic production facility in the world, and the largest industrial complex in the northeast United States. The manufacturing park is located on more than 1,300 acres, and stretches for nearly four miles through the City of Rochester and the Town of Greece. Kodak Park has often been called "A city within a city." It has some 200 major manufacturing buildings producing photographic films, papers and chemicals for a wide variety of applications.

Kodak uses hundreds of different chemicals, in quantities ranging from lab-size containers to full tanker truckloads. Each week, hundreds of truckloads and railcars of raw materials arrive at the park. On a daily basis, thousands of gallons of chemicals are transported through many miles of pipelines to operations all over the site.

All incidents at Kodak are given severity ratings of "high," "medium," or "low" based on their potential to cause an impact on the environment. High and medium-severity incidents are labeled as "significant" because of their potential to impact the environment or the quality of life of neighbors. Low-severity incidents typically involve a spill of a very small quantity of material to an area from which it can be cleaned up without any impact on the environment. In 1997, Kodak recorded just two "significant" incidents, compared to seven to eight per year during 1994-1996. Since 1988, Kodak has achieved a 99 percent reduction in "significant" incidents at its Rochester plant. See Figure 1.

Figure 1

Kodak Park Significant Incidents



These successes are due to a multifaceted release prevention program developed by Kodak. First, modifications being considered to chemical or manufacturing processes are extensively analyzed through a process safety review before they are implemented. Kodak's reviews identify potential hazards, assess the risks they present and evaluate control methods. Changes are then made to minimize hazards. Reviews are conducted prior to the start-up of new or modified processes, or at intervals of not greater than five years for ongoing processes.

They generally involve several members of the affected operations and engineering staff along with internal experts on health, safety and environmental issues. Information generated from the reviews enables management to make informed decisions about process improvements and to ensure compliance with all applicable regulations and requirements.

Second, a considerable effort has been made over the past several years to upgrade tank systems and transfer stations to meet current technical and regulatory standards. More than $100 million has been invested in Kodak's storage tank improvement program. This program to upgrade, replace or eliminate every bulk chemical storage tank by the end of 1998 will result in a 65% net reduction of tanks at Kodak Park. By the end of the year it is anticipated that 893 tanks will have been removed. New and upgraded tanks have secondary containment and advanced leak detection systems. (Note: A more complete description of the Kodak program is discussed in the Spring/Summer 1990 edition of *Tank Bulletin*.)

In conjunction with the tank improvement program, Kodak has begun upgrading transfer stations. This work is ongoing to meet the 1999 upgrade requirements established by the Department of Environmental Conservation in the State's Chemical Bulk Storage Regulations. In general, they are designed to contain, at a minimum, the volume of the spill most likely to occur. In a number of areas, remote catch tanks are used to enhance spill containment where space is limited. See Figure 2. for a photograph of an upgraded transfer station.

Finally, after a spill or release has occurred, every effort is made to minimize its impact. Data from accidents is analyzed to learn what steps are needed to prevent recurrence. To provide prompt spill response and to initiate the appropriate follow-up activities, Kodak uses an internal 911 phone system.

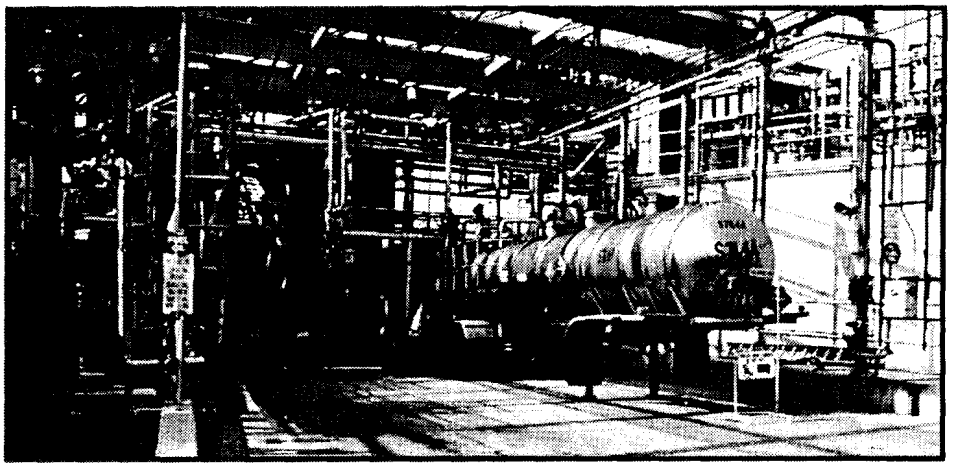


Figure 2—Kodak's upgraded transfer station

Employees are trained to use this number to report every spill, as well as any fires and injuries. Experienced personnel respond to these incidents and initiate necessary regulatory reporting. The Kodak Fire Department maintains a highly trained HazMat unit that can be brought to the scene with the necessary equipment to deal with most types of incidents, and to keep them from growing larger. Once a spill has been contained and cleaned up, the attention turns to determining how to keep such an incident from happening again. Root-cause analysis techniques are used to identify the factors that led to the incident. These are then used both to modify the specific process involved, and to focus the direction of the release prevention program for the entire site.

