NJDEP Hazardous Waste/UST Compliance & Enforcement

Underground Storage Tank Inspection Program

#### Bureau of hazardous Waste and UST Enforcement Michael R. Hastry 609-943-4989, Cell #609-439-9646 Krista M. Frey 609-943-3019, Fax#: 609-292-3970 Mail Code 09-03, PO Box 420 Trenton, NJ 08625-0420

#### HAZARDOUS WASTE COMPLIANCE AND ENFORCEMENT

Name	Desk #	Cell #
Bergen, Essex, Hudson, I	Hunterdon, Mor	ris, Passaic,
Somerset, Sussex and W		
Fax: 973-631-6331	Phone: 973-6	<u>56-4470</u>
Sterling, Jeff	973-656-4498	609-802-3064
(Northern)		
Allyene-Piggot, Joan	973-656-4470	N/A
Dotterweich, John	973-656-4449	609-439-9726
Erickson, Maria	973-656-4449	609-977-4490
Hanley-Tagliaferri,	973-631-6293	609-439-9638
Paula		
Kent, Maria	973-631-6325	609-439-9645
Sanchez, Martin	973-631-6325	609-439-9649
Strochak, Liz	973-656-4456	609-439-9422
Szardenings, Stephen	973-631-6325	609-439-9650
Mercer, Middlesex, Monmouth, Ocean and Union		
Counties		
Fax: 609-292-3970 Phone: 609-943-3019		
Mirabella, Joe	609-292-3962	609-273-4970

Mirabella, Joe	609-292-3962	609-273-4970
(Central)		
Baier, Nicholas	609-292-3917	609-358-2067
Chiles, Tiffany	609-292-3917	609-439-6405
Cosgrove, Susan	609-292-3917	609-439-9757
King, Paul	609-292-3917	609-439-9728

Atlantic, Burlington, Camden, Cape May, Cumberland,		
Gloucester and Salem Counties		
Fax: 856-614-3608 Phone: 856-614-3658		
Salabritas, Jeff	856-614-3650	609-439-9739
(Southern)		
Carmen, Carol	856-614-3663	609-306-3601
Santos, Carlos	856-614-3648	N/A
Scaffidi, Amy	856-614-3663	609-439-9651
Veit, Brian	856-614-3663	609-802-8676

#### UNDERGROUND STORAGE TANKS

(UST)		
Name	Desk #	Cell #
Fax	x: 609-292-3970	
Olko, John		609-851-7989
Brooks, Auradis	973-656-4415	609-462-5649
DeAppolonio, Paul	973-451-5620	609-468-3048
Marlowe, Kevin	973-656-4415	609-439-9589
Norville, Lorraine	609-292-6051	609-477-4263
Provost-DiNuzzo, Jenna	973-656-4415	609-672-1309
Stavash, John	973-656-4415	609-439-9602
Lenik, Jennifer (S)	856-614-3615	609-672-1802
Lenoir, Kristina (S)	856-614-3615	609-221-3306
Hollis, Michael	609-292-6051	609-477-0945
Pierson, Janelle	609-292-6051	609-672-1327
Silcox, Sonya	609-292-6051	609-209-1799
Davis, Gregory	609-292-6051	609-439-9414
UST CEHA		
Hollis, Michael	609-292-6051	609-477-0945

#### Hollis, Michael

Address for HW/UST offices:

Northern

7 Ridgedale Ave, Cedar Knolls, NJ 07927

#### Central

9 Ewing St, Mail Code 09-03, PO 420, Trenton, NJ 08625-0420

Southern

2 Riverside Dr, Suite 201, Camden, NJ 08102

#### **MANIFEST/BIENNIAL REPORTING/REGISTRATION MEDICAL WASTE**

Name	Desk #
Reburn, Bret	609-292-3949
Buffin, Pat	609-984-2155
Davis, Carla	609-984-2142
Mullen, Becky	609-984-2162
Vincent, Gale	609-984-6596
White, Mindy	609-984-2138

#### **SPECIAL INVESTIGATION &** SUPPORT SERVICE

\*(Shared service with Solid Waste Enforcement)

