



# STANK BULLETIN

Division of Water  
Information and Bulk Storage



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**New York State Department of Environmental Conservation**  
Mario M. Cuomo, Governor Thomas C. Jorling, Commissioner



## EPA and New York State Agree on Underground Storage Tank Rules

The U.S. Environmental Protection Agency (EPA) and the State of New York have agreed that the State's existing underground storage tank program will satisfy most of the essential federal regulations during the transition period before the State's Department of Environmental Conservation (DEC) receives complete delegation of the federal program.

"This will simplify compliance for the owners and operators of the estimated (123,000) underground tanks in the State storing petroleum and chemicals as they will not have to deal with two sets of regulations," said William J. Muszynski, EPA Region 2. Both sets (of regulations) regulate certain aspects of tank upgrading, leak monitoring and proper closure at the end of a tank's useful life.

"Owners and operators are cautioned that they are subject to regulations for tanks down to 110 gallons in capacity, the broader federal coverage," Mr. Muszynski said. In addition, they must show financial responsibility, such as insurance, to cover cleanup of leaks and spills, to compensate third parties for damages, and to close the tanks. They may also need to modify their timetables regarding upgrading, leak detection and closure.

"New York has had an aggressive and sophisticated underground storage tank program for several years and we are pleased to define our roles formally through a Memorandum of Agreement (MOA) which EPA and the State signed (July 1989)," Mr. Muszynski said.

"We are carrying out Congressional regulatory requirements placed on the private sector by allowing states that are capable of assuming this responsibility to carry it out independently."

The MOA does not mean tank owners do not have to comply with Federal requirements. This is not the case. DEC is the primary enforcement agent but will be enforcing State law and regulations. Owners still must meet Federal requirements.

Information on the program and its requirements can be obtained from EPA at (212) 264-2301 and the State DEC. (The DEC Bulk Storage Help-line number is 1-(800)-242-4351.)

### Memorandum of Agreement

**To:** Environmental Protection Agency (EPA)  
**From:** New York State Dept. of Environmental Conservation (NYS DEC)

The purposes of this MOA are to:

- define EPA and DEC roles and responsibilities during the transition period;
- ensure that State and Federal UST regulations are administered in a coordinated manner without duplication of effort; and
- provide tank owners and operators with clear information on compliance requirements.

### How Will the Federal UST Program Be Implemented?

Under the MOA, the Federal UST Program will be implemented through either DEC's bulk storage regulations or the EPA UST regulations, as described below:

#### State Regulated Tanks -

DEC's bulk storage regulations will be used where tanks are covered by both the Federal and State regulations. DEC is responsible for conducting compliance and enforcement activities, but may request back up from EPA.

#### Federally Regulated Tanks -

EPA's UST regulations will be used where no State jurisdiction exists, i.e., for tanks which are small and fall below the 1,100 gallon regulatory threshold of the State PBS regulations, for tanks which contain non-fuel/motor lubricant petroleum products, and for waste oil tanks.

Under the MOA, DEC is the operating arm for EPA and agrees to issue "notice of violation" letters to owners/operators for violations of the Federal regulations (40 CFR 280) for those tanks not covered by the State bulk storage regulations. DEC will notify EPA when "notices of violation" are issued and EPA Region II will be responsible for any further follow-up enforcement action that might be necessary should the owners/operators fail to comply.

*TANK BULLETIN is a semiannual publication of the New York State Department of Environmental Conservation, Division of Water. The purpose of this newsletter is to inform the regulated and concerned community on important issues regarding bulk chemical and petroleum storage. The focus will be on federal and state regulations, technical developments, legal concerns, educational opportunities, and where to get assistance. Reader correspondence and submission of news articles are encouraged.*

Editor: Susan L. Salo, Chemical Engineer, Bureau of Information and Bulk Storage



Updates and Summaries

CBS Compliance Update

The Chemical Bulk Storage (CBS) regulations set July 15, 1989 as the deadline for registering storage tanks containing any of the 1,023 listed hazardous substances. As of this time, nearly 7,000 tanks at over 1,600 facilities have been registered with DEC.

The CBS regulations make it illegal to deliver a listed substance to a storage tank unless the owner of the tank has registered with DEC. Registration certificates are good for two years and must be posted at the facility.

Owners must also label each storage tank at the facility. The label must show I.D. number of tank, chemical stored, and working capacity. Warning signs are also required by the N.Y.S. Uniform Fire Prevention and Building Code. Information about these warning signs can be obtained by calling your local fire code enforcement official.