Using the above approaches, Kodak has been successful in preventing problems which are inherent with the handling of large quantities of hazardous substances.

The result? A 99% reduction in "significant" incidents over the past nine years.

Kodak believes that it is best to focus on preventive measures today, not remedial measures tomorrow.

Tank Owners Please Note:

If you have a substandard federally regulated UST, you will not be able to use it after December 22,1998. Only UST systems that are upgraded or replaced can be used after that date. Hiring a contractor before December 22,1998 to perform required work does not qualify you to use your tank.

WWW Gives You the World

In the Winter 1997 Issue of the Bulletin we listed useful web site addresses (URLs - Universal Resource Locators) such as those of the American Petroleum Institute (API), National Fire Protection Association (NFPA), National Association of Corrosion Engineers (NACE), and others. Of course, we have discovered some more which are listed below:

http://www.Albany.net/~gra—Homepage for the NYS Association of Service Stations and Repair

http://www.epa.gov/swerust1/ustfacts—Environmental Protection Agency (EPA) homepage for USTs

http://www.frtr.gov—Federal remediation technologies roundtable homepage

http://www.assembly.state.ny.us/ALIS—URL for New York State Laws. (Note: type ALIS in capitals).

http://www.access.gpo.gov/nara/CFR—Homepage for the National Archives and Records administration containing the U.S. Code Of Federal Regulations

http://www.epa.gov/swerust1/mtbe—URL for MTBE fact sheets, or call 800-490-9148

Homepage for SPCC Planning

If you are preparing a spill prevention control and countermeasure (SPCC) plan as required by EPA under 40 CFR 112, then you should visit EPA's Oil Spill Program homepage at http://www.epa.gov/oilspill.

Westchester County Delegated

Effective June 23, 1998, aboveground and underground petroleum bulk storage tanks located in Westchester County, formerly regulated by the NYS Department of Environmental Conservation (DEC), will be regulated by the Westchester County Health Department (WCHD). Westchester County now joins Nassau, Suffolk, Rockland and Cortland counties which have been delegated the Petroleum Bulk Storage (PBS) Program.

In accordance with the Order on Consent executed by DEC Commissioner John P. Cahill and WCHD Commissioner Harold N. Adel, M.D., the Health Department is empowered to administer and enforce Article XXV (entitled Petroleum Bulk Storage Code) of the Westchester County Sanitary Code. Article XXV now governs the bulk storage of petroleum in Westchester County in lieu of 6 NYCRR Parts 612-614.

The County is now responsible for registering tanks, for enforcing the testing, inspecting and closure requirements at existing storage facilities and for ensuring that owners and operators install state-of-the-art equipment at all new facilities.

For further information on the rules and regulations of the WCHD, contact Carlos Torres, Chief of the Westchester County program at 914-637-4890. The address of the WCHD is: Westchester County Health Department, 145 Huguenot Street, New Rochelle, NY 10801.

Spill Cleanup Program Available Again for Homeowners

With the demise of the HELP (Homeowners Environmental Loss Protection) Program two years ago, many homeowners with residential fuel oil tanks have wondered if there is insurance available to cover the cost of cleaning up a tank leak. Well, a new program that serves this need has just come on line. It's called the CLEAR Program. CLEAR stands for Cleanup of Environmental Accidental Releases.

CLEAR is an insurance program that has been approved by the New York State Insurance Department on an excess and surplus lines basis. It can cover the costs of cleanup, property damage, and tank repair or replacement. The cleanup of fuel oil accidentally released onto a neighbor's property is also covered, provided the neighbor does not restrict the insurer's access to such property. Not all homeowner tanks are expected to qualify for coverage because of the inspection and tightness testing requirements. Insurance policies cover USTs up to 4,000 gallons capacity.

CLEAR insurance is only available through participating fuel oil dealers. Annual premiums are reported to range from approximately $65 to $225 depending on tank location, whether it is tightness tested prior to insuring and area of the State that the tank is located.

For more information on CLEAR insurance, contact your fuel oil dealer or the New York State Insurance Department Hotline at 1-800-522-4370.

DEC IS NOW ON THE INTERNET
Our address is:
http:/www.dec.state.ny.us

Know-how Important for Removing/Installing Storage Tanks

Experienced contractors have learned that removing a storage tank is dangerous work and installing a new system correctly requires patience and know how. Study courses and on-the-job training is essential if you are providing tank removal or installation services.

API Training Course-Operation Underground

Operation Underground is a training program developed by the American Petroleum Institute (API) that teaches the proper procedures for installing and removing underground storage tanks. Installation and removal procedures are addressed in two separate training modules. Each module includes an instructional video and an associated workbook. Trainees view a segment of the video and answer questions in the related workbook, reviewing or moving forward at their own paces

If you are interested in obtaining a copy of one or both of these modules, contact API at (202) 682-8227.

Ask for:

Underground Storage Tank Installation Training Module—Publication 1663, or;

Underground Storage Tank Removal Training Module—Publication 1663D.

API also offers a contractor certificate program. The Program is designed to provide tangible evidence that one or both of the modules have been completed. To take the exam(s) an individual must fill out a certificate application form and return it to API headquarters for processing.