Name	Desk #	Cell #
- 1000		
Barry, John	609-777-2445	609-577-2845
Fasanella, Krista	609-292-6305	N/A
Lawson, Mary	609-292-4313	N/A
Marue, Sharon	609-341-5443	N/A
Harkins, Bob	609-777-2953	609-273-3734
Gomez, Bob	609-292-3837	609-439-9397
(TOU)		
Farrar, Chris	609-943-3018	609-439-8217
Feehan, Ron	609-292-3853	609-439-9657
Kosierowski, Mike	609-292-3602	609-439-9640
Lewis, Lawrence	609-943-3018	609-209-1762
Licensing & Registration - Main # 609-292-7081		
Bonfonti, Paula	609-292-3532	N/A

Licensing & Registration - Main # 009-292-7001		
Bonfonti, Paula	609-292-3532	N/A
Cox, David	609-292-3522	N/A
Marine, Rhonda	609-292-2699	N/A

OLA Fax #984-3488 SW Duty Officer 292-4910 EPA RCRA 292-2913



## **UST Goals**

- Protect human health and environment
- Ensure sound UST system management
- Protect groundwater resources
- Prevent, control, remediate, and abate leaking UST systems

## Why Care about USTs?

- Can threaten \_\_\_\_\_ and thus drinking water systems.
- Can be a threat to human health.
- New and \_\_\_\_\_\_ systems can still fail.
- Ownership is shifting back to Mom and Pops. More operators = more potential

<sup>•</sup> New releases persist today.

## Why Care about USTs?

- Can threaten <u>Groundwater</u> and thus drinking water systems.
- Can be a threat to human health.
- New and <u>Upgraded</u> systems can still fail.
- Ownership is shifting back to Independent operators = more potential <u>Problems</u>?
- New releases persist today.

## **Regulated USTs**

- All tanks **10** % or more buried containing hazardous substances.
- Hazardous Substance means Motor Fuel, waste oil, others.
- Except:
  - C3Residential Heating Oil tanks of any size,
  - Scalar Solution States Scalar Sca
  - ☞Farm/residential tanks <u>1,100</u> gallons or less
  - **C**3Others



## Inspection Frequency

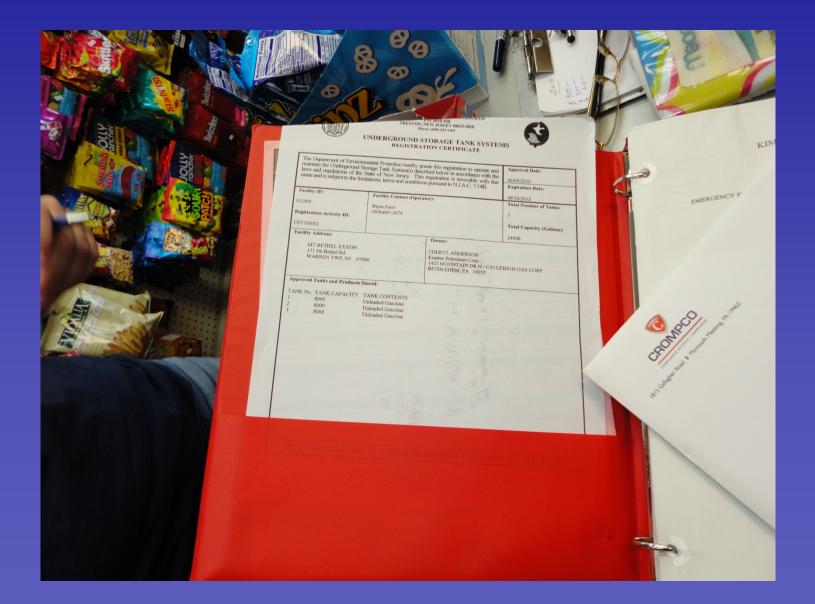
• Once every 3 years - Minimum

### **UST** Inspection

- Registration
- Insurance
- Release Detection Monitoring
- Cathodic Protection
- Spill Prevention
- Overfill Prevention
- Air Permitting/Compliance