Contractor Chosen for Technical Guidance Manual

DEC recently executed an agreement with Badger Engineers, Inc. to prepare a hazardous substances technical guidance manual for the Department. The manual will contain recommended practices which engineers and managers at storage sites can use to prevent leaks and spills of hazardous substances.

Information in the manual will complement the Chemical Bulk Storage Regulations (6 NYCRR Parts 595 to 599). Publication is planned for December of 1990.

If you have any comments or methods for preventing chemical leaks or accidents which should be included in the manual, or have questions regarding this manual, you can call Jacqueline Sibbles on the Bulk Storage Help-line at (800) 242-4351.

Chemical Bulk Storage (CBS) - Phase II

Review of comments on the first draft of the Phase II CBS regulations, the technical regulations for chemical storage, has been completed. A compilation of comments and a responsiveness summary was prepared and distributed to commenters in November. Input provided by the public has resulted in major changes which will be reflected in the final proposal. Our goal is to have flexible yet enforceable regulations which industry, concerned citizens, and DEC can agree will meet the intent of the CBS law to protect the environment.

Next, public notices of the proposed regulations will be issued, public hearings will be conducted, a final responsiveness summary will be prepared and finally, final regulations will be submitted to the Environmental Review Board for approval and publishing.

The following is the latest schedule for completing the regulations:

Mail Summary of Comments and Responsiveness Summary	November 1, 1989
Finish Final Proposal	December 1, 1989
Public Notices and Distribution	January 15, 1989
Conduct Formal Public Review and Public Hearings,	March 1, 1990
Distribute Responsiveness Summary,	thru
Conduct Environmental Board Review	May 1, 1990
Filing - Final Regulations	Fall 1990

PBS Compliance Update

Petroleum Bulk Storage (PBS) regulations have been implemented by New York State DEC or the delegated counties for nearly four years. During this period owners have registered approximately 119,000 petroleum bulk storage tanks at over 50,000 facilities. DEC believes that another 16,000 facilities are still not registered. Many of these facilities are not in operation and may contain storage tanks that have not been properly closed. Enforcement actions are underway statewide to locate these unregistered or improperly closed storage tanks. Many owners have found themselves faced with legal proceedings and penalties. Examples of civil actions which have been taken include the following:

Kingston, NY - In January 1989, John Walker of Kingston, New York was fined \$2500 for failing to register 3 petroleum storage facilities having a capacity of over 1100 gallons each and for depositing an "unwholesome substance" near a highway.

Region 9, NY - In February 1989, DEC's Region 9 office concluded enforcement action involving 473 East Delavan Incorporated. The company signed a consent order which imposed a \$5000 penalty and required them to install monitoring wells and test or permanently close tanks at 14 locations. The case was initiated after the Region's spill response unit discovered that the 14 locations had avoided most of the requirements in the PBS regulations because of incorrect information that had been reported on the company's PBS applications.

Compliance with tank testing is improving. DEC recently sent overdue tank test notices to over 6,000 facilities statewide in an effort to bring facilities into compliance voluntarily before taking a more aggressive enforcement approach.

To avoid penalties, you should register your facility immediately and bring it into compliance with DEC standards. If you need assistance, call the nearest DEC Regional Office or call the Bulk Storage Help-line: 1-800-242-4351.

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## Vapor Recovery Required

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Volatile Organic Compounds (VOC) in gasoline form ozone through a complex photochemical reaction. The New York City Metropolitan Area (NYCMA) and several upstate counties exceed the National Ambient Air Quality Standard for ozone. In order to meet this standard, the Department of Environmental Conservation (DEC) is currently implementing a regulation (6 NYCRR Part 230) requiring gasoline vapor collection systems in the NYCMA. These systems control gasoline vapor emissions from truck transfer during storage tank loading, and refueling of motor vehicles. The Department may require a reduction in VOC emissions in the upstate counties in the future.

Owners and/or operators of upstate gasoline dispensing sites are advised to consider installing the Stage I and Stage II underground piping when replacing underground storage tanks. The installation cost during tank replacement is less than \$5,000. Retrofitting normally costs \$25,000 to \$50,000 and 2-4 days for installation and testing.

For further information regarding acceptable piping layouts and testing requirements, please contact the Bureau of Source Control in the Division of Air Resources at (518) 457-2044.

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### Notes

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The staff administering the bulk storage regulations in Region 3 has moved from the White Plains sub-regional office to the main regional office in New Paltz. **The new address and telephone number for Region 3 Bulk Storage Staff is:** 21 South Putt Corners Rd., New Paltz, NY 12561; Telephone: (914) 255-5453.