PEI Manuals Offer Guidelines

The Petroleum Equipment Institute (PEI) offers two separate manuals on tank installation. The first is *Recommended Practices for the Installation of Underground Liquid Storage Systems* and the other is *Recommended Practices for Installation of Aboveground Storage Systems for Motor Vehicle Fueling.* The purpose of these manuals is to identify practices and procedures for the proper installation of tank systems. These manuals are available from PEI by calling (918) 494-9696.

NYS Educational Seminars

The DEC works with Phil Pimentel, PIM Enterprises, to offer educational courses on underground tank installation, underground tank closure and an introduction to aboveground tank installation. Each course is about a day in length. These courses, which are very practical in nature and designed for the contractor involved in tank work, are usually offered during the winter time (January/February) in various locations around the State. If you would like more information on this course or to sign up to receive a course brochure for when the seminars are offered, please call PIM Enterprises at 1-800-841-8827.

There is a voluntary certification program that is in use in New York State. The exam is offered by the International Fire Code Institute (IFCI). You can call the Bulk Storage Helpline (1-888-457-4351) to get a brochure on the exam.

New Construction Standard for Steel Tanks

A recent change in UL 58, the construction standard for steel underground storage tanks, which went into effect on September 30, 1997, is worth noting. The thickness of steel plate used in building a tank is one of the factors that determines if the tank has the strength to withstand pressure from the soil above it. In the old version of UL 58, the thickness of the seel plate for each tank size was specified in the standard. In the latest edition, the thickness of the plate is left largely to the discretion of the manufacturer, with the caveat that each tank must bear a label indicating the maximum allowable burial depth. All tanks must also be able to withstand at least a 5-foot burial depth.

In other words, it is now possible for a manufacturer to produce an 8,000 gallon tank with a specified maximum burial depth of 5 feet, and an 8,000 gallon tank with a specified maximum burial depth of 8 feet. Because the tank with the deeper burial depth must be able to support a larger amount of soil above it, the tank will need to be constructed of thicker steel. Because steel is sold by the ton, the tank with a maximum burial depth of 8 feet will weigh more and cost more than the tank with a maximum burial depth of 5 feet. Thus, owners and installers need to verify that the planned burial depth is less than the maximum permissible burial depth indicated on the tank label.

Tank Owners

It is very important that you hire contractors that are qualified to do work on tanks. Because there are no certification requirements in most areas of the state, it is very important that you check out the qualifications of the contractor very carefully. If the contractor has attended these courses and uses these manuals, it is a sign that they are interested in doing the job correctly. You should also check out references to be sure that they have a history of doing this kind of work.

Questions and Answer Section

Question: Can I deduct my expenses for tank removal, replacement and cleanup on my federal income tax return?

Answer: Yes. The costs to remove and replace storage equipment are considered capital expenditures and can be deducted over a depreciation period established by the Internal Revenue Service under Section 168 of the Internal Revenue Code. Typically for an underground tank, this would be 10 years. You will need to consult the modified cost recovery system (MACRS) table in IRS Publication 3946 for actual deductions each year.

As for cost to a cleanup contaminated soil or the cost to remove but not replace a tank, these are considered business expenses and can be deducted as normal operating expenses in the year that they occur.

Because deductions are unique to your situation, it is advisable to consult with a tax consultant or obtain a written interpretation from the IRS on all planned deductions.

New Publications from OUST

A new EPA publication entitled *Getting the Most Out of Your Automatic Tank Gauging System* (EPA-510-F-98-011) was released in March. The audience is UST owners and operators using automatic tank gauging systems to comply with federal leak detection requirements. This leaflet provides UST owners and operators with a basic checklist they can use to make sure their automatic tank gauging systems work effectively. The leaflet focuses on what actions the UST owner and operator must take to comply with leak detection requirements and prevent significant cleanup problems. For a copy of this publication, call 1-888-457-4351.

Tank Upgrading with Cathodic Protection

If a tank owner wants to upgrade a tank with cathodic protection only, the first step is an assessment of the tank to ensure the tank is in good enough shape to be upgraded. The regulations require either an internal inspection or some other inspection which is allow by EPA. ASTM came out with an emergency standard in 1994 that allowed tanks to be inspected without putting a person inside the tank. While this standard had a limited life of just two years, EPA allowed the use of this standard until March 1998. After March 1998, either a new ASTM standard had to be used, or each of the inspection methods had to have their capabilities third-party certified. The new ASTM standard is expected out shortly. In the meantime, three of the vendors of inspection methods have had their methods third-party certified. The methods that have been evaluated and acceptable for use are:

- *Mean Time to Corrosion Failure (MTCF)* by Warren Rogers Associates/CorrPro Companies
- *Tank Environmental Profile (TEP)* by International Lubrication and Fuel Consultants, Inc. (ILEC)
- *Petroscope by Tanknology* - NDE, Inc.

NYSDEC
Bulk Storage Program
50 Wolf Road, Room 360
Albany, New York, 12233-3750

Non-Profit Org.
U.S. Postage Paid
Albany, NY
Permit No. 598