

November 2014

Re: Heating Oil Information

Dear Municipal Officials:

Following the enclosed statewide press release from the Department of Environmental Protection (DEP), the Southeast Regional Office (SERO) put together a heating oil information packet to assist municipal officials, contractors, and homeowners in your municipality during the upcoming heating oil season. In this packet DEP provides:

- Tips for Residential Heating oil Tank Owners fact sheet including a self-inspection checklist.
- Home Heating Oil Releases guidance that describes steps to take following a release.
- Notice of Contamination form, which needs to be filled out and sent to the regional office following a release.
- Emergency Response Contractors List and disclaimer.
- Soil Sampling Heating Oil Tank Excavations, which supersedes the sampling protocol in the enclosed closure guidance.
- Underground Storage Tank Heating Oil Cleanup Grant form.
- Closure Requirements for Underground Storage Tank technical document provides helpful
  information regarding sampling parameters, cleanup standards, waste disposal, and a closure
  report form to assist in documenting closure activities for underground or aboveground
  storage tanks. This document can be found at the following link:
  http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-92199/263-4500-601.pdf

We suggest that you hand out this packet with any permits for heating oil tank removals. Feel free to make copies as needed and to provide this information to any resident with a home heating oil tank. All of these documents except the Emergency Response Contractors List are available on DEP's webpage.

SERO is creating a heating oil tank presentation for municipal officials, fire departments, consultants, and contractors. If you are interested in participating in this training, or if you have any questions regarding the enclosed packet, please contact Dana Kutz at 484.250.5770.

Sincerely,

Stephan Sinding Regional Manager

Environmental Cleanup and Brownfields

Enclosure

#### COMMONWEALTH OF PENNSYLVANIA

Dept. of Environmental Protection Commonwealth News Bureau Room 308, Main Capitol Building Harrisburg PA., 17120

#### FOR IMMEDIATE RELEASE

09/3/2014

#### **CONTACT:**

Amanda Witman, Department of Environmental Protection 717-787-1323

#### **DEP Reminds Citizens of Important Autumn Advisories**

Owners of Swimming Pools and Home Heating Oil Tanks Should Take Caution

**HARRISBURG** -- Autumn is less than a month away and DEP would like to remind citizens about important precautions to take as they are closing their pools and filling their home heating oil tanks. Pool wastewater, if not disposed of properly, can contaminate local waterways, while poorly maintained home heating oil tanks can leak.

When chlorinated water is drained from a swimming pool into a storm sewer, it can quickly make its way to a stream or other body of water, where aquatic life can be damaged or killed.

The discharge of swimming pool water to local waterways without a permit is a violation of the Clean Streams Law. Property owners and pool companies must obtain a permit from their local municipality before disposing of any pool wastewater. This includes pool backwash water, neutralized pool cleaning wastewater and standing water.

Pool wastewater should be discharged into the local sanitary sewer system, if possible. If sanitary sewers are not available, the wastewater should be hauled offsite for disposal at an approved treatment facility or otherwise discharged according to the department's Swimming Pool Wastewater Discharge Guidelines.

Owners of home heating oil tanks should consider inspecting indoor and outdoor home heating oil tanks for potential problems prior to refilling them. Preventing leaks will save owners energy and money, in addition to protecting owners' health.

Leaking heating oil can cause indoor air problems and potentially contaminate groundwater and private drinking water wells. A spill cleanup can cost up to \$50,000 and may not be covered by homeowner's insurance. Residents who think their oil tank may have a problem should immediately contact their oil company for help.

A quarter of all Pennsylvania homes use heating oil to stay warm in the winter.

DEP encourages homeowners to consider these tips:

- For safety reasons, always assume the tank contains at least some oil;
- Routinely inspect the exterior of the tank and all attached equipment;
- Check for signs of rusting on the tank and its structural supports;
- Examine the tank's fill line and feed line to the furnace for leaks;
- Never tip over or empty a tank onto the ground;
- Enlist a professional to perform maintenance or alterations to a heating oil tank system; and
- Recognize that wet spots or odors near the tank may signal a problem.

When fuel is delivered, make certain that the home address is clearly visible and the tank's fill line clearly marked. If a resident cannot be home when fuel oil is delivered, mark the fill pipe with a red flag or marker and inform the oil company of the location. Ensure that any disconnected fill pipes that remain above the ground are permanently sealed and cannot be opened.

For more information, or to view the Swimming Pool Wastewater Guidelines, visit <a href="https://www.dep.state.pa.us">www.dep.state.pa.us</a> keyword: pool wastewater.

For more information about filling a home heating oil tank, visit <a href="https://www.dep.state.pa.us">www.dep.state.pa.us</a> keyword: Storage Tanks, or call DEP's Division of Storage Tanks at 717-772-5599.



#### TIPS FOR RESIDENTIAL HEATING OIL TANK OWNERS

Residential heating oil tanks are tanks that store fuel oil to provide space heating on premises where they are located. With proper tank management, spills and leaks can be avoided. Leaking tanks can contaminate public and private drinking water supplies, pollute soils, create the potential for fires and explosions, and subject tank owners to very expensive cleanup costs. A typical cleanup cost for spills and overfills from heating oil tanks ranges from \$10,000 to \$50,000 and is often not covered by typical homeowner's insurance policies.

#### How can heating oil tanks be protected from spills and overfills?

- 1. ROUTINELY INSPECT THE EXTERIOR OF AN ABOVEGROUND TANK AND ALL ATTACHED EQUIPMENT. Many times, leaks can easily be detected and corrected before extensive environmental damage occurs. Tanks and equipment should be inspected for uniform corrosion, pitting, holes, leaking pipes, loose joints and loose fittings. Be aware that most corrosion failures occur from water sitting at the bottom of the tank. Tanks rust from the inside out. A freshly painted tank doesn't mean that it is structurally sound!
  - Tanks can collapse when the tank legs rust or when the soil underneath settles due to the freezing and thawing cycle. To prevent collapses, tanks and equipment should be frequently inspected for structural soundness, such as weak or unsteady support legs. Tanks should be installed on a concrete pad and be secured with floor flanges and concrete anchors. Never place an aboveground tank directly on the soil. Remember, a 275-gallon tank full of heating oil weighs over one ton. Tanks need to be installed in a secure area, away from vehicular traffic, and be protected from high winds and any potential falling objects such as tree limbs, snow, ice, etc., that could damage the tank or break the attached equipment.
- 2. INSTALL SPILL AND OVERFILL PREVENTION DEVICES. Spills and overfills occur when product is delivered to the tank. There are simple and generally inexpensive devices that can be installed on tanks to prevent this from occurring. The product distributor can advise the tank owner about available devices.
- 3. ENSURE THE TANK ADDRESS IS CLEARLY VISIBLE AND THE FILL LINE IS CLEARLY MARKED. This is extremely important for multi-family dwellings and in areas where dwellings are located close together. Many spills and overfills have resulted from deliveries made to the wrong tank.
- 4. CONSIDER A SECONDARY CONTAINMENT STRUCTURE. If a release from the tank does occur, the easiest way to limit the liability is to capture and contain the entire release before it enters the environment. Double-walled underground tanks, diked aboveground tanks, and retrofit structures for existing aboveground tanks are readily available. A product distributor can advise tank owners on various options.

#### Is it important to remove the fill pipe when a tank is removed?

Yes. There are numerous documented cases of heating oil being delivered through fill pipes for basement tanks that no longer exist. Some simple steps to avoid this costly mistake include: 1) Remove the fill line after the removal of the tank; 2) If the fill line cannot be removed, then permanently seal <u>both</u> ends of the fill pipe; 3) Contact the oil delivery company and inform them that the tank has been removed and that under no circumstances should a delivery be made to the tank.

Self-Inspection Checklist for Basement and Backyard Aboveground Home Heating Oil Tanks (ASTs)
If the answer is "YES" to any of the following questions, call an oil burner technician for a more detailed inspection and corrective measures.
<ul> <li>□ Are the tank legs unstable or on a precarious foundation?</li> <li>□ Is the tank vent clogged or restricted because of ice, snow or insect nests? (Screened vents can prevent insect nest problems.)</li> <li>□ Are there any signs of rust, weeps, wet spots or excessive dents on the tank's surface?</li> <li>□ Is the overfill whistle silent when the tank is being filled? (Ask your delivery person.)</li> <li>□ Are there any drips or signs of leakage around the filter or valves?</li> <li>□ Are there signs of spills around the fill pipe or the vent pipe?</li> <li>□ Do the oil lines between the tank and the furnace run either under concrete or aboveground without being encased in protective tubing?</li> <li>□ Is the fuel-level gauge cracked, stuck or frozenor are there signs of oil around it?</li> <li>□ Is there danger of snow or ice falling on the tank?</li> <li>□ Are you using more oil than normal?</li> </ul>

#### Self-Inspection Checklist for Home Heating Oil Underground Storage Tanks (USTs)

If the answer is "YES" to any of the following questions, call an oil burner technician for a more detailed inspection and corrective measures.

- Are you using more fuel than normal?

  Is the tank vent clogged or restricted because of ice, snow or insect nests? (Screened vents can prevent insect nest problems.)

  Is the tank taking on water a rise in water level greater than 1/2" for an 8- to 12-hour period? (An oil-burner technician can check for water or provide the owner with water-finding paste to check themselves.)
- Is the overfill whistle silent when the tank is being filled? (Ask a delivery person.)

#### Are there indicators that a residential heating oil tank might be leaking or product has been spilled?

Yes. There are many indicators, including:

- Soil is saturated with heating oil;
- Soil or other surface material around the fill pipe is stained;
- Product vapors are in the soils or in the basement area;
- Fuel is seeping into a basement, stream, underground utility, etc.;
- Drinking water supplies are contaminated;
- Fuel consumption has suddenly increased;
- · Furnace is operating erratically; and
- · Neighbors are complaining of fuel oil odors.

#### What should be done if a residential heating oil tank leaks?

- √ Contact the DEP immediately. It is the responsibility of the tank/property owner to notify the appropriate DEP regional office of the location and extent of the release. A list of DEP regional offices is shown below.
- √ Identify the source of the release. If you can't find the source, you may need to contact a professional to test the tank and/or piping system to locate the area of the release.
- √ Stop or contain the release. Absorbent material like cat litter can help stop the release from spreading. Call a professional, such as your product distributor, to remove as much product from the tank as necessary to prevent further release.
- Begin cleanup. Contact professionals to help determine the extent of contamination, prepare a cleanup plan and clean up the site. The cost and quality of work can vary greatly. For information on how to hire contractors, refer to the DEP Storage Tank Cleanup Program's Fact Sheet, "Leaking Underground Storage Tanks: Controlling Cleanup Costs." Owners may want to first notify their private insurance company before hiring a contractor to see if any cleanup costs are covered. Furthermore, some insurance companies want to approve a contractor first as part of their policies. Remember, it is the responsibility of the tank/property owner to initiate and complete all necessary corrective action measures. For more information on the DEP's cleanup standards, please contact the appropriate DEP regional office.
- √ Keep detailed and accurate records. It is very important to keep records of cleanup action plans and actions taken.
- Help may be available. The DEP has a reimbursement program for tank owners who have underground storage tanks with a capacity of 3,000 gallons or less used for storing heating oil for consumption on the premises where stored to assist with costs of taking corrective action in response to a release. The release must have occurred on or after Jan. 30, 1998. details. instructions and the application form are available at the following www.portal.state.pa.us/portal/server.pt/community/cleanup program/14100/underground heating oil tank cleanup reim bursement grant program/589716.

#### Regional DEP Offices:

#### Northwest Region

230 Chestnut St.
Meadville, PA 16335-3481
814-332-6648
Counties: Butler, Clarion, Crawford,
Elk, Erie, Forest, Jefferson, Lawrence

Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango and Warren

#### Southwest Region

Westmoreland

400 Waterfront Drive Pittsburgh, PA 15222-4745 412-442-4091 **Counties:** Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington and

#### North-central Region

208 West 3rd St., Suite 101 Williamsport, PA 17701-6448 570-327-0500

Counties: Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga and Union

#### South-central Region

909 Elmerton Ave. Harrisburg, PA 17110-8200 717-705-4705

Counties: Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry and York

#### Northeast Region

2 Public Square Wilkes-Barre, PA 18701-1915 570-826-2511

Counties: Carbon, Lackawanna, Lehigh, Luzeme, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne and Wyoming

#### Southeast Region

2 East Main St. Norristown, PA 19401-4915 484-250-5960

**Counties:** Bucks, Chester, Delaware, Montgomery and Philadelphia

Central Office Bureau of Environmental Cleanup and Brownfields Division of Storage Tanks P.O. Box 8762

P.O. Box 8762 Harrisburg, PA 17105-8762 717-772-5599 800-42-TANKS (in PA only)

For more information, visit www.dep.state.pa.us, keyword: Storage Tanks.