DIVISION OF REMEDIATION SUPPORT UNDERGROUND STORAGE TANK PROGRAM P.O. BOX 028 TRENTON, NEW JERSEY 08625-0028 Phone: (609) 633-1464



#### UNDERGROUND STORAGE TANK SYSTEMS REGISTRATION CERTIFICATE

maintain the Underground Stor	age Tank System(s) describ ate of New Jersey. This re	s this registration to operate and ed below in accordance with the gistration is revocable with due pursuant to N.J.A.C. 7:14B.	Approval Date: 01/24/2008 Expiration Date: 12/31/2010
Facility ID:	Facility Contact (Operato	r):	Total Number of Tanks:
012345 Registration Activity ID: UST070001	Joseph Smith (201) 555-1234		3 Total Capacity (Gallons): 26000
Facility Address: JOE'S GARAGE 444 MAIN ST ANYWHERE, NJ 02854.		<b>Owner:</b> JOSEPH SMITH 444 MAIN ST ANYWHERE NJ, 02854	Decisity Address CLINTON ALC 24.1 Tendyr 71 mai 1 x Bur
Approved Tanks and Products TANK No. TANK CAPACITY 5175 8000 5176 8000 5177 10000	Stored: TANK CONTENTS Unleaded Gasoline Light Diesel Fuel (No. 1-D) Unleaded Gasoline		



#### Facility must have a Current and Accurate Registration

	UNDERGROUND STORAGE TANK FACILITY CERTIFICATION QUESTIONNAIRE
FACILITY UST	# (PROGRAM INTEREST ID):
	f this Registration Questionnaire will satisfy the registration requirements of the Underground Storage of bstances Act, N.J.S.A. 58:10A-21 et seq., and the Underground Storage Tank Rules N.J.A.C. 7:14B et. seq.
B. This is a C. This is a D. This is a There ha If "C" is checked Facility Nam Owner Name Facility Oper Owner Conta	are box         a registration of a proposed or newly installed underground storage tank. (This form must be filed at least 30 days prior to operation)         a registration of an existing underground storage tank not presently registered.         a correction or amendment to an existing facility registration. (Check type of change below)         ave been no changes to the facility registration since last submittal. (Complete Section A, C & E)         d above, please check the appropriate type of change(s) below         re and/or Address Change         add address Change         address Change         address Change         address Change         address Change         addre Person Change         Closure (Complet
1. Facility Name	
2. Facility Location Address Line 1	
Address Line 2	
City or Municipali	
3. Facility Operator	COUNTY STATE ZIP CODE BLOCK LOT
Contact Person	ORGANIZATION (If applicable, e.g. Company) or INDIVIDUAL
	PERSON TITLE PHONE NUMBER (INCLUDE AREA CODE & EXT) E-MAIL ADDRESS
Operator Address	
(if different than #2	2) ADDRESS LINE 1 (NUMBER AND STREET)
	ADDRESS LINE 2 (e.g. PO BOX, SUITE)
4. Tank Owner (Organization)	CITY OR MUNICIPALITY         STATE         ZIP CODE
Contact Person	
Tank Owner	PERSON TITLE  PHONE NUMBER (INCLUDE AREA CODE & EXT)  E-MAIL ADDRESS
Address	ADDRESS LINE 1 (NUMBER AND STREET)
	ADDRESS LINE 2 (e.g. PO BOX, SUITE)
	CITY OR MUNICIPALITY STATE ZIP CODE

1-609-633-1464 • www.state.nj.us/dep/srp/bust

Check In Yes No

#### 2/ TANK INSURANCE (FA)

All <u>REGULATED TANKS</u> must have insurance for "the purpose of remediation and for compensating third parties for bodily injury and property damage".