There is also a new phone number for **Bulk Storage and Spill Response Staff for Region 8:** (716) 243-5640.

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## Manufacturer's Technical Submittals Required

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Manufacturers and distributors are a primary and vital source of information on proper storage of hazardous substances which they produce and/or sell. Because each chemical or mixture has its own unique characteristics, the manufacturer may be the only authoritative source of chemical specific information and is in the best position to offer guidance on storage and handling practices.

The State's Hazardous Substance Bulk Storage Act requires manufacturers or distributors of hazardous substances to supply the owners and operators of bulk storage tanks with technical guidance and recommended practices (Best Management Practices) for the proper storage and handling of such substances. "Up-to-date" copies of the manufacturers guidance must also be filed with DEC, 50 Wolf Road, Room 326, Albany, New York 12233-3520.

**The deadline for complying with this requirement was July 15, 1989.**

The intent of DEC's submittal requirements of Section 596.5 is to stimulate manufacturers to develop storage and handling guidance where current guidance is incomplete or weakly developed and to promote communication on spill prevention practices between the manufacturer and buyers of bulk quantities of hazardous substances.

The Department encourages manufacturers and distributors to pool their knowledge and resources and to work with professional, industrial, and scientific organizations to develop industry standards and Best Management Practices (BMP's). Groups such as the American Institute of Chemical Engineers, Chemical Manufacturers Association, Center for Chemical Process Safety or New York State Chemical Alliance may play a role in coordinating or developing standards which are consistent and reflect the state-of-the-art in storage and handling.

Wherever appropriate, manufacturers should guide buyers to additional sources of information necessary for proper storage. Industry standards such as those developed by the American Petroleum Institute, the Chlorine Institute, and the American Society of Mechanical Engineers should be referenced.

If you have any comments or questions regarding these submittals, you may contact Jacqueline Sibbles on the Bulk Storage Help-line at 1-(800)-242-4351.

**Effective July 15, 1989, manufacturers and distributors of hazardous substances regulated under Part 597 must supply their customers and DEC with technical guidance and recommended practices for safe and proper storage of these substances.**

**Required manufacturer and distributor technical guidance must cover:**

1. Physical and Chemical Data;
2. Design and Construction of Storage System;
3. Conditions for Safe and Proper Substance Storage;
4. Recommended Storage Equipment;
5. Equipment Inspection and Maintenance Procedures;
6. Safety Precautions; and
7. Emergency Response

## Aboveground Pros & Cons

With release of the federal UST regulations, many tank owners are considering moving tanks aboveground. Avoiding the UST requirements for leak detection, corrosion protection, and financial responsibility is foremost in the minds of many owners. However, Congress and EPA are working on similar regulations for aboveground tanks for sometime in the near future.

In addition, aboveground tanks have disadvantages. For example, they may pose a fire hazard if they store flammable or combustible liquids. In fact, aboveground storage of gasoline is not permitted at retail outlets under the National Fire Prevention Code, NFPA 30A, "Automotive and Marine Service Station Code." Some other things which must be considered include regulations, construction standards and maintenance.

DEC regulations and New York's fire code have requirements for construction, installation and operation of aboveground tanks. Such requirements include secondary containment; location of the tank relative to buildings, property lines and traffic areas; emergency shut-off valves, proper foundations, corrosion protection of underground piping and tank bottoms, overfill alarms or fill shut-off valves, and emergency relief vents.

Any aboveground tank used for flammable or combustible liquids must be built to an accepted standard, such as UL 142 or API 620. Using an underground tank aboveground is not recommended under any circumstances. Fabrication for each varies in many ways, including metal thickness, venting capacity and piping connections.

Maintenance must also be considered. Aboveground tanks require special coating of outside surfaces to avoid external corrosion and high temperatures causing evaporation losses. Tank systems, piping, secondary containment, and corrosion protection must be periodically inspected.

Russ Brauksieck, DEC Bulk Storage Engineer says, "Both aboveground and underground tanks are a threat to the environment. The choice of locating a tank aboveground or underground should be based primarily on environmental considerations. However, other factors related to fire safety, building aesthetics, space needs, maintenance requirements and economics should also be considered."

## Four New Tank Test Methods Accepted in New York State

Four new tank test methods have been accepted for use in New York State over the last year. This brings the total number of accepted tank test methods to (14) fourteen.

### The four new tank tests are:

Testronics by Environmental Equipment Corp.

HTC Leak Detection System by United Detection System

Tank Tech by JFW Development Inc.

VacuTect Precision Tank Test System by Tanknology Corporation International.