## Home Heating Oil Releases



Commonwealth of Pennsylvania

Equal Opportunity Employer

#### Home Heating Oil Releases

Home heating oil releases can result from leaks, spills, overfills or heating system malfunctions. When released indoors, heating oil can damage both your home and its contents, and can cause health problems. When released into the environment, heating oil can pollute drinking water supplies, contaminate soils and expose you to liability if neighboring properties are affected by the release. Heating oil releases can also be expensive to clean up. Prompt action to stop, contain and clean up a heating oil release can greatly reduce or eliminate adverse impacts to your property, your health, the environment and your wallet. This publication provides information to help you deal with a heating oil release and any subsequent cleanup.

#### Prevent Fire, Explosion and Exposure

#### As a precaution:

- Turn off any open flames or ignition sources (if this can be done safely and quickly).
- Keep all ignition sources away from the area until the release is completely cleaned up.
- Don't smoke or light matches in the area.
- Don't turn on any electrical items.
- Avoid breathing heating oil vapors for extended periods and protect your skin and eyes from contact with heating oil.

#### Leave the premises immediately and call 911 if:

- The release occurs near an open flame or ignition source.
- High concentrations of vapors (odors) are present.
- You are unsure of the safety risks.

#### Stop or Contain the Release

Prompt action to stop and contain a heating oil release will help to minimize the scale and cost of the cleanup.

#### If you can safely do so:

- Check to see if closing the valves on the tank or lines will stop or slow the flow of oil.
- Try to capture the release with buckets or pans, or contain it using absorbent materials (see Absorption and Disposal below).
- If a sump is nearby, shut off the sump pump and check the sump and discharge point for heating oil contamination.
- Close off floor drains and keep heating oil away from other pathways to the environment such as cracks in basement floors and gaps between walls and floors.
- If the release occurs outside, try using a shovel to build a dike to contain the oil or divert it to an area where it can be contained away from any water wells, streams, drainage areas or buildings.
- Call a professional, such as your heating oil distributor, to remove oil from the tank and lines, as needed, to prevent the further release of heating oil.

#### Immediately call for assistance if:

- The release is large in volume.
- Oil is flowing unchecked from the tank or lines.
- The release cannot be stopped or contained using the methods described above.

Many local fire departments (call 911), heating oil distributors or spill response professionals can respond with materials to help contain the heating oil release and recover any free-standing heating oil. Find out who provides this type of assistance in your local area and have emergency contact numbers handy in the event of a release.

#### Report the Release

If the release has contaminated or could potentially contaminate the environment (soil, groundwater or surface water), you must report it to your Department of Environmental Protection (DEP) Regional Office. DEP can assist you with information on what you can do to minimize the adverse effects of a heating oil release as well as how to conduct a successful environmental cleanup. DEP may send a representative to your property to inspect the release. A list of DEP Regional Offices and the counties they serve is available at the end of this publication and at <a href="https://www.depweb.state.pa.us">www.depweb.state.pa.us</a>. Heating oil releases may be reported to DEP 24 hours per day, 7 days per week.

If the release was caused by your heating oil distributor (i.e. due to improper fuel delivery), immediately report the release to the company and ask them to recover any released oil and clean up any contamination.

You may also need to report the release to your insurance company if you have heating oil release coverage.

#### Clean Up the Release

You are responsible for ensuring that the released heating oil and any resulting contamination are cleaned up.

If the heating oil release is too large or extensive to be cleaned up using the methods and materials described below, or if groundwater or surface water are impacted, contact a professional to conduct the cleanup.

#### **Minor Releases**

Minor releases often result from small spills or drips at the fill pipe, or from small leaks in the tank, the lines or the fittings. Minor releases are small in volume; they do not impact the environment, or they result in only minor impacts to soil. However, even minor releases should be cleaned up. You may elect to clean up a minor release yourself. Be sure to wear protective gear, such as rubber gloves, protective eyewear and clothing. Avoid breathing heating oil vapors for extended periods.

#### Absorption and Disposal

For minor releases of heating oil, absorbent materials commonly found around the home, such as kitty litter, sawdust, peat moss, sand, newspaper, etc., can be used to soak up the released oil. Absorbents should be removed as soon as they become saturated, placed in double plastic bags and sealed. Place the bags in a lined trash can or on plastic sheets to avoid spreading contamination to other areas of the home or property. If possible, take the material to a household hazardous waste collection site for disposal. Otherwise, contact your local trash hauler for information and guidance on the proper disposal of oil contaminated materials. Minor amounts of soil, stained or contaminated with heating oil, may also be removed, handled and discarded in the same way as saturated absorbents.

#### Odor Control

Even minor releases of heating oil can result in major odor problems. Extended exposure to heating oil vapors can cause health problems, so odor control is critical. If the release occurs inside the home, such as in the basement or living areas:

- Close off openings to other areas of the home to prevent odor migration to uncontaminated parts of the building. This
  includes doors, windows, laundry chutes, pet doors, etc.
- If you have forced air heating, shut down the heating system and close any heat registers, cold air returns, etc.
- Open doors and windows to the outside in the contaminated area to ventilate odors.

Persistent odors may require the services of a cleanup professional. Fire and water damage restoration specialists may also be able to assist in removing persistent odors.

#### Oil Stain Removal

Materials that have been in contact with heating oil should be discarded or thoroughly cleaned. There are several commercial oil cleaners and stain removers available on the market. You can also use household degreasers/cleaners to remove oil staining. Products that are applied directly and wiped off with a cloth or paper towels are preferred since they do not generate oil-contaminated rinse water. Rinse water contaminated with heating oil can spread contamination and should not be disposed of in drains, sumps, storm sewers or on the ground. Any discarded oil-stained materials, or rags, paper towels, mops, brushes, etc., used to clean up heating oil should be bagged and discarded in the same manner as absorbents described above.

#### **Environmental Cleanup**

Most heating oil releases that have impacted soil, groundwater or surface water will require the services of an experienced environmental cleanup professional (contractor). Using an experienced contractor will help to ensure that your heating oil cleanup will be successful and will meet all state standards and requirements.

#### Hiring a Contractor

Your heating oil distributor, county emergency management agency, insurance company, the telephone directory or an internet search may help you locate a contractor in your area. (Search terms to consider are "Spill Response," "Spill Control," "Environmental & Ecological Services," "Tank Installation & Removal," and "Tank Cleaning.") Although you are not required to use a DEP certified contractor, DEP has a list of certified contractors available on its website at <a href="www.depweb.state.pa.us">www.depweb.state.pa.us</a>, keyword: Tank Cleanup. For tips on how to hire a contractor visit the PA Attorney General's Office website at <a href="www.attorneygeneral.gov">www.attorneygeneral.gov</a> and the Federal Trade Commission's website at <a href="www.ftc.gov">www.ftc.gov</a>. The DEP fact sheet titled <a href="Leaking Underground Storage Tanks">Leaking Cleanup Costs</a> (Doc. #2550-FS-DEP-1610) also provides some basic guidelines for finding a contractor and controlling cleanup costs. This fact sheet can be found at the DEP web address listed above.

#### Cleanup Requirements

All heating oil releases that impact the environment must be cleaned up to state environmental cleanup standards. The cleanup standards for soil, groundwater and surface water are found in the Land Recycling Regulations (25 PA Code Chapter 250, Administration of the Land Recycling Program). If your cleanup meets these standards and you complete the administrative and reporting requirements of the Land Recycling Program, you will be granted a release of liability for the cleanup from DEP. A release of liability ensures that DEP will not compel you to perform additional environmental cleanup. A release of liability can also be extremely useful if you decide to sell your property. It will demonstrate to prospective buyers and lenders that the heating oil contamination has been cleaned up to state standards and that no additional environmental cleanup is required. Information on cleanup requirements and the Land Recycling Program is available from your DEP Regional Office and on the DEP website at <a href="https://www.depweb.state.pa.us">www.depweb.state.pa.us</a>, keyword: Land Recycling.

If environmental contamination is not cleaned up or if the cleanup does not meet all of the requirements of the Land Recycling Program, a release of liability will not be issued. You will be required to disclose any contamination remaining on the property to prospective buyers when you offer your property for sale, and DEP may take enforcement action to compel a cleanup and/or to ensure that the cleanup standards have been met.

#### Oil Recovery and Tank System Closure

Any free-standing heating oil should be recovered, and your cleanup contractor or heating oil distributor may pump any unused oil out of the tank and lines. If an aboveground or underground (buried) tank or heating oil line must be removed (i.e. due to corrosion or structural failure), it should be thoroughly cleaned inside prior to removal and disposal. Disposal must be in accordance with DEP regulations. Tanks that are buried underground and cannot be removed (i.e. due to obstructions) should be cleaned and filled with a non-shrinking inert solid material, such as sand, gravel or concrete, prior to re-grading. This will prevent subsidence and/or heaving after the tank is closed out. Make sure that the fill pipe is removed. Removing the fill pipe will ensure that fuel cannot be mistakenly delivered. Be sure to check with your local government and fire marshal to see if there are any local regulations, such as permit or inspection requirements that must be followed when removing a tank and piping system or closing a tank in place. (Local regulations must also be followed when installing a new tank or tank system.)

#### Soil, Groundwater and Surface Water

Any contaminated soil that is removed during cleanup must be tested prior to disposal. Disposal of contaminated soil must be in accordance with DEP regulations. Contaminated soil stockpiled on site prior to disposal should be placed on a liner of plastic or other impermeable material and covered with tarps or plastic sheeting. Any soil remaining in or on the ground following cleanup must meet the cleanup requirements of the Land Recycling Regulations. Your contractor should test the soil to make sure that the cleanup requirements of the Land Recycling Regulations have been met.

If heating oil has contaminated groundwater or surface water bodies, the cleanup should be closely coordinated with the DEP Regional Office. Groundwater cleanups may require the installation of monitoring or extraction wells and treatment systems. Surface water cleanups may require the use of absorbent booms, oil separators or other devices to recover the oil and clean the water.

#### Vapors

Heating oil contamination in soil and/or groundwater may result in vapors migrating into the home or into adjacent homes or structures. Exposure to these vapors may cause health problems. If vapors or odors persist or have migrated to adjacent buildings, more extensive environmental cleanup or specialized vapor mitigation measures may be needed.

#### Help is Available

Your DEP Regional Office is available to assist you with any questions or concerns you may have regarding environmental cleanup. A reimbursement grant program is also available to assist owners of leaking underground heating oil tanks with the cost of environmental cleanup. Information on this grant program is available at <a href="https://www.depweb.state.pa.us">www.depweb.state.pa.us</a>, keyword: Tank Cleanup, or by contacting the DEP Division of Remediation Services at 717-783-9475, e-mail <a href="mailto:tankcleanup@state.pa.us">tankcleanup@state.pa.us</a>.

#### **Preventing Releases**

The best way to minimize the adverse effects and costs of heating oil releases is to prevent them from occurring in the first place. Information on preventing heating oil releases can be found in the DEP fact sheet *Tips for Residential Heating Oil Tank Owners* (Doc. #2570-FS-DEP1681). This fact sheet is available at <a href="https://www.depweb.state.pa.us">www.depweb.state.pa.us</a>, keyword Tank Cleanup.

#### **DEP Regional Offices**

Southeast Region 2 E. Main St. Norristown, PA 19401 Telephone: 484-250-5900 (24 hours/day) Bucks, Chester, Delaware, Montgomery and Philadelphia	Northeast Region 2 Public Square Wilkes-Barre, PA 18701-1915 Telephone: 570-826-2511 (24 hours/day) Carbon, Lackawanna, Lehigh Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne and Wyoming
Southcentral Region 909 Elmerton Ave. Harrisburg, PA 17110 Telephone: 717-705-4700 (business hours) 1-877-333-1940 (after hours) Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry and York	Northcentral Region 208 W. Third St. Williamsport, PA 17701 Telephone: 570-327-3636 (24 hours/day) Bradford, Cameron, Clearfield, Centre, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga and Union
Southwest Region 400 Waterfront Dr. Pittsburgh, PA 15222 Telephone: 412-442-4000 (24 hours/day) Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington and Westmoreland	Northwest Region 230 Chestnut St. Meadville, PA 16335 Telephone: 814-332-6945 (business hours) 1-800-373-3398 (after hours) Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer,

#### NOTIFICATION OF REPORTABLE RELEASE (Owners and Operators)

#### ☐ Follow-Up

#### NOTIFICATION OF CONTAMINATION (Certified Installers and Inspectors)

#### NOTIFICATION OF REPORTABLE RELEASE (Owners and Operators)

The Storage Tank Program's Corrective Action Process (CAP) regulations establish release reporting requirements for owners and operators of storage tanks and storage tank facilities.

Subsection 245.305(a) of the regulations requires owners or operators to notify the appropriate regional office of the Department as soon as practicable, but no later than 24 hours after the confirmation of a reportable release.