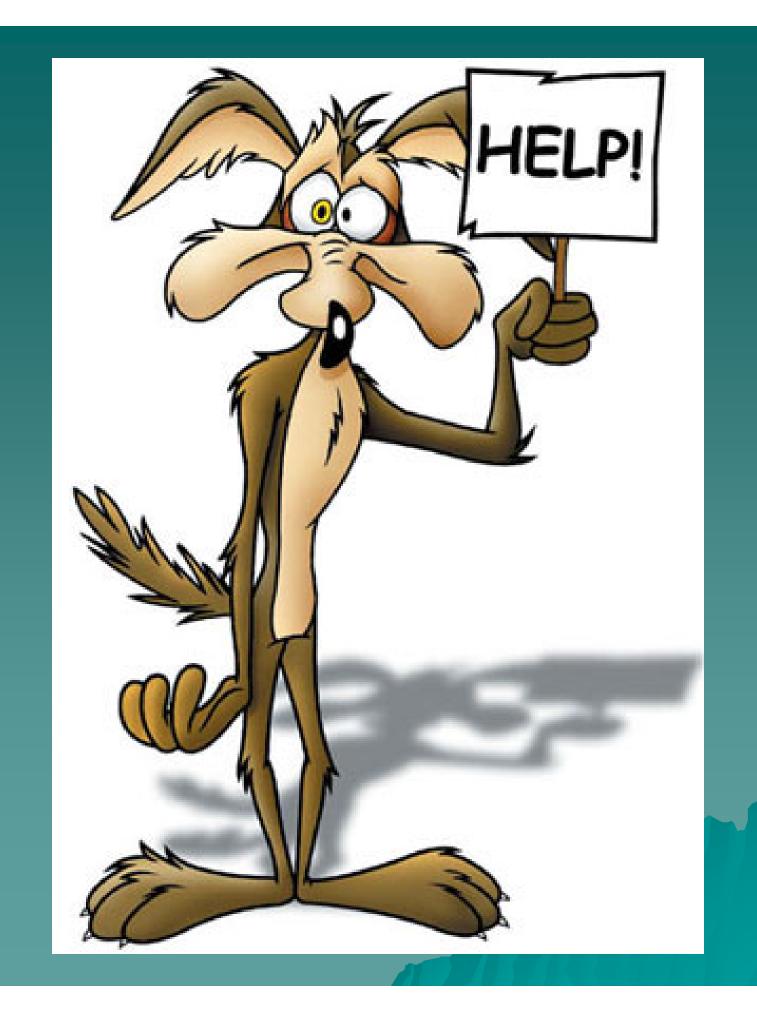
#### **Coverage Amounts:**

< 10,000 gallons throughput per month: \$250,000 > 10,000 gallons throughput per month: \$1,000,000 Hazardous substances other than motor fuel: \$1,000,000