The first three tests listed are volumetric tank tests and are similar in operation to the other volumetric tank tests that have been accepted.

The last test listed is the first non-volumetric tank test to be accepted in New York State for the testing of underground storage tanks. This method does not require the tank to be overfilled as for the volumetric tests, and operates on a vacuum principle allowing leaks to be detected without releasing additional product into the environment.

## EPA Study Affects Tank Test Methods

In addition to the four new tank tests that have been accepted, there have been at least three companies that have revised their methodology based on a research project done by the EPA at its Edison, NJ lab. These methods are:

Petro-Tite by Heath Consultants, Inc.

EZY-Chek II by Horner Creative Products, Inc

AES System II by Associated Environmental Services, Inc.

## Six Major Findings of EPA Tank Test Study

Testing methods are now being revised or developed based on the following six major findings of the Edison, NJ lab study.

1. After filling the tank, a 6-hour waiting period is needed before the test may be begun to ensure that the tank and its contents are stable.
2. A 3-hour waiting time is needed after the tank is overfilled to minimize temperature instabilities.
3. An array of at least 5 temperature sensors need to be used to compensate for temperature variations, unless the product is circulated to achieve uniform temperature.
4. The test needs to be conducted at a nearly constant liquid level in order to minimize the pressure differences that will occur in the tank.
5. The test needs to use proper data collection techniques, and results from the test need to be verified using statistical methods, to ensure the data and results are reliable. The easiest way to accomplish this is to use a computer.
6. The equipment used needs to be properly maintained, installed, and calibrated.

## How to Inspect an Aboveground Tank

by Richard Coriale, Chemical Engineer



According to section 613.6 of the Petroleum Bulk Storage Regulations, aboveground tanks greater than 10,000 gallons or smaller tanks which could contaminate groundwater or surface water, must be inspected when they reach age ten, or by December 27, 1990, whichever comes later; and they must be reinspected every ten years thereafter. Owners must perform a detailed inspection in accordance with accepted industry standards to ensure that these tanks are structurally sound and are not leaking. This article summarizes current standards. Exemptions for this type of inspection include tanks which are entirely aboveground such as tanks on racks, cradles or stilts; tanks which store No. 5 or No. 6 fuel oil; or tanks which meet all the performance standards set forth in the standards for new construction, sections 614.8 through 614.11.

The Department expects tank owners to drain the aboveground tank; remove all sludge and scale from the tank walls and floor; visually inspect all internal surfaces for corrosion, pitting, and cracking; and perform an accepted non-destructive testing method on the tank shell and floor to ensure structural soundness of all welds and seams.

The first step of this process involves emptying product from the tank from the lowest draw-off point. Since the piping system must also be tested, all lines connected to the tank should be drained and flushed with a few gallons of water. After this step is completed there will be a mixture of heavy sludge, product, and water left in the tank; this is called "tank bottoms" and must be properly removed.

Tank bottoms can be removed by a hand pump for smaller tanks, or with a vacuum truck for larger tanks. This material must be disposed of properly according to applicable local, state and federal laws. Such laws might require compliance with solid or hazardous waste disposal regulations. In no case should this material, or any fraction of it, be discharged directly on to the ground or into surface water. Once the tank is free of product, the tank should be vapor-free before entry is attempted.

*Owners must inspect aboveground tanks to ensure they are structurally sound and are not leaking.*

Once all connections to operating equipment, feed lines, product lines, and other piping, are disconnected and blinded, flammable vapors can be removed. Vapors can be removed by a low pressure blower or air mover. Adequate venting of the tank can be checked with the use of an explosion meter to determine when safe limits have been reached so that the tank can be entered. It is important that adequate ventilation be provided and frequent air quality checks be performed (every 10 minutes) by a qualified technician using an explosion meter to ensure a safe workspace.

When a safe work environment is achieved, the tank may be entered and cleaned using a high pressure rinse, using as little water as possible to remove loose scale. Again any generated waste must be properly disposed of. Workers should also wear the necessary protective equipment and use intrinsically-safe equipment to meet OSHA requirements for confined-space entry.

A confined-space entry permit should also be obtained from the facility owner or operator prior to entry. This permit should include a written procedure of all precautionary measures to be taken.

A preliminary visual inspection is the first step in the internal inspection. Strong, intrinsically-safe lights are necessary to conduct the visual

inspection. To enhance worker safety, it is a good idea to inspect the roof or top head and any internal supports first. The shell and the bottom should then follow in that order. The inspector should look for any signs of corrosion, pitting or cracking. Generally, any area with pits deeper than 1/8" and larger than 1/4" in diameter, should be patched with a 1/4" steel plate. The tank shell is to be similarly inspected.