Subsection 245.305(d) requires owners or operators to provide an initial written notification to the Department, each municipality in which the reportable release occurred, and each municipality where that release has impacted environmental media or water supplies, buildings, or sewer or other utility lines, within 15 days of the notice required by subsection 245.305(a).

Subsection 245.305(e) requires owners or operators to provide follow-up written notification to the Department and to each impacted municipality of new impacts to environmental media or water supplies, buildings, or sewer or other utility lines discovered after the initial written notification required by subsection 245.305(d). Written notification is to be made within 15 days of the discovery of the new impact.

This form may be used to comply with subsections 245.305(d) and (e).

#### OWNERS AND OPERATORS (O/O)

INDICATE IF THIS IS AN INITIAL OR FOLLOW-UP NOTIFICATION BY MARKING THE APPROPRIATE BOX FOUND IN THE TOP RIGHT-HAND CORNER OF THIS FORM. PLEASE COMPLETE ALL INFORMATION IN SECTIONS I, II, IIIA, IIIB, IV, V, VII and VIII.

#### NOTIFICATION OF CONTAMINATION (Certified Installers and Inspectors)

Program's Storage Tank regulations establish standards of performance for certified installers and inspectors of storage tanks and storage tank facilities.

Subsection 245.132(a)(4) of the regulations requires certified installers and inspectors to report to the Department a release of a regulated substance or confirmed or suspected contamination of soil, surface or groundwater from regulated substances observed while performing services as a certified installer or inspector.

This form may be used to comply with subsection Subsection 245.132(a)(4) 245,132(a)(4). submission of the form within 48 hours of observing suspected or confirmed contamination. Where there is a reportable release, the form may be submitted jointly by the owner, operator, certified installer and certified inspector. In this instance, the form must be received by the appropriate regional office within 15 days of the notice required by subsection 245.305(a).

CERTIFIED INSTALLERS AND INSPECTORS (I/I) PLEASE COMPLETE ALL INFORMATION IN SECTIONS I, II, IIIA, IIIC, VI, VII and VIII.

#### INSTRUCTIONS

- FACILITY INFORMATION Record the name, I.D. number and physical location (not P.O. Box) of the facility at which a reportable release has been confirmed or at which suspected or confirmed contamination has been observed. Include the name and phone number of a person to contact at the facility.
- OWNER/OPERATOR INFORMATION Record the name, business address and telephone number of the owner of the facility 11. identified in Section I. Also, record the name and telephone number of the operator of the facility.
- REGULATED SUBSTANCE INFORMATION Indicate to the best of your knowledge: A) the type of product or products involved; B) the quantity of product or products released; and C) whether the contamination is suspected or confirmed.
- REPORTABLE RELEASE INFORMATION Record the date of confirmation of the reportable release, e.g., "9/18/01"; the date and regional office notified; and the date the local municipality(ies) [provide name of municipality(ies)] was/were sent a copy of this form. Indicate to the best of your knowledge the source/cause of the release, how the release was discovered and the environmental media affected and impacts.
- INTERIM REMEDIAL ACTIONS Indicate the interim remedial actions planned, initiated or completed.
- SUSPECTED/CONFIRMED CONTAMINATION INFORMATION Record the date of observation of the suspected or confirmed contamination, e.g., "11/24/01". Indicate to the best of your knowledge the indications of a suspected release or extent of confirmed contamination resulting from the release of the regulated substance.
- ADDITIONAL INFORMATION Provide any additional, relevant, available information concerning the reportable release or suspected or confirmed contamination. Include in this section specific details or problems about the release. For example, if the piping was the source of the release and the cause was corrosion of a metal connector or flexible connector, it is important to include that information here. Use additional 8½" x 11" sheets of paper, if necessary.
- VIII. CERTIFICATION Please print your name, and provide your signature and date of signature. If a certified installer/inspector, provide certification number and company certification number.
- ATTACHMENT If a certified installer/inspector, provide a copy of failed valid tightness test(s), if applicable.

#### PLEASE SEND COMPLETED ORIGINAL FORM TO:

PA Department of Environmental Protection Environmental Cleanup and Brownfields Program Storage Tank Section (and the appropriate address below,

depending on where the FACILITY is located)

Southeast Region 2 East Main Street Norristown, PA 19401 PHONE: 484-250-5900 AX: 484-250-5961

Counties Bucks, Chester, Delaware, Montgomery, Philadelphia Northeast Region 2 Public Square Wilkes-Barre, PA 18711-1915 PHONE: 570-826-2511 FAX: 570-820-4907

Counties Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northamptor Pike, Schuylkill, Susquehanna, Wayne, Wyoming

South-central Region 909 Elmerton Avenue Harrisburg, PA 17110 PHONE: 866-825-0208 FAX: 717-705-4830

Counties Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, York

North-central Region 208 W. Third Street, Suite 101 Williamsport, PA 17701 PHONE: 570-321-6525/327-3636 FAX: 570-327-3420

Counties Bradford, Cameron, Centre, Clinton, Clearfield, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, Union

Southwest Region 400 Waterfront Drive Pittsburgh, PA 15222 PHONE: 412-442-4091/4000 FAX: 412-442-4328

Counties Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset Washington, Westmoreland Northwest Region 230 Chestnut Street Meadville, PA 16335-3481 PHONE: 814-332-6945 800-373-3398 FAX: 814-332-6121

Counties Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango, Warren

I. FACILITY INFORMATION (Both O/o	O and I/I)	II. OWNER/OPERAT	OR INFORMATION (Both O/O and I/I)
Facility Name	Facility I.D. Number	Owner Name	
Street Address (P.O. Box not acceptable)		Address	
City State	Zip Code	City	State Zip Code
County Municip	pality	Telephone Number	
Contact Person Teleph	none Number	Operator Name	Telephone Number
l)i	I. REGULATED SUB	STANCE INFORMATION	ON
A. Type of Product(s) Involved (Mark All That Apply 区 ): Both O/O and I/I	B. Quantity (Gallons) of O/O Only	Product(s) Released:	C. Contamination Suspected [S] or Confirmed [C] (Mark All That Apply 図): I/I Only
Leaded Gasoline			
Aviation Gasoline			
Jet Fuel			
New Motor Oil			
Used Motor Oil			
Fuel Oil No. 2			
Fuel Oil No. 4			
Fuel Oil No. 6			
Other (Specify)			
Unknown			
	ORTABLE RELEAS	SE INFORMATION (O/O	
Date Reportable Release was Confirmed:	//	Date Owner/Operator S	Sent Copy of this Written Notification to Local Name of Municipality(ies) Notified:
Date Owner/Operator Verbally Notified Appropria Reportable Release and Office Notified:	iate Regional Office of	Date: / /_	
Date: / / Office		_ Date: / /_	Municipality
Source (Mark All That Apply 図):	How Discovered (N	Mark All That Apply 図):	Environmental Media Affected and Impacts (Mark All That Apply 図):
Tank (DEP Assigned Nos)  Piping System (Aboveground Regulated)	During Closure		Soil
Piping System (Underground Regulated)	Lining Installation		Sediment
Piping System (Non-Regulated)		1	Surface Water
Dispenser/Dispensing Equipment	1		Ground Water
Accident/Natural Disaster	l .	rities	Bedrock
Submersible Turbine Pump Head/Fittings	ì	Reports	Water Supplies
Containment/Sump Failure	l .		Vapors/Product in Buildings
Unknown	1		Vapors/Product in Sewer/Utility Lines
	f .		Ecological Receptors
Cause (Mark All That Apply 図):		sults	
Faulty Installation	1	Results	
Physical/Mechanical Failure	1		
Spill During Delivery			
Overfill at Delivery	Unknown	······□	
Vehicle Gas Tank Overfill			1
Other (Specify)			1
Unknown		J.	ſ

V. INTERIM REMEDIA	AL ACTIONS	(0/0 Only)		
·	Planned	Initiated	•	Not Applicable
Regulated Substance Removed from Storage Tanks	🗆			
Fire Explosion and Safety Hazards Mitigated	🔲			
Contaminated Soil Excavated	🔲		🗌	
Froe Product Recovered	🔲			
Water Supplies Identified and Sampled	🔲			
Tomporary Water Supplies Provided	🔲	🔲		
Other (Specify)	_ 🗆	🔲		
VI. SUSPECTED / CONFIRMED CON				
Date of Observation of Suspected/Confirmed Contamination:	/ /_ m	<u> </u>		
Indication of Suspected Contamination (Mark All That Apply 🗵)		Confirmed Conf	tamination (Marl	∢All That Apply ⊠):
Unusual Level of Vapors	<b>'</b>			r Backfill
Erratic Behavior of Product Dispensing Equipment	l l	roduct		
Release Detection Results Indicate a Release	1	luct or Sheen on	Ponded Water	
Discovery of Holes in the Storage Tank	1	luct or Sheen on	the Ground Wate	r Surface
Other (Specify)		luct or Sheen on	Surface Water	
	Other (Sp	ecify)		
VII. ADDITIONAL INFO	RMATION (B	oth O/O and I/I		
Provide any additional, relevant, available information of contamination. Include specific details or problems about release and the cause was corrosion of a metal connector or Provide DEP-assigned and owner/operator-assigned tank no paper, if necessary.	the release. flexible conn	ector, it is impo	rtant to include	that information here.

VIII. CERTIFICATION (Both C	D/O and I/I)
I,(Print Name)  C.S.A. §4904 (relating to unsworn falsification to authorities) that I am the owner and that the information provided by me in this notification is true, accurate and contact the information provided by me in this notification is true, accurate and contact the information provided by me in this notification is true, accurate and contact the information provided by me in this notification is true, accurate and contact the information provided by me in this notification is true, accurate and contact the information provided by me in this notification is true, accurate and contact the information provided by me in this notification is true, accurate and contact the information provided by me in this notification is true, accurate and contact the information provided by me in this notification is true, accurate and contact the information provided by me in this notification is true, accurate and contact the information provided by me in this notification is true, accurate and contact the information provided by me in this notification is true, accurate and contact the information provided by me in this notification is true, accurate and contact the information provided by me in this notification is true, accurate the information provided by the inform	hereby certify, under penalty of law as provided in 18 Pa. or operator of the above referenced storage tank facility omplete to the best of my knowledge and belief.
Signature of Owner or Operator	/ / / Date
I,	hereby certify, under penalty of law as provided in 18 Pa.  ied installer who performed tank handling activities at the this notification is true, accurate and complete to the best
Signature of Certified Installer	// Date
Installer Certification Number	Company Certification Number
I,	hereby certify, under penalty of law as provided in 18 Pa.  fied inspector who performed inspection activities at the this notification is true, accurate and complete to the best
Signature of Certified Inspector	/ / / Date
Inspector Certification Number	Company Certification Number