#### Facility must have a Current and Accurate Insurance Policy

## Release Detection Monitoring (tanks)



## **Summary of Options**

#### Common

- Automatic
   Tank Gauging
   Interstitial
- Monitoring



#### Less Common

- Inventory Control and Tightness Testing
- Statistical Inventory Reconciliation

#### Uncommon

- Manual Tank
   Gauging
- Soil Vapor
   Monitoring
- Groundwater
   Monitoring

## **Automatic Tank Gauging**



## Find the Tank Gauge

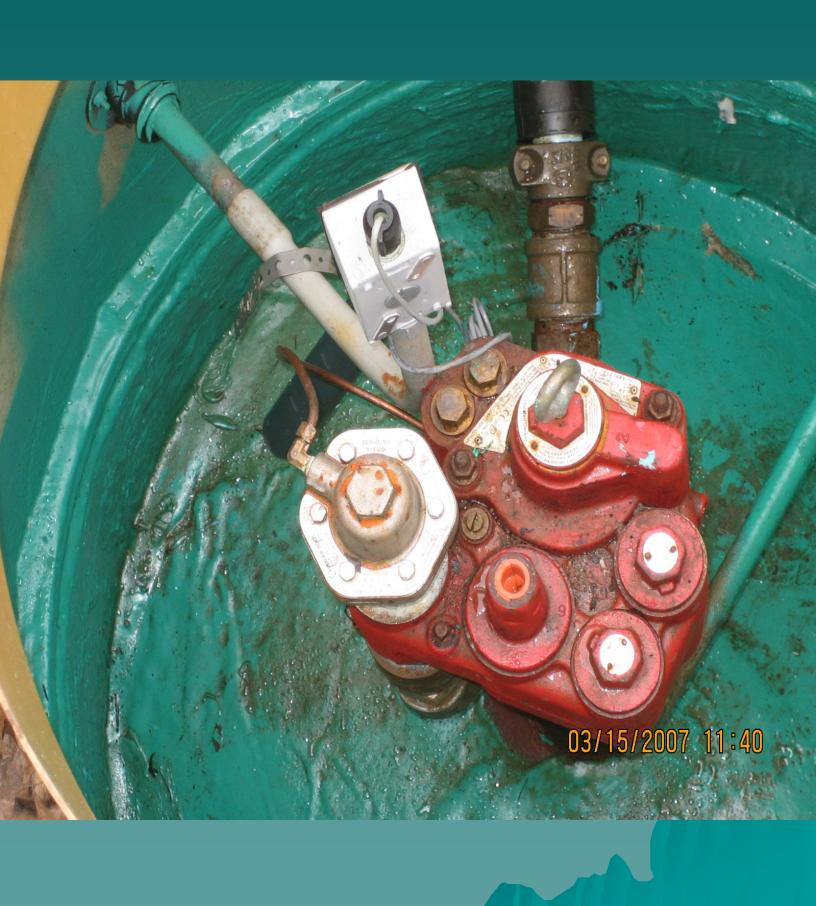


















## It Ain't Kool-Aid!



An sti-P<sub>3</sub> tank (sti = Steel Tank Institute). All sti-P<sub>3</sub> tanks of 10,000 gallons or less are shipped with anodes (1) attached to each end. The anodes, in part, protect the tank from corrosion. In addition, the 2-inch riser (2) indicates that this UST is double-wall and the riser is connected to the interstitial space. The riser provides an access point for monitoring of the interstitial space by either electronic sensors or by manual checks. Not as apparent are the two additional methods of corrosion protection which are the outer coating and the dielectric bushings (3) where the system piping will be connected to the UST. When the UST is installed, a cathodic protection test port (PP4) with a test wire should be installed at ground surface to be able to conduct a corrosion test of the UST every 3 years. See definitions: dielectric, sti-P<sub>3</sub>, interstitial, PP4 test port.



This rectifier contains both an ampmeter and voltmeter. To verify that the rectifier panel is on, these gauges should have values above zero. The readings do not tell you that the system is protecting the tanks and lines, it only indicates that the unit is operating. *See definitions: impressed system, corrosion and rectifier.* 



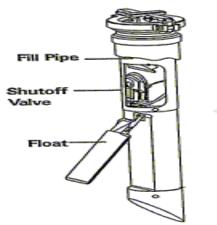




Corrosion Protection
 >.850 Passing test results
 Required Test 1 X 3 years

A product tight spill bucket. A manual pump (1) is used to pump water or product out of the spill bucket. An in-tank float (2) is present in the drop tube (3). The float (2) closes the drop tube when the tank is filled to 95% of its capacity. Item (4) is a diagram and photograph of the in-tank float valve contained within the drop tube. Inspection Significance: This UST is equipped with the required spill prevention (spill bucket) and has a method of overfill prevention (float valve). See definitions: spill bucket, overfill protection.