More thorough measurements should be taken to ensure that the tank shell and floor are structurally sound; this would mean performing a non-destructive test, such as ultrasonic, dye penetrant or magnetic particle tests. This type of testing should especially be performed on areas of the tank where severe corrosion is found. Excessive corrosion of either the tank shell or floor should prompt immediate replacement of the entire tank.

If the tank floor is lined with a fiberglass or epoxy coating, this coating should be inspected to ensure that it is in good condition and free of holes and cracks. In addition, a holiday detector should be used in conjunction with the visual inspection to ensure that the coating is protecting the tank from electric current.

Finally, a tightness test must be performed on all connecting above and below ground piping in accordance with generally accepted engineering practices. A method such as the PetroTite line tester, which tests the lines at 50 psi, can be employed.

If the inspection reveals a structural failure or leak, the tank and/or piping will have to be properly repaired before it is put back into service. Evidence or suspicion of leaks or spills during this inspection must be reported to the DEC Spill Hotline: (800) 457-7362. All inspection reports must be kept on site and made available to DEC upon request.

### Reference

"API Guide to Inspecting Refinery Equipment," Chapter XIII: Atmospheric and Low Pressure Storage Tanks.



## Companies Offer Pollution Liability Insurance for NY UST's

In the last issue of **TANK BULLETIN**, the federal financial responsibility requirements were discussed. One of the principal ways to meet EPA's financial responsibility requirements is to obtain insurance. Several options are available. Underground tanks that are part of a small facility may be able to be insured by the existing carriers. The following companies (arranged alphabetically) have indicated to DEC that they can meet some or all of the financial responsibility requirements in New York.\*

### Agricultural Excess and Surplus Insurance Company (AESIC)

**Contact:** Charles J Weisblum (212) 797-9600  
MLW Services, Inc.  
100 William Street  
New York, New York 10038

### American International Group (AIG)

AIG offered insurance for petroleum marketers that meets third party liability requirements, but not site cleanup requirements.

#### Marketers with 26 tanks or more should contact:

John Armore, President (212) 770-7000  
Technical Insurance Division  
American International Group  
70 Pine Street  
New York, New York 12070

#### Marketers with less than 26 tanks should contact:

Fred S. James Company (800) 255-7112  
P. O. Box 1675  
Harrisburg, Pennsylvania 17105 (717) 763-7261

### Environmental Protection Insurance Company (EPIC)

**Contact:** Charles LaBarge, President/Mike DePaemelaere (214) 243-8284  
Berkeley Risk Retention Group Managers  
3010 LBJ Freeway, Suite 504  
Dallas, Texas 75234

### Oilmen's Insurance Plan

(Reinsured by Fireman's Fund)

Oilmen's Insurance expects to start writing policies in New York this Fall.

**Contact:** Jane Jachimczyk, Senior Vice President (212) 629-4290  
Oilmen's Insurance  
350 5<sup>th</sup> Avenue, Suite 6505  
New York, New York 20018

### Petroleum Marketers Mutual Insurance Company (Petromark)

**Contact:** Max Clay (703) 481-0200  
The Planning Corporation  
11347 Sunset Hills Road  
Reston, VA 22090

## UST Financial Responsibility Reporting Requirements Clarified

In the last **TANK BULLETIN**, there was an article on the Federal financial responsibility requirements for underground storage tanks (UST's) containing petroleum. This article is essentially correct, however, the need to report and file proof of financial responsibility with DEC is *qualified* as follows:

Records must be kept of the type of coverage, at the tank site or place of business, indicating that the financial responsibility requirements have been met. **You only need to report and file copies of these records with DEC in the following cases:** (1) You install a new tank system; (2) You have confirmed that a tank system is leaking; (3) You receive notice that a method of coverage will be cancelled or will not provide sufficient coverage, and you are unable to get other coverage; or (4) DEC or EPA request your records. **In New York State, proof of financial responsibility should be sent to DEC at the following address:**

*NYS DEC  
Data Systems Section  
50 Wolf Road, Room 310  
Albany, New York 12233-3530*

\* *DEC does not endorse these firms. They are included for reader information. UST owners and operators should consult appropriate counsel or professional advice pertinent to their needs.*

*As we get word of other insurance companies entering this field, we will update this list in subsequent **TANK BULLETIN's**.*



New York State's Department of Environmental Conservation has been developing and enforcing its Petroleum Bulk Storage (PBS) Program since the early 1980's in an effort to prevent leaks and spills of petroleum into the environment. The applicable regulations are 6 NYCRR Parts 612, 613, and 614.