LEVIN	ADDRESS	CITY	STATE	ZIP	PHONE	EIN NO.	CAPABILITIES
A & I SEPTIC SERVICE		Mt Holly, NJ		. 09080	1-800-229-6411		SEWAGE VAC TRUCKS / PUMP & HAUL
	(Tom 2527 Market St	Aston, DELAWARE CO.	PA	19014	1-800-876-9690 (610) 859-9000 Fax (610) 859-2000	11-2710601 P	PETROLEUM / HAZ-MAT/ EMERGENCY RESPONSE & REMEDIATION/ TANKS/ SOIL/GROUND WATER/MARINE SERVICES OSORO WITH US COAST GUARD
ALL PHASE ENVIRONMENTAL SERVICES (Charles Durepo)	131 TECHNOLOGY DR.	ВЕТНІЕНЕМ, LEHIGH CO.	РА	18015	1-800-592-3261 ( 24 hours)	ω	SPILL RESPONSE HAZ-MAT / NON-HAZ-MAT / TANK TESTING
APCON ENVIRONMENTAL SERVICES, INC.	1525 Campus Drive	Warminster	PA	18974	1-800-887-2222 (215) 672-8000 Fax (215) 672-5310	23-2669843 P	PETROLEUM / TANK REMOVAL
B.P.A ENVIRONMENTAL SERVICES, INC	PO BOX 1202	POTTSTOWN	РА	19464	(610)-427-9014 Fax (610) 427-9018	23-2811152 F	PETROLEUM / HAZ-MAT/ AST-UST REMOVAL/ VAC TRUCK/ REMEDIATION
(Angre Dopweil) Brown Environmental Services Corportation	Suite 201 301 South Main Street	Newtown	PA	18940	215) 322-5050		Groundwater Remediation, Surface Water Remediaton, Soil Remediation
CLEAN HARBORS (Adam Mastracchio, Manager)	2858 Route 322	Bridgeport	2	08014	856-467-3102 Fax (609) 227-9350	04-2698999 F	PETROLEUM / HAZ-MAT
CLEAN VENTURE / CYCLECHEM	600 Cenco Blvd.	Clayton	3	08312	(856) 863-8778 Fax (856) 863-3725	22-2149233 F	22-2149233   PETROLEUM / HAZ-MAT
(Mike Lancos, Branch Manager) COASTAL ELECTRIC & ENVIRONMENTAL SERVICES	PO Box 736	HAMMONTON	2	08037	(609) 561-0701 Fax (609) 561-3194	22-330003	PETROLEUM SPILLS
(Nonard N. Lucera, President) AQUA WASTEWATER SERVICES	186 Andrien Rd.	GLEN MILLS, DELAWARE PA	E PA	19342	(610) 459-1111		SEWAGE VAC TRUCKS / PUMP & HAUL
CONTAINIMENT COLLITIONS INCORPORATED	1449 Cronhan Pike	Mount Union	PA	17066	814-542-8621		WASH WATER (DECONTAMINATION) CONTAINMENT UNIT
D.C.R. ENVIRONMENTAL SERVICES, INC.	3600 Conshohocken Ave. Unit	Philadelphia	PA	19131	(215) 938-7112 Fax (215) 938-0806	23-2617172	PETROLEUM / HAZ-MAT
Dale Reisel, Flesideli. EAGLE INDUSTRIAL HYGENE ASSOC INC	359 Dresher Rd	HORSHAM	ЬА	19044	19044 (215) 672-6088		INDUSTRIAL HYGENE CONSULTING JASPESTOS REMOVIAL SURVEYS/ MOLD REMEDATION/ FIREING RANGE & LEAD CLEAN UP/ INDOOR AIR QUALITY AND TESTING/ WATER DAMAGE
EASTERN DIVERSIFIED SERVICES	89 ALLENTOWN RD.	SOUDERTON	PA	18964	(800)-295-3636 Fax (215) 723-0907	23-2513103	PETROLEUM/ HAZ-MAT / INDOOR POLLUTION / DISASTER, FIRE & FLOOD KLEENUP/
JOIN COITED, EINIOIIIIRIILA COOLUITADO ELDREDGE, INC.	898 Fem Hill Rd.	WEST CHESTER	ЬА	19380	(610) 436-4749 Cell (484) 325-0003		PETROLEUM/ HAZMAT/ HIGH VACCUM TRUCK SERVICE/ TANK REMOVAL/WASTE STORAGE VESSELS/ ROLL OFF/WASTE OIL PROCESSING/ REMEDIATION *** (Limited ER)
ELK ENVIRONMENTAL (Thomas Peduto, Vice President)		READING	PA	19601	24 HR. 1-800-851-7156 610-372-4760 phone 610-372-4820 fax	23-2660539	PETROLEUM / HAZ-MAT / UST & AST REMEDIATION / TRANSPORTATION / DISPOSAL / MERCURY REMEDIATION/ SEWAGE/ MEDICAL WASTE/ ASBESTOS & LEAD ABATEMENT/ DEMOLITION/ DECONTAMINATION/ MOLD / GROUNDWATER
NMENT/	288 Oak Grove Rd.	Swedesboro	3	08085	856-467-5001	51-0345186	PETROLEUM / HAZ-MAT / PHARMACEUTICAL/ CATASTROPHIC EVENTS/ FLOOD REMEDIATION
(EISCO) Jack Diamicis, President ELOHIM CLEANING CONTRACTORS Theodom Mana St. Vina Bresident	804 Winder Drive	BRISTOL	PA	19007	(215) 781-1546	81-0558244	TOXIC/ BIOLOGICAL -WASTE REMOVAL/ LEAD & ASBESTOS REMOVAL
Incodore mode St., vice resident ENVIRONMENTAL ENTERRISES, INC.	455 RAILROAD PLAZA	ROYERSFORD	PA	19468	(610) 792-1100 Fax (610) 792-1104	31-0895554	HAZ-MAT / MERCURY RECYCLING/ REACTIVES & GAS CYLINDERS / LAB PACKS
brian Hunter, Juvision markager ENVIRONMENTAL MANAGEMENT GROUP INTERNATIONAL, INC. Manaf Farhan, Engineer	PO Box 1600	MEDIA	PA	19063	(FAX) 610-565-6465		HAZARDOUS/ INDUSTRIAL & SOLID WASTE MGT. WASTEWATER MGT./ STROAGE TANKS
ENVIRONMENTAL PRODUCTS AND SERVICES OF VEDMONT Clos Grandlia Manager	5100 PAXTON STREET	HARRISBURG	PA	17111	(717) 564-4200 Fax (717) 564-3457	16-1384153	PETROLEUM / HAZ-MAT, GEOSCIENCE/ Disaster and Flood Clean-up/ Sewer Cleaning/ Mercury Spills and Transportation.
FERRICK CONSTRUCTION COMPANY, INC. Tom Ferrick, Owner Cell # 215-416-3157 (24hrs.)	811 IVYHILL ROAD	PHILADELPHIA	PA	19150	(215) 836-7470 Fax (215) 836-2145	23-2640567	PETROLEUM / HAZ-MAT

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# EMERGENCY RESPONSE

PA-DEP-SERO

## CONTRACTORS LIST

FLEETWASH ENVIRONMENTAL SERVICES (James Dicarlo, Chief Ops. Officer)	273 PASSAIC AVE	FARFIELD	NJ 170	17004 1-800-774-5546		22-2867084 HYDRAULIC, PETROLEUM SPILLS, NON-HAZ SPII IS NO I EVEL A
FRANC ENVIRONMENTAL, INC.	321 Maple Ave.	Horsham	PA 190	19044 (215) 997-0920	+-	OR B SEWAGE VAC TRUCKS / PUMP & HAUI / CI FANING & REPAIPS
GALLAGHER, J SEPTIC AND WASTEWATER CONTROL INC.	1606 Embreeville Rd.	COATESVILLE	PA 19320		26-1917905	SEWAGE VAC TRUCKS / PUMP & HAUL REPAIR and SERVICE
GENERAL SEWER SERVICE, INC.	1408 CALCON HOOK ROAD	SHARON HILL	PA 19079	7~	( 23-2157669	SANITARY SEWER CLEANING
GODWIN PUMPS Chink Timer Sales Ren	84 FLOODGATE ROAD	BRIDGEPORT	NJ 18014	(610) 461-1214 14 (856) 467-3636	22-2138498	LARGE PUMPS / SEWER BYPASS PIDEING
GRAY BROTHERS, INC.	1696 E. Lancaster Av.	PAOLI	PA 19301	Fax (856) 467-5676 01 (610) 644-2800	23-1611379	SEWAGE VAC TRICKS AND HAY MATS ADMAN STATE
GUARDINAN ENVIRONMENTAL SERVICES, INC. (Jack Wilson, Response Manager)	70 Albe Drive	Newark	DE 19702		20-5112070	PETROLEUM / HAZ-MAT / SITE REMEDIATION
HAZTEC (Vince Crusco/ Kenneth Link)	1577 Tralee Drive	DRESHER	PA 19025	25 (215) 830-0722		PETROLEUM (Land & Water)/ HAZ-MAT (Up to Level A)
НЕРАСО, Ц.С	716 JERSEY AVENUE	GLOUCESTER CITY	NJ 08030	30 800-326-2439 FAX 856-456-6632		PETROLEUM CLEAN UP
HEPACO-REACT, INC (Ron Gould, Director of Operations)	6901 KINGSESSING AVE.	PHILADELPHIA	PA 19142		56-1428449	PETROLEUM / HAZ-MAT / NON HAZ / SPILL RESPONSE / AST & UST REMOVAL / REMEDIATION
HICKMAN SANITATION SERVICES	352 Snyder Av.	WEST CHESTED	70202	+		
INTEX ENVRIONMENTAL GROUP, INC	6907A EASTON RD	DOYLESTOWN	PA	215-766-7260 FAX(215) 766-9730		SEWAGE VAC TRUCKS/ PUMP & HAUL PETROLUEM/ UST&AST REMOVAL& INVESTIGATION/ GROUNDWATER AND SOIL REMEDIATION/ HAZMAT VARAD
J & J SPILL SERVICE AND SUPPLIES	PO Box 370	Blue Bell	PA 19422	77 (640) 277 4644 500		INTRUSION TESTING
(Bill Kunsch and Pete Cook, Operations Manager)				(610) 277-4511	7897/81-57	PETROLEUM SPILLS/ VAC TRUCKS
	2437 DURHAM ROAD	BRISTOL	PA 19007		23-2325508	PETROLEUM / HAZ-MAT / FLOOD REMEDIATION
Karen,	912 Cheny Tree Rd.	ASTON, (DEL. CO.)	PA 19014	1	Ī	SEWER CLEANING / INSPECTION / INSTALLATION
EWIS ENVIRONMENTAL GROUP	455 Railroad Plaza	ROYERSFORD	PA 19468	8 1-800-258-5585	72 247 4047	PTTDO IT IN THE STATE OF THE ST
Um Gould, Emergency Services Coord.     Brandon Smith, Director of Operations   LOTAL CAPT   L	-				7484747	PELKOLEUM / HAZ-MAT / UST & AST REMEDIATION / TRANSPORTATION / DISPOSAL / MERCURY/ SEWAGE
LION 101AL CANE, INC. (Mark Taylor, Gen. Manager) James Baker, Operations Manager	225 BIRCH STREET	KENNETT SQUARE	PA 19348	T	31-0561825	31-0561825 HAZ-MAT / FIRE DEPT. EQUIP. CLEANING INSPECTION AND REPAIR (DECONTAMINATION)
LORCO PETROLEUM SERVICES	1800 Carman Street	CAMPEN		7		
CNI		CAMPEN	U8105	5 1-800-734-0910	22-3237361	PETROLEUM/ AUTO FLUIDS/ ANTI-FREEZE PUMP OUTS/
S	105 Kiverview Drive PO Box 365	Paulsboro	N) 08066			HAZ MAT/ OIL MARINE & LAND/ DECONTAMINATION/ DISPOSIAU SIGHT INVESTIGATION/ TANK CLEANING/ LIQUID REMOVIAL/ VAC TRUCKS/ REMIDIATON OF SOIL
MOBILE DREDGING AND PUMPING (R. Jay Gress, Vice President)	3100 BETHEL ROAD	CHESTER	PA 19013		23-1644245	PETROLEUM / HAZ-MAT / VAC TRUCKS / SEWAGE
	314 BAY WEST Blvd.	NEW CASTLE	DE 19720	0 1-877-322-6008	23-1994123	PETROI EI IM, HAZMAT / MADINIE GRIU I DEGRACIO.
Jul Conin / 8 1-8 13-1 100						FLOOD REMEDIATION
				10eii (464) 645-0511		