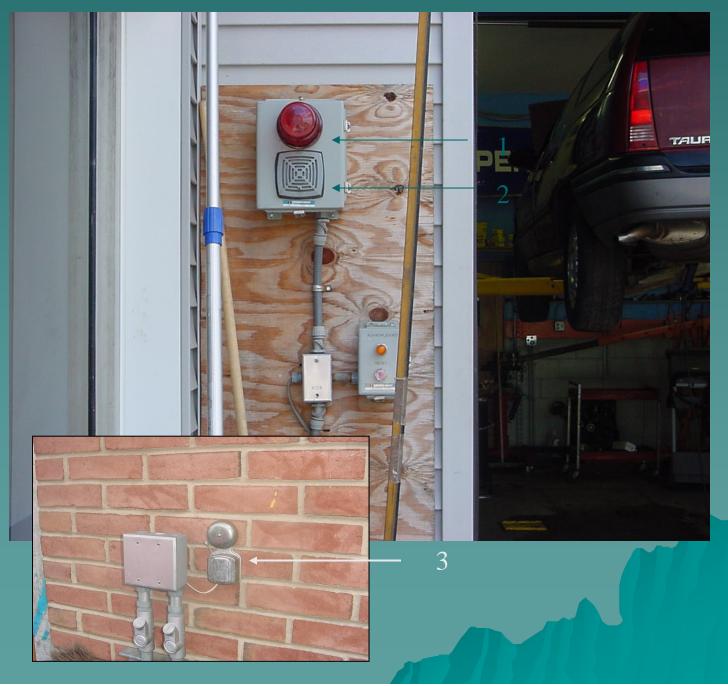






# Spill Prevention Clean and Dry – No Liquid Inspect for HOLES

This unit, which should be located outside the building and near the tank field, contains a red light (1) and a horn (2). The unit is connected to the ATG panel and should give a visual and audible warning when the UST if filled to 95% of its capacity. The bell (3) in the inset photograph is another form of an alarm that can be used for overfill compliance. Inspection significance: An alarm must be located in view or hearing of the delivery driver to serve as a warning to prevent overfill of the UST. If this is the method that the owner or operator is using for overfill protection, it must be located within view of the driver. If it is not within sight or hearing of the tank field, the owner or operator should be cited for a lack of overfill protection. See definitions: ATG and overfill prevention



This is a coaxial drop tube that also includes a method of overfill protection as well as being one of two methods of Stage I vapor recovery. The inner pipe (1) conducts fuel from the tanker to the UST. The vapors return to the truck through the space between the inner and outer pipe (2). The warning labels (3) indicate that the coaxial is made by OPW and also contains an in-tank float valve that prevents over filling the tank. Item (4) is a photograph of the in tank float valve contained within the drop tube. **Inspection Significance: Verify the presence of the float valve by looking down the drop tube with an intrinsically safe flashlight. The presence of the coaxial drop tube and the warning label do not guarantee that an in-tank float (overfill protection) is present. If no float is present, verify what method of overfill is used for the UST. See definitions: Stage I, co-axial and overfill protection.** 



The second second

### OPW OVERFILL PREVENTION VALVE

FAILURE TO PROPERLY CONNECT DELIVERY HOSE AND ELBOW OR DISCONNECTING A LIQUID FILLED DELIVERY HOSE OR ELBOW WILL RESULT IN AN EXTREMELY HAZARDOUS SPILL, WHICH MAY RESULT IN PERSONAL INJURY, PROPERTY DAMAGE, FIRE, EXPLOSION, AND WATER AND SOIL POLLUTION.

Make sure *all* connections, hose and elbow, between storage tank and transport are securely coupled. Only use fill elbows that securely lock to the tight fill adaptor. Make sure the lip seal and/or all gaskets in the delivery elbow are properly in place to prevent an overfilled tank. Do not operate with damaged or missing parts which prevent tight connections. If this is a remote fill, make sure that all other openings are tightly capped.

Normal Operation: Hose "Kick" and reduced flow signals tank is full. Close transport delivery valva and drain hose into tank before disconnecting any hose fitting. Overfilled Tank: Failure of the hose to drain signals an overfilled tank. *Do not Disconnect* any delivery hose fitting until the liquid level in the tank has been lowered to allow the hose to drain into the tank. Attention: In the event you are splashed, remove all wetted clothing immediately. Do not go into an enclosed area and stay away from ignition sources.



61SO\_N.Y.C.F.D. APPROVAL # 4902 PART NO. C-3838-M



### Flow-Restrictor Bypass. Bad

 Never store stick in the drop tube.
 Can cause an overfill.
 Can damage overfill device





Overfill ball float commonly referred to as a 90% flow restrictor. This device is located in the UST and is connected to the vent line which is located just above the top of the UST. As product is introduced into the UST and it reaches the ball (1) at the bottom of the device, the ball floats on top of the product. When the ball reaches the end of the sub (2), it restricts the air flow out of the UST through the vent line. At this point, the UST is 90% full. This restriction causes a significant slowdown of product delivery into the UST signaling to the delivery person to shut off the valves on the delivery truck to avoid an overfill. Because the UST is only 90% full, this allows the product remaining in the delivery hose to drain into the UST without overfilling the tank. The cap (3) is typically what is seen under a small cover at the tank field for this type of overfill protection. Inspection Significance: This type of overfill protection should not be used for suction systems, systems with remote fills or systems that receive deliveries under pressure. Since the ball and sub are located within the tank, the cap (3) must be located along the center line of the tank to indicate the presence of a 90% flow restrictor. See definitions: Overfill provention.