Part 613 contains several important upgrading requirements for petroleum bulk storage facilities. The deadline for compliance is December 27, 1990.

### THE REQUIREMENTS FOR UPGRADING AN EXISTING FACILITY ARE....

- Color Coding of Fill Ports
- Installation of Gauging / High Level Warning Alarms
- Installation of Shutoff, Operating and Check Valves
- Retrofitting Secondary Containment
- Monthly and 10-year Inspections of Aboveground Facilities

### Color Coding of Fill Ports

According to 613.3(b), the owner or operator of an above or below ground tank must permanently mark all fill ports to identify the product being stored in the tank. Monitoring wells must also be permanently marked and identified as such to prevent accidental deliveries. DEC also recommends painting and labeling of all aboveground piping (especially the fill and discharge lines.) These markings must be consistent with the color/symbol code of the American Petroleum Institute (API).

The main objective of this coding system is to positively identify the product transfer points for tank truck loading and unloading. This should help eliminate handling errors such as unloading product into an unidentified monitoring well.

Basically, this color coding system consists of two shapes - a circle and a hexagon. Circles represent gasoline while hexagons represent distillates. A border around either one indicates that the product contains an extender such as ethanol. The highest octane level gasoline is red, the one with the lowest level of octane is white, and anything in between is labeled blue. Vapor recovery connections and manholes are marked with orange circles. The symbol for kerosene is a brown hexagon; that for diesel fuel is a yellow hexagon. The symbols for grades of fuel oil beyond Nos. 1 and 2 are not yet identified. (See color-symbol chart on next page.)

For more information on this subject and a color symbol chart, write to API and request "API Recommended Practice 1637" at *American Petroleum Institute, 1220 L Street, Northwest, Washington, D.C. 20005.*

### Installation of Gauging/High Level Warning Alarms

According to section 613.3(c)(3), all aboveground petroleum tanks must be equipped with a gauge which accurately shows the level of product in the tank. This gauge must be accessible to the carrier and be installed so it can be easily read. A high level warning alarm, a high level liquid pump cut-off controller or equivalent device may be used in lieu of this gauge.

In addition, the design capacity, working capacity and identification number of the tank must also be clearly marked on both the tank and at the gauge. This may be accomplished with a stencil or with a clearly printed sign or label.

### Installation of Shutoff, Operating and Check Valves

A valve designed to close automatically in the event of the dislodging or overturning of a product dispenser is required for all motor fuel under pressure. This valve, termed an impact or shear valve, is located at the base of the dispenser. Upon impact, the top portion of the valve shears off immediately. This in turn causes the valve to close.

Also, any tank causing a gravity head on a dispenser of motor fuels, such as an aboveground tank which supplies a fuel dispenser, must be equipped with a device such as a solenoid valve. This electrically-operated valve must be installed and adjusted so that liquid cannot flow by gravity from the tank in the event of a piping or dispenser hose failure. The desired pressure differential across the valve is preset so that in the event of a pressure gain or loss, which indicates a failure or loss of product, the valve will automatically close.

*Part 613 contains several important upgrading requirements for petroleum bulk storage facilities. The deadline for complying with these requirements is December 27, 1990.*





## LEARNING ABOUT BULK STORAGE

This section of the newsletter provides descriptions, information, and noteworthy comments regarding relevant educational conferences or other services.

### DEC Offers Guidance On.....

#### .....Secondary Containment

The Technical Operations Guidance (TOGS) "Secondary Containment Systems for Aboveground Storage Tanks" was recently issued by the Department. This document, which is based on Part 613 of the Petroleum Bulk Storage (PBS) regulations, discusses criteria for requiring secondary containment systems and includes design criteria for secondary containment.

#### .....Hazardous Substances Manufacturer Submittals

The Technical Operations Guidance (TOGS) "Chemical Bulk Storage Regulations - Technical Guidance for Spill Prevention" has just been completed by the Department. This document, which is based on section 596.5(b) of the Chemical Bulk Storage (CBS) regulations, discusses in detail the information specified to be included in the technical guidance and recommended practices which must be submitted by manufacturers or distributors of hazardous substances to customers and to DEC effective July 15, 1989.

### DEC Trains Local CEO's

DEC and the Department of State Codes Division have been providing training to the Local Fire and Building Code Enforcement Officials (CEO's) on safe and proper bulk storage of petroleum and chemicals. This course, "Hazardous Substance Bulk Storage," satisfies 6 of 40 hrs. training required annually for CEO's. It has been conducted at four locations across the state and is currently scheduled to be offered monthly through the end of March.