NATIONAL RESPONSE CORPORATION	3500 Sunrise Hwy	Great River	NY 11739	631-22 (In cas emerg 4672 4908	16) 369-	1-3087170	11-3087170   PETROLEUM, & MARINE SPILLS
NORTHSTAR CONT, INC	32250 EAST ADANA AVE		PA 19124		71-8897	-1400552	PETROLEUM/ HAZ-MAT
NO-DIG PIPELINERS		CHESTER CO.	PA	(610) 384-9612	512	-	SEWER LINE CLEANING
ON-SITE MANAGEMENT (Jackie Lark)	1109 Saunders Ct.	ER	PA 19380			-	SEWAGE PUMPING & HAUL / JET TRUCK / CAMERA INSPECTION / REPAIRS
PETROLEUM RECYCLING CORP. Christine Paul. Gary Rothman)	3000 EAST ONTARIO ST.	PHILADELPHIA	PA 19134		0 (24	23-3070334	PETROLEUM / HAZ-MAT / TANKS / VAC TRUCKS / TRANSPORTATION / DISPOSAL/ NON HAZ OILS
RVICES (PSC Environmental)	550 PINETOWN ROAD	TON					HAZ-MAT / NON-HAZ-MAT / PETROLEUM / MERCURY / VAC TRUCKS PUMP & HAUL / TRANSPORT & DISPOSAL/TANKS
RAPID RESPONSE INC. (Stacy Wenner, Ops. Mgr.)	14 Brick Kiln Court	NORTHAMPTON	PA 18067	67 (484) 275-6900 (24 Hours) 877-460-1038		23-3036392	PETROLEUM / HAZ-MAT / REACTIVES / MERCURY / REMEDIATION / TRANSPORTATION / DISPOSAL
REACTIVE & EXPLOSIVE MATERIALS TRAINING CORPORATION	133 ROUTE 206	BRANCHVILLE	NJ 07826		Fax		HIGH HAZARD REMEDIATION: EXPLOSIVE & ENERGETIC MATERIALS / SHOCK SENSITIVE MATS
REPUBLIC ENVIRONMENTAL SYSTEMS (TRANSPORTATION GROUP LLC) Transportation Manager	21 Church Road	Hatfield	PA 19440	40 215-997-2446 215-997-9117 (Fax) 215-997-1315	-1315		TRANSPORTATION OF HAZ-MATS
REPUBLIC ENVIRONMENTAL SYSTEMS	2869 SANDSTONE DR	HATFIELD	PA 19440	40 215-822-8995		26-2277543	TREATMENT OF HAZ-MATS
RESIDUAL MANAGEMENT SERVICES LLC DBA EARTHCARE (Dave Bower, Operations Manager)	99 MAPLE GRANGE RD.	VERNON	NJ 7462	.2 800.428-6166 (973) 764-6100 Fax(973) 764-6404	5404	0-5371263	20-5371263   SEWAGE CLEANING, PUMPING, HAULING / VAC TRUCKS
S & D ENVIRONMENTAL SERVICES, INC. Walt Baker, Technical Rep.	PO Box 88 (BRANCH)	Westville	080 FN	08093 856-853-1196 (24 hrs.) 856-853-1205 (Fax)	×		o l
SAFETY-KLEEN	77 TOWPATH ROAD	FAIRLESS HILLS	PA 190	19030 (215)-736-8699 7:00AM-7:00PM			PETROLEUM/ SOLVENTS/ CONTAINER PUMPING/ HAZ WASTE DISPOSAL
SAFETY-KLEEN	1140 GREEN HILL RD.	WEST CHESTER	PA 193	19380 (610)430-0096 8:00AM-5:00PM	<b>V</b>	39-6090019	VAC TRUCK/ PETROLEUM/ SOLVENTS/ CONTAINER PUMPING/ HAZ WASTE DISPOSAL
SANFORD MOTORS. (Craig Sanford)	1309 S. PENNSYLVANIA AVE.	MORRISVILLE	PA 190	19067 (215) 295-1911 (215) 321-3980	1 0 Fax	23-2564453	PETROLEUM / HAZ-MAT / MEDICAL WASTE / LAB PACKS
S.H BIO-WASTE, LTD	104 G.P. CLEMENT DR	COLLEGEVILLE	PA 194	19426   610-454-7999 FAX 610-454-7899	199 54-7899		BIO MEDICAL WASTE
SSM, INC.	1047 N. Park Road PO Box 6307	READING	PA 1961(	4	Fax	23-2592299	SEWER BYPASS / SPILLS / HAZ-MATS / ENGINEERING
SHAW ENVIRONMENTAL AND INFRASTRUCTURE	2790 Mosside Blvd.	Monroeville	PA 151	(0	373	75-3044680	HAZ-MAT / FULL SERVICE
STERI - CYCLE SPECIALTY WASTE SOLUTIONS	4300 POTTSVILLE PIKE	Reading	PA 196	19605   610-929-3563 (484) 945-0575 Fax (610) 929-0241	5 -0241	36-3640402	
Triumvirate ENVIRONMENTAL SERVICES	500 Carbon AVE.	Baltimore	MD 212	21226 1-800-404-8037 (410) 636-3700  Fax (410) 636-0260	260	742909904	TANK REMOVAL / HAZ & NON-HAZ MATS / INDUSTRIAL CLEANING / WASTE REMEDIATION

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PA-DEP-SERO

US ENVIROINMEN I AL	409 BOOT ROAD	DOWNINGTOWN	PA 18	19335 1-888-884-9700	1-888-884-9700		SEWAGE.BYPASS / STORMWATER DRAINAGE INSPECTION/ UST
VEOLIA ENVIRONMENTAL SERVICES AND TECHNICAL SOLUTIONS Bob Rath, Regional Manager	3100 Hedley Street	Philadelphia	PA 19	19137 215-2 800-4		36-4394814	1 36-4394814 HAZ-MAT/ TANK REMOVAL/ REACTIVES/ EXPLOSIVES
VEOLIA ENVIRONMENTAL SERVICES AND TECHNICAL SOLUTIONS Bob Rath, Regional Manager	105 Willow Spring Circle	York	PA 17	(Fax) 17402 1-800 (Fax)	(Fax) 215-533-6799 1-800-423-2382 (Fax) 215-289-3700	36-4394814	36-4394814 HAZ-MAT/ TANK REMOVAL/ REACTIVES/ EXPLOSIVES
VEOLIA ENVIKONMEN AL SERVICES AND TECHNICAL SOLUTIONS Bob Rath, Regional Manager	1 Eden Lane	Flanders	PA 07	07836 1-800-423-2382 201-691-3923	1-800-423-2382 201-691-3923 973-	36-4394814	36-4394814 HAZ-MAT/ TANK REMOVAL/ REACTIVES/ EXPLOSIVES
WARREN F. DELONG, INC. (Warren F. DeLong, Office Manager)	33 CONESTOGA ROAD	MALVERN	PA 19	19355 (610) (610)	1. 😴	23-2586166	23-2586166 PETROLEUM / HAZ-MAT / MERCURY
				case of em (610) 384-	case of emergency) (610) 384-		
MEALECTONAL CALIBORITY				7367(Nj	7367 (Nights- Phillip		
WEAVER LOWN ENVIRONMENTAL GROUP Donald Fuchs, President	2 Dorrington Road	Carnegie	PA 15		46-4850	25-1404579	25-1404579 PETROLEUM/ HAZ-MAT
WILLIAM HENDERSON	510 Abbot Dr. *C	HAVEREORD DEL CO	DA 10	1010 (24 DIS.)	S.)		The state of the s
WM. P. McGOVERN INC.	1144 W. Baltimore Pike			19348 (610) 444-5797	444-5797	23,2304480	SEWER CLEANING & INSPECTION SEMACE VAC & JET TRI JOYG / PUR S. S
WKS Compass	1 South Gold Drive	Hamilton	NJ 08	08691 1-800-358-4135	358-4135	204402-02	PETROLEIM / HAZ-MAT / MERCI IDV
							MENON MENON



## Soil Sampling for Demonstration of Attainment in Heating Oil Tank Excavations §250.707(b)(B)

The following soil sampling may be accepted by the Department to demonstrate attainment of the Statewide Health Standard. The assessment for soils shall apply to each distinct area of contamination. An analysis shall be performed individually for each petroleum substance identified as being present at the site.

For sites not covered by the Storage Tank and Spill Prevention Act, including all sites being remediated under an NIR, samples shall be taken from the bottom and sidewalls of the excavation in a biased fashion that concentrates on areas where any remaining contamination above the Statewide health standard would most likely be found. The samples shall be taken from these suspect areas based on visual observation and the use of field instruments. If a sufficient number of samples have been collected from all suspect locations and the minimum number of samples has not been collected, or if there are no suspect areas, the locations to meet the minimum number of samples shall be based on a random procedure.

The number of sample points required in the excavation shall be determined in the following way:

- (I) For 250 cubic yards or less of excavated contaminated soil, five samples shall be collected.
- (II) For each additional 100 cubic yards of excavated contaminated soil, one sample shall be collected.
- (III) For excavations involving more than 1,000 cubic yards of contaminated soil, the remediator shall identify the number and locations of samples in a confirmatory sampling plan submitted to the Department. The remediator shall obtain the Department's approval of the confirmatory sampling plan prior to conducting attainment sampling.
- (IV) Where water is encountered in the excavation and no obvious contamination is observed or indicated, soil samples collected just above the soil/water interface shall be equal to or less than the applicable Statewide health MSC determined by § 250.308(a)(2)(ii) (relating to soil-to-groundwater pathway numeric values).
- (V) Where water is encountered in the excavation and no obvious contamination is observed or indicated, a minimum of two samples shall be collected from the water surface in the excavation.
- (VI) For sites where there is a release to surface soils resulting in excavation of 50 cubic yards or less of contaminated soil, samples shall be collected as described in this clause, except that two samples shall be collected.

All sample results shall be equal to or less than the applicable Statewide Health MSC as determined using Tables 1—4 and 6 in Appendix A in Chapter 250.

SERO ECB 4/18/12

Table IV-9
Abbreviated Short List of Petroleum Products

PRODUCT STORED	PARAMETERS TO BE TESTED IN SOIL	ANALYTICAL METHOD (reported on a dry weight basis)	PARAMETERS TO BE TESTED IN WATER	ANALYTICAL METHOD
Kerosene, Fuel Oil No. 1	Benzene Toluene Ethyl Benzene Cumene (Isopropylbenzene) Methyl tert-Butyl Ether Naphthalene Trimethyl benzene, 1,2,4- (Trimethyl benzene, 1,3,4-) Trimethyl benzene, 1,3,5-	EPA Method 5035/8260B	Benzene Toluene Ethyl Benzene Cumene (Isopropylbenzene) Methyl tert-Butyl Ether Naphthalene Trimethyl benzene, 1,2,4- (Trimethyl benzene, 1,3,4-) Trimethyl benzene, 1,3,5-	EPA Method 5030B/8260B or 524.2
Diesel Fuel, Fuel Oil No. 2	Benzene Toluene Ethyl Benzene Cumene (Isopropylbenzene) Methyl tert-Butyl Ether Naphthalene Trimethyl benzene, 1,2,4- (Trimethyl benzene, 1,3,5-	EPA Method 5035/8260B	Benzene Toluene Ethyl Benzene Cumene (Isopropylbenzene) Methyl tert-Butyl Ether Naphthalene Trimethyl benzene, 1,2,4- (Trimethyl benzene, 1,3,4-) Trimethyl benzene, 1,3,5-	EPA Method 5030B/8260B or 524.2
Fuel Oil Nos. 4, 5 and 6, and Lubricating Oils and Fluids	Benzene Naphthalene Fluorene Anthracene Phenanthrene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(a)pyrene Benzo(g,h,i)perylene	EPA Method 5035/8021B or 5035/8260B  EPA Method 8270C or 8310	Benzene Naphthalene Phenanthrene Pyrene Chrysene	EPA Method 5030B/8021B, 5030B/8260B or 524.2 EPA Method 8270C, 8310 or 525.2

2510-FM-BWM0249 Rev. 6/2011 Instructions



## COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

## UNDERGROUND STORAGE TANK HEATING OIL CLEANUP GRANT PROGRAM INFORMATION FOR APPLICANTS

Please read all of the information below before completing the Application for Reimbursement.

#### **Basic Provisions**

- Funds are available to assist owners of underground (buried) heating oil tanks with the costs of environmental cleanup due to a release of heating oil from the underground tank system. The release must have occurred, or been discovered, on or after January 30, 1998.
- Underground heating oil tanks with a capacity of 3,000 gallons or less used to store heating oil for consumption on the
  premises where stored are eligible. An underground tank is one whose volume (including the underground pipes or
  lines) is 10% or more beneath the surface of the ground.
- This is a reimbursement program. The tank owner must pay the first \$1,000 of eligible cleanup costs. The Department
  will reimburse the remaining eligible cleanup costs up to a maximum of \$4,000.
- A maximum of \$500,000 is available annually to assist tank owners with cleanup costs. The program is currently authorized through June 30, 2012.
- Heating oil tanks located on or above the surface of the floor in an underground area, such as a basement or cellar, are not eligible for this program.

#### **Eligible Cleanup Costs**

Eligible cleanup costs include, but are not limited to:

- Excavating, emptying, cleaning, removing, transporting and disposing of a leaking underground storage tank.
- Excavating contaminated soil.
- Recovering free product.
- Transporting and disposing of wastes (e.g. in-tank materials, contaminated soil, contaminated groundwater).
- Determining the extent of contamination, including conducting soil borings or installing wells.
- Designing and implementing groundwater and surface water abatement systems (e.g. installation and maintenance of well water treatment systems and placement of absorbent booms in streams, lakes, or ponds).
- Restoring disturbed or contaminated areas by backfilling, grading, and re-vegetating.
- Sampling and analytical costs associated with disposal of wastes, determining the extent of contamination, evaluating
  the progress of the cleanup, and confirming that a cleanup is complete.

#### Ineligible Costs

Ineligible costs include, but are not limited to:

- Excavating, emptying, cleaning, removing, transporting and disposing of a non-leaking tank.
- Repairing a heating oil tank.
- Installing a new heating oil tank.
- Repairing or replacing a heating system.
- Replacement fuel.
- Activities eligible for reimbursement under other assistance programs or those covered by private insurance.

#### Am I Eligible for a Reimbursement Grant?

To determine your potential eligibility for a reimbursement grant, answer the following questions:	_	
Was the heating oil tank an underground (buried) tank?	∐ Yes	☐ No
Was the tank capacity 3,000 gallons or less?	☐ Yes	☐ No
Was the tank used to store heating oil for consumption on the premises where stored?	☐ Yes	☐ No
Was there a release of heating oil to the environment from the tank, the associated lines/pipes, or as a result of a spill or overfill due to a failure of the tank system?	Yes	□No
Did the release occur, or was it discovered, on or after January 30, 1998?	☐ Yes	☐ No
Was an environmental cleanup performed?	☐ Yes	☐ No
If you answered "YES" to ALL of the above, you may be eligible for a reimbursement grant.		

2510-FM-BWM0249 Rev. 6/2011 Instructions

#### How Do I Apply?

Submit the Application for Reimbursement of Cleanup Costs along with the **original itemized** contractor invoices documenting the cleanup work performed. Attach proof of payment of at least \$1,000 of eligible cleanup costs for each tank release.\* Proof of payment may include copies of the **front and back** of canceled checks, or other **paid** receipts. You must also attach a completed and signed W-9 form, Request for Taxpayer Identification Number and Certification, available from the Internal Revenue Service (IRS) at <a href="www.irs.gov">www.irs.gov</a>. **Reimbursement you receive will** be reported to the IRS and may be subject to taxes.