# Overfill Prevention Present and Functional

# Prevention Starts Before Delivery

Owner/operator shall ensure: -There is enough room in tank before delivery. -The Entire transfer is monitored. -No <u>Spills</u>due to overfills.



Monthly Containment Device Inspection Log

 Containment Sumps - Turbine Pumps
 Diping Sumps

Piping Sumps

Should be Clean and Dry

## Monthly Dispenser Pan Inspection Log

 Containment pan located under the Dispenser
 Should be Clean and Dry
 Is it Water or Fuel?

#### Release Response Plan

(a) The owner or operator shall prepare, and update as necessary to reflect changes to the facility and to regulations governing response plans, a release response plan which includes the following information:

1. The emergency telephone numbers of the local fire department, local health department, Department of Environmental Protection Hotline 1-877 WARN DEP or 1-877- 927-6337, and any other appropriate local or State agencies;

2. The name and telephone number(s) of the person responsible for the operation of the facility during an emergency;

3. The name and telephone number of any retained licensed site remediation professional; and

4. The procedures to be followed in the event of a leak or discharge of a hazardous substance, pursuant to N.J.A.C. 7:14B-7.3 and 8, and the Administrative Requirements for the Remediation of Contaminated Sites, N.J.A.C. 7:26C, and N.J.A.C. 7:14B-9 if the underground storage tank system must be closed.

(b) The owner or operator shall ensure that the release response plan is available for on site inspection.

(c) Any release response plan that is required by and is in compliance with the New Jersey Spill Compensation and Control Act, N.J.S.A. 58:10-23.11 et seq., and the Discharges of Petroleum and Other Hazardous Substances Rules, N.J.A.C. 7:1E, shall suffice for this requirement.





#### **UST Compliance Points**

Contact UST Enforcement at 609-943-3019 for more information

- Facility must have
- Registration Current and Accurate
- Insurance Current and Accurate Policy
- Release Detection Monitoring
- For Tanks
  - Functional and Passing Method of Release Detection
  - 0.2 passing and or Interstitial Sensors Normal/No Alarms
- For Pressurized Lines
  - Functional and Passing Method of Release Detection
  - Mechanical Line Leak Detectors- Annual Passing Test
  - Pressure Monitoring Lines .2 GPH Test = Pass
  - Annual Line Tightness Test
  - Interstitial Monitoring
    - Test Boots Loose
      - Sensors mounted in correct position
      - Sump must be free of liquid
- Suction Piping What type do you have?
  - American requires either monthly monitoring OR a *3-year* test.
- Corrosion Protection
  - Required Test 1 X 3 years
  - >-.850 Passing test results
  - 60 day rectifier inspection (If applicable)
  - Proof of Tank Construction UL1746 Compliant
- Spill Prevention (Spill Buckets)
  - Clean and Dry No Liquid
  - Inspect for HOLES
- Overfill Prevention
  - Present and Functional
- Monthly Containment Device Inspection Log
- Air Permit Issues
  - Current and Accurate Air Permit
  - Check all Stage 1 and 2 hardware
  - Ensure all required testing is completed and passing
- Release Response Plan
- DEP HOTLINE 1-877-927-6337

#### <u>1-877-WARNDEP HOTLINE</u> 1-877-927-6337

The NJDEP has established a toll-free telephone hotline number you can use to report environmental incidents, abuses, and complaints in New Jersey or impacting it. The 1-877-WARNDEP number can be used in the New Jersey, New York, Pennsylvania, and Delaware calling areas.