This course teaches the CEO about the properties of hazardous materials and the fundamental design principles associated with these materials, as required by DEC regulations and the NYS Fire and Building Codes for the bulk storage of petroleum and chemicals. This course also addresses working relationships between DEC and the CEO's, overlap between DEC regulations and fire code, and authority for enforcement. For example, according to the PBS regulations, a CEO must be notified when an underground tank is added, removed, or repaired; and when an aboveground tank is added. With both DEC and CEO's knowledgeable of each other's regulations and knowing when to refer a problem to the proper agency for enforcement, their field presence can be more effective.

The overall effect of this course will be a safer environment and an increase in public health and safety.

If you are a Code Enforcement Officer and would like to attend this course, call Ed Haher at (518) 474-4073.

## Spill Plans In New York State

A one-day workshop on Spill Prevention Control and Countermeasure (SPCC) plans will be scheduled on a demand basis at several locations across the State. SPCC plans are required for major oil storage facilities (over 400,000 gallons), by DEC (6 NYCRR Part 610); and for any oil storage facility with aboveground storage greater than 1320 gallons or any aboveground tank greater than 660 gallons, or any underground tank 42,000 gallons or more, by the federal EPA (40 CFR 112).

This workshop is designed to address SPCC planning for most oil storage facilities in New York State. Current State and federal regulations and guidelines will be covered. The workshop will guide owners and engineers in preparing the SPCC plan and will include a site review process description. The role of the professional engineer, plan amendments, and future directions will also be discussed.

**Title:** Spill Plans in New York State

**Coordinator:** John Kruse, Ph.D., P.E.

**Presenters:** Representatives from  
U.S. Environmental Protection Agency  
NYS Dept. of Environmental Conservation  
CSS Associates Consulting Engineers

#### Registration Information:

For information (such as Course Dates, Times, Locations, Fees, Registration Deadlines, Workshop Outline, etc.), call John F. Kruse, Ph.D., P.E., at (914) 462-7987 9 AM - 9 PM (Monday - Friday) or write to: CCS Associates Consulting Engineers, 6 Cabin Way, Poughkeepsie, New York 12603.

#### Tentative Schedule

The following is a tentative schedule for the course this fall:

Date(s)	Location
November 9-10, 1989	Rensselaer Center of Applied Geology Troy, NY
December 8, 1989	Broome Community College Binghamton, NY
December 14-15, 1989	Rensselaer Center of Applied Geology Troy, NY

## Tank Installer Training Course Update and Schedule

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The Department requires that all new aboveground and underground petroleum storage systems be installed in accordance with strict standards for construction. To meet these standards, all newly installed storage tanks and pipes must be constructed of corrosion-resistant material or be provided with cathodic protection. Secondary containment and leak monitoring systems must also be included.

According to the new federal UST regulations, tank installers must either be certified, have their work inspected by a qualified licensed engineer or demonstrate through other means acceptable to DEC that the system has been properly installed.

A 2-day Tank Installer Training Course is being offered by the continuing education branch of the community college system in NYS. This course is designed to train installers of underground and aboveground storage tanks and operators of storage tank facilities on safe, reliable installation and operation practices, and testing, relining and closure methods. Relevant State and federal regulations will also be covered in the course.

A course completion certificate will be provided by DEC to those participating in the course who achieve a minimum score of 80% on the three-hour competency exam.

Certification is not currently required under New York State law. However, if certification becomes a State requirement, completion of this course will be considered towards fulfilling the requirements for certification.

The Tank Installer Training Course has been offered twice so far. It was taught at Hudson Valley Community College by Mike Farmer and at Onondaga Community College by instructors from O'Brien & Gere. Overall there have been 91 students who have taken the course. Of these 91 students, 75 have passed the Tank Installer Competency Exam given at the end of the course and have received a certificate of completion for the course.

It is anticipated that this course will be offered across the State as time progresses. Tentative plans are being made to offer the course in the areas of Buffalo, Poughkeepsie, Plattsburgh and Albany some time this fall or winter.

If you are interested in attending one of the courses and would like to be on the mailing list to receive information on the course offerings or would like to receive a course brochure and outline, please call the Bulk Storage Help-Line: 1-800-242-4351 or write to Russ Brauksieck, NYSDEC, 50 Wolf Road, Room 326, Albany, NY 12233-3520.