Mail completed applications to:

PA Department of Environmental Protection
Bureau of Waste Management
Division of Remediation Services
Storage Tanks and Hazardous Sites Corrective Action Section
P.O. Box 8471
Harrisburg, PA 17105-8471

\*Releases from two (2) or more tanks on the same property are subject to the same provisions as releases from a single tank. You must pay the first \$1,000 of eligible cleanup costs for each tank that has experienced a release. The maximum reimbursement allowed is \$4,000 per tank. If the tanks are located side by side (in the same excavation) you need only submit one application, however, you must provide information about each leaking tank in Section D of the application (attach additional sheets if necessary). If the tanks are located in different areas on the same property, you must submit a separate application for each tank.

#### Where Can I Get Help?

If you have questions or need additional information about the grant program, call the DEP Division of Remediation Services at 717-783-9475 or e-mail <a href="mailto:tankcleanup@state.pa.us">tankcleanup@state.pa.us</a>. Information and application forms are also available on the DEP website at <a href="mailto:www.depweb.state.pa.us">www.depweb.state.pa.us</a>, keyword: Storage Tank Cleanup. For information on cleaning up a home heating oil release contact your DEP regional office or consult the DEP publication entitled <a href="mailto:Home Heating Oil Releases">Home Heating Oil Releases</a> available at the web address above.

#### **DEP Regional Offices and Counties Served**

#### Southeast Region

2 E. Main Street Norristown, PA 19401-4915

Phone: 484-250-5900 (24 hours/day)

Counties served: Bucks, Chester, Delaware,

Montgomery, and Philadelphia

Northeast Region

2 Public Square

Wilkes-Barre, PA 18701-1915

Phone: 570-826-2511 (24 hours/day)

Counties served: Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill,

Susquehanna, Wayne, and Wyoming

Southcentral Region

909 Elmerton Avenue Harrisburg, PA 17110

Phone: 717-705-4700 (business hours)

1-877-333-1904 (24 hours)

Counties served: Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, and York

#### Northcentral Region

208 West Third Street

Suite 101

Williamsport, PA 17701

Phone: 570-327-3636 (business hours)

570-327-3636 (after hours)

Counties served: Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, and

Union

#### Southwest Region

400 Waterfront Drive

Pittsburgh, PA 15222

Phone: 412-442-4000

Counties served: Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset,

Washington, Westmoreland

#### Northwest Region

230 Chestnut Street, Meadville, PA 16335

Phone: 814-332-6945 (business hours)

1-800-373-3398 (after hours)

Counties served: Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer,

Venango, Warren

2510-FM-BWM0249 Rev. 6/2011 Form

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

## COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WASTE MANAGEMENT

For Department Use Only	
pplication No	

## UNDERGROUND STORAGE TANK HEATING OIL CLEANUP GRANT APPLICATION FOR REIMBURSEMENT OF CLEANUP COSTS

Storage Tank and Spill Prevention Act Section 710(b.2)

Please read the Information for Applicants before completing this form. Be sure to complete all sections and include supporting documents. Type or print all information, except for required signatures. This form may be filled out online or downloaded and printed. Submit completed application to:

PA Department of Environmental Protection
Bureau of Waste Management
Division of Remediation Services
Storage Tanks and Hazardous Sites Corrective Action Section
P. O. Box 8471
Harrisburg, PA 17105-8471

	SECTION A – TANK OV	MERINFORMATION	
Name			
Mailing Address	Street	Note: The name, mailing address and Federal tax ID or social security number in Section A must exactly match the	
	P.O. Box	informatio	on on the W-9 form.
	City	State	- Zip Code
County		Telephone	(
Municipality Tow Federal Tax ID or Social Secu	rnship, Borough or City	·	
	DEPARTMENT USE	ONLY Supplier	IIIVOICE #.
VID #:	DEPARTMENT USE		r Invoice #:
VID #:			<del>\</del>
		Invoice Da	ite:
SAP Fund 20082000  Total Amount Approved for	General Ledger	Invoice Da Cost Center 3522509000	ite:Internal Order

Form

SECTION B – TANK LOCATION  Please provide information about the location of the tank. If more than one tank at a given address has experienced a					
release, consult the Information for Applicants on how to submit your application.					
Street Address					
City State ZIP Code County					
Municipality					
Township, Borough or City  Contact Person Name Telephone (					
E-mail					
SECTION C - CLEANUP CONTRACTOR(S)					
Please provide information about the contractor(s) that performed the work. Attach additional sheets if necessary.					
Name					
Mailing Address (Street, P.O. Box)					
City State Zip Code					
Contact Person Name Telephone (					
SECTION D – DESCRIPTION OF THE TANK AND THE RELEASE See the Information for Applicants. Attach additional sheets if necessary.					
Was the tank last used to store heating oil for consumption on the premises where stored?					
Was the tank an underground (buried) tank?					
Size (capacity) of the heating oil tank gallons.					
Type of fuel stored in tank (check all that apply)					
☐ Fuel Oil No. 2 (heating oil) ☐ Kerosene ☐ Used Oil ☐ Other (specify)					
Release occurrence/discovery date (mo, day, yr)					
Was the release reported to the DEP Regional Office?					
Source of the release (check all that apply)					
☐ Tank ☐ Line (pipe) ☐ Spill/Overfill* ☐ Other (specify)					
Approximate amount of fuel released gallons. If amount released is unknown, write "unknown."					
*Only spills or overfills that are due to a failure of the tank system are eligible. Spills or overfills that are the result of improper fuel delivery are not eligible. If a spill or overfill results from improper fuel delivery, contact the heating oil distributor and ask them to perform the cleanup.					
SECTION E – ENVIRONMENTAL CLEANUP					
1.) Was or will the cleanup be performed in accordance with the PA DEP Act 2 Voluntary Yes No Cleanup/Land Recycling Program?					
If "no", attach a copy of the contractor report and any environmental sample results to this grant application.					
If "yes", have you submitted a Notice of Intent to Remediate (NIR)?					
If "yes", have you submitted a Final Report?					
2.) All Applicants – List the total eligible costs you paid. (See the Information for Applicants for a list of eligible costs.)  \$					
SECTION F – SIGNATURE & DECLARATION					
Signature Date 'By signing and submitting this Application for Reimbursement of Cleanup Costs, I assert that the information contained in the					
application and supporting documentation is true and correct to the best of my knowledge and belief, subject to punishment under 18 PA. C.S. 4904 relating to unsworn falsification to authorities."					
To ensure timely processing of your application, be sure to include:					
<ul> <li>Completed and signed application for reimbursement.</li> <li>□ Proof of payment of \$1,000 of eligible cleanup costs for each tank release.</li> <li>□ Original itemized invoices.</li> <li>□ Completed and signed W-9 form.</li> </ul>					



## TECHNICAL DOCUMENT

### CLOSURE REQUIREMENTS FOR UNDERGROUND STORAGE TANK SYSTEMS

EFFECTIVE APRIL 1, 1998

## STORAGE TANK PROGRAM

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

#### DEPARTMENT OF ENVIRONMENTAL PROTECTION

#### Bureau of Land Recycling and Waste Management

**DOCUMENT NUMBER:** 

253-4500-601

TITLE:

Closure Requirements for Underground Storage Tank Systems

EFFECTIVE DATE:

April 1, 1998

**AUTHORITY:** 

The Storage Tank and Spill Prevention Act (Act 32 of 1989, as amended, P.L. 169). 25

Pa. Code, Sections 245.451-455.

**POLICY:** 

It is the policy of the Department of Environmental Protection to carry out the provisions

of the Storage Tank and Spill Prevention Act.

**PURPOSE:** 

The purpose of the attached guidance is the establishment of minimum standards that must be met in order to comply with the closure requirements for regulated underground storage tanks. These procedures include closure notification, tank handling and waste

management and disposal, site assessment, sampling requirements, analytical

requirements, release reporting and record keeping.

APPLICABILITY:

The attached guidance applies to the closure of all federally or state regulated

underground storage tanks.

DISCLAIMER:

The policies and procedures outlined in this guidance document are intended to supplement existing requirements. Nothing in the policies or procedures will affect

regulatory requirements.

The policies and procedures herein are not an adjudication or a regulation. There is no intent on the part of the Department to give these rules that weight or deference. This document establishes the framework, within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement

if circumstances warrant.

PAGE LENGTH:

49

LOCATION:

Volume 5 Tab 66

**DEFINITIONS:** 

Definitions for pertinent terms used in the guidance may be found in the Storage Tank

and Spill Prevention Act and/or Pa. Code §245.1.

TECHNICAL GUIDANCE:

See attached.

**APPENDICES:** 

The following appendices are included with the guidance:

A. Pennsylvania Department of Environmental Protection, Environmental Cleanup Program, Storage Tank Section, and the Department of Environmental Protection, Regional Storage Tank Offices (3930-MP-DEP0061-Rev. 6/97).

B. Planning for Permanent Closure Checklist (2530-FM-LRWM0126 4/96).

- C. Underground Storage Tank System Closure Notification Form (2530-FM-LRWM0127 4/96).
- D. Underground Storage Tank System Closure Report Form (2530-FM-LRWM0159), Rev. 11/97).
- E. Standards/Action Levels for Confirmatory Samples Collected At Closure Site Assessments.

#### TABLE OF CONTENTS

			Page
I.	Ir	ntroduction	1
II.		pplicability	
III.		lethods of Closure	
	A		
	В.	1 ,	2
IV.	El	ements of Closure	
	Α.		
	В.	7 10tl ( 1tl 05 1tl 10tl ) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	. 3
	Б. С.		. 3
		Site Assessment Activities	
V.	Те	mporary Closure	. 3
VI.	Pe	rmanent Closure	. 4
	A.	Planning For Permanent Closure	
	В.	Tank Handling/Waste Management and Disposal Activities	. <del>4</del> 7
		1. Soil Excavation	7
		2. Classification of Wastes	7
		3. On-site Storage of Contaminated Soil	0
		4. Tank Cleaning	9
		5. Tank Removal	9
		6. Waste Transportation Requirements	9
		7. Waste Disposal/Treatment Options	1
		8. Release Reporting	1
	C.	Site Assessment 1	2
		1. Tank System Removed from the Ground	2
		2. Tank System Closed-in-Place or Change-in-Service	<i>3</i>
	D.	Sampling Requirements.	<u>.</u>
	E.	Analytical Requirements	) 0
	F.	Submission and Maintenance of Closure Site Assessment Records	ð n
	G.	Evaluation of Need for Corrective Action	D D
'II.	Арр	pendices	
I	A.	Pennsylvania Department of Environmental Protection, Environmental Cleanup Program, Storage Tar Section, and the Department of Environmental Protection, Regional Storage Tank Offices (3930-MP-DEP0061-Rev. 6/97).	nk
	B.	Planning for Permanent Closure Checklist (2530-FM-LRWM0126 4/96).	
	C.	Underground Storage Tank System Closure Notification Form (2530-FM-LRWM0127 4/96).	
	D.	Underground Storage Tank System Closure Report Form (2530-FM-LRWM0159), Rev. 11/97).	
	E.	Standards/Action Levels for Confirmatory Samples Collected At Closure Site Assessments.	

#### I. INTRODUCTION

On August 5, 1989, the state Storage Tank and Spill Prevention Act (Act 32) became effective in Pennsylvania. This act provides authority for the Department of Environmental Protection to develop regulations establishing the: 1) requirements for closure of tanks by owners and operators to prevent future releases of regulated substances into the environment, 2) standards and procedures for removal and intended and completed closure of underground storage tank (UST) systems; 3) methods and procedures for the removal of USTs from service by the owner and operator, and 4) requirements for reporting by the owner or operator of intended and completed closure of any UST facilities. On September 20, 1991, in 25 Pa. Code §245.2, the department adopted by reference the federal closure regulation, 40 CFR Part 280, Subpart G - "Out-of-Service UST Systems and Closure", to satisfy the requirements of Act 32.

The principal objective of the federal closure requirements is to identify and contain existing contamination and to prevent future releases from UST systems no longer in service. These federal regulations became effective on December 22, 1988. Copies of the regulations may be obtained by writing the U.S. Environmental Protection Agency, Office of Underground Storage Tanks, P.O. Box 6044, Rockville, MD 20850, or by calling or writing the Division of Storage Tanks, Bureau of Watershed Conservation, Department of Environmental Protection, P.O. Box 8762, Harrisburg, PA 17105-8762, (1-800-42-TANKS in PA only, or 1-717-772-5599). This guidance sets forth the procedures for complying with the closure requirements for regulated underground storage tanks.

Also, the Pennsylvania State Police has the responsibility for enforcing closure regulations for storage tanks containing flammable and combustible liquids. The primary intent of these regulations is to prevent fire and explosion hazards. These regulations are contained in the "Pennsylvania State Police Fire Marshal Flammable and Combustible Liquids Handbook". Copies of the regulations may be obtained by contacting the Pennsylvania State Police, Fire Marshal Division, 1800 Elmerton Avenue, Harrisburg, PA 17110, telephone 717-783-5529. The regulations apply throughout Pennsylvania with the exception of Philadelphia and Allegheny Counties, which administer their own programs. In Philadelphia, contact the Commercial and Industrial Fire Unit, 1600 Arch Street, 9th Floor, Philadelphia, PA 19103, telephone 215-686-5150/5151/5152. In Allegheny County, contact the Office of the Fire Marshal, Allegheny County, 400 North Lexington Street, Pittsburgh, PA 15208, telephone 412-350-2552. For UST systems in the City of Pittsburgh, contact Fire Bureau/Public Safety, Fire Prevention Division, telephone 412-255-2863.

Since the effective date of the federal closure regulations for USTs and with the passage of the Storage Tank and Spill Prevention Act, there have been numerous inquiries regarding requirements and appropriate practices for the proper closure of USTs in Pennsylvania. The purpose of this document is to indicate what the department considers to be good practice for persons who are involved in the closure of regulated USTs. The department believes that adhering to this guidance will result in compliance with all applicable federal and state laws and regulations.

While this document is intended to acquaint regulated persons with good practices, it may not address all the actions that the department may determine are necessary at an individual site. Different or supplemental actions may be required in any individual case to achieve compliance with the applicable laws and regulations. Also, this guidance is not intended to address every closure situation. Discuss variations for site specific conditions with the appropriate DEP regional office. A map of the regional offices along with the appropriate contact person and telephone numbers for each region can be found in Attachment 1.

This guidance focuses on the proper procedures for tank closures, along with the observations and measurements necessary to determine if a storage tank site may be closed or subject to corrective action. This guidance does not address the corrective action requirements in any detail. This guidance document revises the "Closure Requirements for Underground Storage Tank Systems," document issued by the department that had an effective date of August 1, 1996.

#### II. APPLICABILITY

This guidance applies to all federally or state regulated USTs (including piping and/or ancillary equipment) when:

- 1. A federally regulated UST in operation on or after December 22, 1988, is being permanently closed by removal, closure-in-place or completing a change-in- service.
- 2. A state regulated UST (that is not a federally regulated UST) in operation on or after August 5, 1989, is being permanently closed by removal, closure-in-place or completing a change-in-service.
- 3. A federally regulated UST in operation on or after December 22, 1988, is being temporarily closed. (Section V only)
- 4. A state regulated UST (that is not a federally regulated UST) in operation on or after September 20, 1991, is being temporarily closed. (Section V only)
- 5. A federally regulated UST was permanently closed before December 22, 1988, and the department has reason to believe that the UST poses a current or potential threat to human health and the environment.
- 6. A state regulated UST (that is not a federally regulated UST) was permanently closed before August 5, 1989, and the department has reason to believe that the UST poses a current or potential threat to human health and the environment.
- 7. A state or federally regulated UST is being partially closed these are closures of portions of regulated underground storage tank systems such as piping and/or dispensers, but do not include closure of other portions such as the tank.

#### III. METHODS OF CLOSURE

- A. Temporary Closure -- Placing an UST out-of-service for a limited period of time.
- B. Permanent Closure
  - 1. Removal -- Placing an UST out-of-service by removing it from the ground.
  - 2. Closure-in-Place -- Placing an UST out-of-service by filling the tank with an inert, solid, non-shrinking material. Foam is not an acceptable material unless approved by the State Police Fire Marshal. Note that local regulations may prohibit closure-in-place or the use of certain types of materials for in-place closures.
  - 3. Change-in-Service -- Placing an UST out-of-service by discontinuing use of the tank to store a regulated substance, but continuing to use the tank to store a non-regulated substance or using the tank in a manner that results in the tank no longer being regulated.

#### IV. ELEMENTS OF CLOSURE

Closure may involve three specific types of activities:

#### A. Tank handling activities

Tank handling activities during closure may involve such tasks as hazard recognition and abatement; removal and handling of vapors, product, wastewaters, and accumulated sludges from the UST system; overseeing cleaning of the UST system; leaving the UST system in the ground and filling the UST with an inert, solid, non-shrinking material; removing the UST system from the ground; excavating soil from around the UST system; and initial, onsite staging of excavated soil.

Tank handling activities must be conducted or directly supervised by a DEP-certified installer (which includes remover) who must be on-site during the tank handling activities. The certified installer must have certification in the appropriate category to conduct the activities. A list of DEP-certified tank handling companies is available from the Bureau of Watershed Conservation, Division of Storage Tanks, P.O. Box 8762, Harrisburg, PA 17105-8762, telephone 800-42-TANKS (in PA only) or 717-772-5599; or Environmental Cleanup Program, Storage Tank Section, in each regional office (see Attachment 1).

#### B. Waste management and disposal activities

Various wastes are generated during closure. It is the responsibility of the tank owner to ensure that these wastes are managed and disposed of in accordance with all applicable regulations and policy. (See Section VI.B., page 7)

#### C. Site assessment activities

The purpose of a site assessment is to determine if contamination is present around each storage tank system as a result of any leaks and/or spills which may have occurred during the operation of the current or any previously existing storage tank system.

The DEP does not certify, nor recommend, specific individuals or companies to perform site assessments. It is highly recommended that the owner or operator acquire the services of qualified and experienced professionals in the environmental field to conduct the site assessment. The person(s) conducting the site assessment should be familiar with proper soil and water sampling and handling procedures. Because many site assessments result in the need for corrective action, it may be advantageous to hire professionals who are capable of proceeding with any necessary corrective action.

#### V. TEMPORARY CLOSURE

- A. When an UST system is temporarily closed, owners and operators must:
  - Continue operation and maintenance of corrosion protection;
  - Continue operation and maintenance of any release detection, unless the UST system is empty. An UST system is empty when all materials have been removed using commonly employed practices so that no more than 2.5 centimeters (one inch) of residue, or 0.3 percent by weight of the total capacity of the UST system, remain in the UST system;
  - Submit an <u>amended</u> "Registration of Storage Tanks" form to the Bureau of Watershed Conservation, Division of Storage Tanks, P.O. Box 8762, Harrisburg, PA 17105-8762, indicating that the UST or USTs have changed status from currently in-use to temporarily out-of-use:

- Where there is an indication of a release of regulated substances, initiate and complete an investigation as soon as practicable, but no later than 7 calendar days, after the indication of a release, in accordance with 25 Pa. Code Chapter 245, Subchapter D, Section 245.304 (relating to investigation of suspected releases); and
- Notify the appropriate regional office of the department as soon as practicable, but no later than 2 hours, after the confirmation of a reportable release, in accordance with 25 Pa. Code Chapter 245, Subchapter D, Section 245.305 (relating to reporting releases), and immediately initiate corrective action. The appropriate release reporting telephone number(s) for each region can be found in Attachment 1.
- B. When an UST system is temporarily closed for 3 months or more, owners and operators must also:
  - Leave vent lines open and functioning; and
  - Cap and secure all other lines, pumps, manways and ancillary equipment.
- C. When an UST system is temporarily closed for more than 12 months, owners and operators must:
  - Permanently close the UST system if it does not meet either performance standards for new USTs or the upgrade requirements for existing USTs, unless the department provides an extension of the 12-month temporary closure period. Owners and operators must complete a site assessment in accordance with Section VI.C. of this document before such an extension can be applied for. Extension requests must be submitted in writing to the appropriate regional office of the department.

#### VI. PERMANENT CLOSURE

A. Planning For Permanent Closure

Where the owner and operator intends to permanently close an UST system, the following pre-closure planning steps should be taken:

- 1. If the tank(s) are required to be registered and they are not, submit a "Registration of Storage Tanks" form, with a fee of \$50.00 per tank, to the appropriate regional office of the department. On the form, complete information for <u>all</u> regulated storage tanks at the facility, including those to be permanently closed.
- 2. Hire a DEP-certified installer who has UMR certification to conduct tank handling activities.
- 3. Make sure that the certified installer and any of their subcontractors have:
  - a. A <u>Site-Specific Health and Safety Plan</u> which includes:
    - (1) Familiarity with and adherence to all applicable Occupational Health and Safety Administration (OSHA) and National Institute for Occupational Safety and Health (NIOSH) regulations and recommendations. A complete discussion of OSHA and NIOSH requirements that may be applicable to closure activities is beyond the scope of this guidance. However, the following closure procedures may be relevant:
      - OSHA 2226 Excavations

- OSHA, 29 CFR Part 1926, Occupational Safety and Health Standards-Excavations
- OSHA, 29 CFR Part 1910, Occupational Safety and Health Standards
- The NIOSH "Criteria for a Recommended Standard\*\*\* Working in Confined Space" may be used as guidance for conducting safe closure procedures at some hazardous substance tanks.
- Locating underground utilities prior to excavation or drilling. Prior to beginning any excavation or drilling activities the person(s) conducting the closure should be familiar with the location of buried utilities as well as other tanks and piping that may be present at the facility. The Underground Utility Line Protection Law (Act 172 of 1986) requires that anyone planning excavations or borings call Pennsylvania ONE-CALL at 1-800-242-1776 at least three, but not more than ten business days, prior to conducting excavation or drilling activities. Once notified, if there are public utilities in the area of the planned excavation or drilling activity, the utilities will mark their lines.
- (3) Procedures or provisions to avoid contact with overhead utility lines by heavy equipment.
- (4) Restricting site access from vehicular or pedestrian traffic by utilizing fencing, similar barriers, security patrols or warning signs.
- (5) Monitoring for and mitigating flammable vapors.
- (6) Elimination of ignition sources by not smoking and utilizing hand tools (shovels, wrenches, hammers) made of spark-proof materials such as beryllium, power tools which are explosion proof and flashlights which are intrinsically safe.
- (7) The availability of a fire extinguisher at the job site which is capable of extinguishing all types of fires.
- (8) The provision for the wearing of appropriate personnel protective equipment.
- (9) Procedures for addressing emergency situations such as fire or explosion, injury and environmental incident. Include a map showing directions to the nearest hospital as well as emergency telephone numbers.
- b. Made provisions for <u>Tank Cleaning and Waste Handling</u> which includes:
  - (1) A plan for containing small spills from disconnecting piping.
  - (2) A method for purging or inerting the tank.
  - (3) A method for cleaning the tank if performed on site.
  - (4) A plan for the handling of tank liquids and sludges.
  - (5) A process to excavate, identify and properly stockpile uncontaminated and contaminated soil.

- (6) A plan for tank system removal.
- 4. Make sure that the person(s) conducting the <u>Waste Management and Disposal</u> activities has/have:
  - a. If the tank is to be cleaned off-site, a plan for transporting the tank to a permitted processing, treatment, storage or disposal facility, and complying with PennDOT regulations.
  - b. A plan for the management and disposal of tank liquids and sludges.
  - c. A plan for transportation of the cleaned tank after removal and the disposition of the tank.
  - d. A plan to remediate and/or dispose of contaminated soil.
- 5. Determine who is going to conduct the site assessment.
- 6. Make sure that the person(s) conducting the site assessment has/have:
  - a. A Site Assessment Plan which includes:
    - (1) Visual assessment procedures.
    - (2) Field test and field instrument procedures.
    - (3) Sample collection procedures and sample preservation methods, including chainof-custody procedures and documentation.
    - (4) Decontamination procedures used on sampling and drilling equipment.
- 7. At least 30 days prior to initiating permanent closure of state and federally regulated UST systems, notify the department of the intent to permanently close utilizing the "Underground Storage Tank System Closure Notification" form found in Attachment 3. A copy of this form must also be sent to the Pennsylvania State Police, Fire Marshal Division, or to the appropriate agency in Philadelphia or Allegheny County, if the tank is governed by their flammable and combustible liquid regulations.
- 8. Use as much product in the tank as possible.
- 9. Identify and comply with any local ordinances governing UST system closures.

A "Planning for Permanent Closure Checklist" can be found in Attachment 2. This checklist is intended to assist the owner and operator in the closure planning process.

B. Tank Handling/Waste Management and Disposal Activities

Where possible, the department recommends that all UST systems be removed from the ground. However, the department recognizes that closure-in-place may be necessary where an UST system is under a permanent structure and removal would damage that structure. Certified installers and tank owners and operators are referred to the following tank handling procedures when permanently closing an UST system:

- American Petroleum Institute Recommended Practice 1604, "Removal and Disposal of Used Underground Petroleum Storage Tanks"
- American Petroleum Institute Publication 2015, "Cleaning Petroleum Storage Tanks"

These publications are available from the American Petroleum Institute (API), 1220 L Street, Northwest, Washington, DC 20005, telephone 202-682-8375.