## READER RESPONSE

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### Questions and Answers

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**Q: The new EPA regulations require a site assessment at the time of closure of an underground tank. What is required for such tanks?**

**A:** DEC must be notified prior to a tank closure. If it is being removed from the ground, the soil and/or groundwater surrounding the tank, piping and the excavation zone must be inspected by the owner for the presence of a release from the tank system. This may be as simple as looking for a petroleum sheen or stain on the soil and smelling for petroleum odors. If there is any evidence of contamination, it must be reported to DEC on the Spill Hot-line: 1-(800)-457-7362 and soil samples need to be taken and analyzed at a laboratory.

If the tank is to be closed in place, then a more comprehensive assessment needs to be done. This would include one or more of the following: soil samples, groundwater samples or soil gas samples. Soil samples must include below the bottom of the tank. All analysis results must be sent to the DEC Regional Spill Engineer prior to closure of the tank.

Plans to remediate contamination must be reviewed with the DEC Regional Spill Engineer. Records of the site assessment must be kept by the owner and made available to DEC or EPA upon request. Questions on site assessments should be directed to the DEC Regional Spill Engineer prior to commencement of work.

### "READER COMMENTS"

*This space is reserved for comments or constructive criticism from you, the reader.*

*News articles or articles of general interest to our readers are also requested.*

*Please send replies to: Sue Salo, Bureau of Information & Bulk Storage, 50 Wolf Road, Albany, N.Y. 12233-3520. Telephone: (518) 457-4351.*



## NEWSWORTHY

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### Flash Fire In Tank Removal

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**N. Chili** - While preparing for the removal of leaking underground tanks at a Hess gas station, a local contractor caused a flash fire in the excavation. High groundwater with a floating layer of gasoline flashed when a cutting tool being used on the pump canopy sparked. In order to handle the slightly contaminated groundwater entering the excavation, an on-site treatment system using make-shift carbon filtration with discharge to the storm sewer was agreed upon by DEC, Monroe County Pure Waters, and the spiller.



*Available Publications*

The following information is available to the public by calling the Bulk Storage Help-line or writing to the DEC Central Office.

- PBS Law, Regulations and Applications (FREE)
- MOSF Laws, Regulations, and Applications (FREE)
- CBS Law, Regulations, Proposed Regulations and Supporting Documents (FREE)
- Companies performing testing acceptable to DEC (FREE)
- Federal UST Law, Regulations and Notification Form (FREE)
- Technical Operation Guidance Series (TOGS) (For a FEE) on testing, secondary containment, inventory control and piping systems for underground petroleum tanks; inspection of above-ground petroleum tanks; and hazardous substance submittals
- Guidance papers on testing and closure (FREE)

*Important Dates*

- December 27, 1985 - PBS regulations in effect.
- December 27, 1986 - PBS facility registration deadline and construction standards in effect.
- December 27, 1987 - PBS initial testing due.
- January 24, 1988 - Federal UST financial responsibility requirements effective.
- July 15, 1988 - CBS Phase I regulations effective.
- December 22, 1988 - Federal UST regulations effective.
- July 15, 1989 - Registration of chemical storage tanks.
- Summer 1990 - Filing of CBS Phase II regulations.
- December 27, 1990 - Upgrading requirements for PBS due.
- December 31 - License applications due for major facilities.
- March 31 - Major facility licenses expire.

**DEC Regions**

**REGION 1**

SUNY Campus  
Building 40  
Stony Brook, NY 11794  
(516) 751-7900

**REGION 2**

Hunters Point Plaza  
2nd Floor  
47-40 21st Street  
Long Island City, NY 11101  
(718) 482-4933

**REGION 3**

21 South Putt Corners Rd.  
New Paltz, NY 12561  
(914) 255-5453

**REGION 4**

2176 Guilderland Ave.  
Schenectady, NY 12306  
(518) 382-0680

**REGION 5**

Route 86  
Ray Brook, NY 12977  
(518) 891-1370

**REGION 6**

State Office Building  
207 Genessee Street  
Utica, NY 13501  
(315) 793-2554

**REGION 7**

615 Erie Blvd. W.  
Syracuse, NY 13204  
(315) 426-7400

**REGION 8**

6274 E. Avon-Lima Rd.  
Avon, NY 14414  
(716) 243-5640 or 226-2466

**REGION 9**

600 Delaware Ave.  
Buffalo, NY 14202  
(716) 847-4590

**CENTRAL OFFICE**

50 Wolf Road  
Albany, NY 12233-3520  
(518) 457-4351

For general information about bulk storage, call the **Bulk Storage Help-Line: 1-800-242-4351.**



**New York State DEC**  
**Bulk Storage Program**  
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