In addition to the API publications, certified installers and tank owners and operators should be aware of the following:

### 1. Soil Excavation

If an UST system is being permanently closed by removal from the ground, the certified installer should initially excavate only that amount of soil and backfill material necessary to remove the tank and piping. Once the tank system is removed from the ground, removal of any soil beyond three feet from the tank and piping in any direction will be considered as remedial activity and will not require the use of a certified installer.

Excavated soils must be segregated (i.e. obviously contaminated, not suspected to be contaminated). This may be accomplished by visual observation and by field screening the soils as they are excavated through the use of field instruments such as photoionization detectors, flame ionization detectors, portable gas chromatographs and other appropriate field measurement procedures. Segregation of soils during excavation will facilitate laboratory testing, treatment and disposal. Note, however, where soil has been segregated into presumably contaminated and uncontaminated piles, the soil, which is presumably uncontaminated, must be sampled prior to reuse on-site in order to confirm that it is uncontaminated. See Section VI.C.1.d.(5), page 21, "Soil Pile Sampling." It is also recommended that excavated soils be segregated from concrete and asphalt material.

### 2. Classification of Wastes

The wastes associated with the permanent closure of UST systems include residual and possibly hazardous wastes. Wastes may include the tank itself, along with any associated piping, unusable product, sludges and sediments, condensation water, wastewater associated with cleaning the tank, and contaminated soil removed from the excavation.

A classification of these wastes as either residual or hazardous should be made based on the following:

### a. Tank, Piping and Contents

Emptied and Cleaned - A storage tank is considered "empty" when no more than 1 inch (or .3 percent by weight of its total capacity) of residue remains in the tank. A tank and piping is considered "cleaned" when all remaining residue has been removed using applicable industry standards to clean that type of storage unit. A tank and piping which has been emptied and cleaned is considered scrap metal and, if it is to be recycled or reused, is specifically excluded from being a hazardous waste (25 Pa. Code §261.4(a)(21), relating to exclusions) or residual waste (25 Pa. Code §287.1, relating to definition of coproduct and waste). An emptied and cleaned tank which will not be recycled or reused, but is destined for disposal in a landfill, is regulated as a residual waste.

Emptied but not Cleaned - A petroleum storage tank, which meets the above definition of "empty", but has not been cleaned, is excluded as a hazardous waste, provided the tank and contents do not fail the test for any characteristic from D001 through D017 (see 25 Pa. Code §261.4(a)(17)). If excluded as a hazardous waste, the tank and contents are a residual waste. Most petroleum storage tanks, with the exception of those containing gasoline residues, which may fail the test for ignitability (D001) or lead (D008), fall into the category of petroleum contaminated media and debris and are excluded as hazardous waste and regulated as a residual waste.

In the case of a tank which stored a hazardous substance, or a petroleum storage tank which contains a substance that fails the test for any characteristic from D001 through D017, the tank contents are <u>not</u> subject to regulation as a hazardous waste <u>until the waste exits the tank in which it was generated, or remains in the tank for a period of more than 90 days after the tank ceased to be operated as a storage tank (see 25 Pa. Code § 261.3(e)).</u>

Not Empty - A petroleum or hazardous substance storage tank and its contents are not subject to regulation as a hazardous waste for a period of 90 days after closure or until the waste exits the storage tank, whichever comes first (25 Pa. Code § 261.3(e)). The classification of the contents upon exit from the tank or after 90 days has elapsed is dependent on the results of a hazardous waste determination provided the contents are not usable product. When it is not immediately possible to determine if a material is a hazardous waste, the material must be managed as a hazardous waste until a determination is made which indicates it is not (25 Pa. Code § 261.3(g)).

- b. Unusable product, sludges and sediments, tank bottoms and wastewater These wastes from inside the storage tank are hazardous if they meet any of the hazardous waste criteria in Chapter 261. If the tank contained gasoline it should be assumed the wastes are hazardous. If the wastes are determined to be non-hazardous, they are subject to regulation as a residual waste.
- c. Contaminated Soil Petroleum contaminated soil is regulated as a residual waste (25 Pa. Code §287.2(c)(4), relating to scope) provided it does not meet any of the hazardous waste criteria in Chapter 261 or if it is specifically excluded from regulation as a hazardous waste (25 Pa. Code §261.4(a)(17)). Soils contaminated with products that appear on the hazardous waste lists of commercial chemical products are subject to regulation as a hazardous waste.
- d. Recovered or reclaimed product Any virgin product recovered directly from the tank, if used, is considered a product and is not regulated as a waste. In addition, any material reclaimed from tank bottoms that qualifies as a coproduct, is not regulated as a waste.

# 3. On-site Storage of Contaminated Soil

Contaminated soils removed from the excavation during a tank removal that are residual waste must be stored in accordance with applicable sections of 25 Pa. Code §§299.101-299.154 (relating to standards for storage of residual waste) of the residual waste management regulations and other applicable department regulations. In addition to the general requirements set forth in §299.131(a), 25 Pa. Code §245.308(d) (relating to on-site storage of contaminated soil) of the regulations to administer the storage tank and spill prevention program requires that contaminated soil piles be completely and securely covered, for the duration of the storage period, with an impermeable material of sufficient strength, thickness, anchoring or weighting to prevent tearing or lifting of the cover, infiltration of precipitation or surface water runon, and exposure of the soil to the atmosphere. In addition to the nuisance control requirements set forth in §299.115(b),

25 Pa. Code §245,308(d) also requires that appropriate steps be taken to deter public access to the storage area. This may include fencing, similar barriers, security patrols or warning signs.

Where excavated contaminated soil is stored on-site, 25 Pa. Code §245.308(c) requires that the excavated soil be disposed of or active treatment of the excavated soil be initiated, within 90 days from the first day of storage, unless extended by the department in writing. Extension requests must be submitted in writing to the appropriate DEP regional office. The department may require immediate removal of contaminated soil if the soil is not being properly stored or managed, or if the department determines that storage poses a threat to human health, safety or the environment (25 Pa. Code §245.308(e)).

Contaminated soils that are hazardous waste must be stored in accordance with 25 Pa. Code §262.34 (relating to accumulation) of the hazardous waste management regulations. Hazardous waste cannot be stored for more than 90 days without a permit from DEP's Bureau of Land Recycling and Waste Management. Extensions under Chapter 245.308(c) do not apply to hazardous waste.

### 4. Tank Cleaning

USTs may be cleaned at the closure site or moved to another location for cleaning. However, the department recommends that USTs be cleaned prior to removal from the excavation to eliminate the potential for releases. In either case, the tank owner is considered the generator of the wastes. If the wastes are hazardous, the owner must obtain a provisional generator I.D. Number from DEP's Division of Reporting and Fee Collection by telephoning 717-783-9258. If the USTs are cleaned at the closure site, use extreme care to safely and properly purge the USTs of explosive vapors prior to accessing the USTs for cleaning. If the USTs are to be moved to another location for cleaning, see the waste transportation requirements in Section VI.B.6. below.

#### 5. Tank Removal

When a tank is to be removed from the ground, provisions should be made in order to safely lift it out of the excavation. One of the major dangers in tank removals is when the lifting chain is not properly attached to the tank and the chain snaps back under tension. The lifting chain should be attached to an existing lifting lug on the tank or a lifting plug (a threaded plug with an attached lifting lug) screwed into a center tank opening. It is also important that the machine (backhoe, excavator or crane) used to remove the tank be of sufficient lifting capacity to safely remove the tank. For example, a small backhoe could be damaged or tipped over while attempting to remove a large tank.

### 6. Waste Transportation Requirements

The wastes associated with the permanent closure of UST systems must be transported as follows:

### a. Tank, Piping and Contents

Emptied and Cleaned - An underground storage tank and piping that is emptied and cleaned on-site is considered scrap metal. If it is to be recycled or reused, it is not subject to hazardous or residual waste management transportation regulations. If it is destined for disposal in a landfill, it is subject to the residual waste transportation requirements (25 Pa. Code §285.218 and §299.201-219).

Emptied but not Cleaned - A petroleum product storage tank containing a substance that does not fail the test for any characteristic from D001 through D017, which is empty

(contains no more than 1 inch or .3 per cent by weight of its total capacity), but has not been cleaned, is exempt from the department's hazardous waste transportation requirements. Residual waste transportation requirements as provided by 25 Pa. Code §285.218 and §299.201-219 apply.

In the case of a tank which stored a hazardous substance, which meets the definition of a hazardous waste, or a petroleum product storage tank which contains a substance that fails the test for any characteristic from D001 through D017, the tank contents are <u>not</u> subject to regulation as a hazardous waste <u>until the waste exits the tank in which it was generated, or remains in the tank for a period of more than 90 days after the tank ceased to be operated as a storage tank (see 25 Pa. Code § 261.3(e)). Until 90 days has elapsed, the residual waste transportation requirements apply if the tank is to be transported, after which hazardous waste transportation regulations apply.</u>

Not Empty - Any regulated storage tank containing more than 1 inch of residue (or more than .3 percent by weight of total capacity) may be transported according to the residual waste regulations for a period of up to 90 days, after which the hazardous waste regulations apply unless the residue contained in the tank is determined to be non-hazardous.

The Pennsylvania Department of Transportation (PennDOT) does have two additional requirements which tend to override DEP's regulations for transporting tanks that have not been thoroughly emptied and cleaned. These are:

- If a tank stored a flammable liquid such as gasoline, it must be totally emptied, cleaned and purged on-site before being transported over the highway. If such a tank is only "empty" -- one inch of residue remaining -- that "empty" tank must be transported in a DOT-approved container. Since the transport of an underground storage tank inside another DOT-approved tank is impractical, the impact of this requirement is that tanks, which contained flammable liquids, must be emptied, cleaned and purged on-site prior to transporting them.
- If a tank stored a combustible liquid (petroleum products other than gasoline), the tank must be leak tight. This means that the remaining residue cannot leak out through holes, fittings, etc.

For additional information pertaining to PennDOT requirements, contact PennDOT, Motor Carrier Enforcement Division, 717-787-7445.

b. Unusable product, sludges and sediments, tank bottoms and wastewater - These wastes upon removal from inside the storage tank, if hazardous wastes, must be transported by a licensed hazardous waste transporter, under manifest. The transporter must ensure that Chapter 263 is being complied with.

If the wastes are not hazardous wastes, they must be transported in accordance with Chapters 285.218 and 299.201-219, as residual wastes.

c. Contaminated Soil - Petroleum contaminated soil that is a residual waste must be transported in accordance with Chapters 285.218 and 299.201-219.

Petroleum contaminated soil that is determined to be hazardous waste and soils contaminated with products that appear on the hazardous waste lists of commercial chemical products are subject to regulation as a hazardous waste and must be transported by a licensed hazardous waste transporter, under manifest. Chapter 263 must be complied with.

d. Recovered or reclaimed product - This is considered a product. Therefore, no licensed hazardous waste transporter is required. PennDOT regulations, however, apply.

# 7. Waste Disposal/Treatment Options

- a. Empty product tank and piping Once properly emptied and cleaned, a storage tank and piping may be recycled. If they are not recycled, these wastes, if hazardous wastes, must be taken to a permitted reclamation facility or permitted hazardous waste treatment, storage or disposal facility. If non-hazardous, the wastes can be disposed of at a facility permitted to accept the wastes.
- b. Unusable product, sludges and sediments, tank bottoms and wastewater These wastes, if hazardous wastes, must be taken to a permitted reclamation facility or permitted hazardous waste treatment, storage or disposal facility.

If non-hazardous, the solids can be disposed of at a facility permitted to accept the wastes. Tank bottoms and wastewater can be treated at a facility which is designated to treat tank bottoms and wastewater and has an issued NPDES permit and waste management permit or permit-by-rule which specifies the discharge of treated tank bottoms and wastewater. The product can be separated and recovered with the remaining wastes subjected to additional treatment processes prior to discharge.

It also may be possible to discharge non-hazardous liquids to a DEP permitted sanitary sewer system. However, prior written authorization must be received from the receiving sewer authority.

c. Contaminated Soil - Contaminated soil shall be used, treated or disposed of in accordance with department regulation and policy.

Venting or low temperature stripping of contaminated soils may not be conducted without the express prior consent of DEP's Bureau of Air Quality. In general, such approval will not be granted without the provision of control measures, which are subject to prior review.

Petroleum contaminated soil that is a residual waste may be disposed of at any facility permitted to accept this type of waste. Other options include, but are not limited to, low temperature stripping and bioremediation. The department encourages alternatives to landfill disposal, however, prior review is required.

Petroleum contaminated soil that is determined to be hazardous waste and soils contaminated with products that appear on the hazardous waste lists of commercial chemical products are subject to regulation as a hazardous waste and must be taken to a permitted reclamation facility or permitted hazardous waste treatment, storage or disposal facility.

# 8. Release Reporting

An owner or operator must notify the appropriate regional office of the department as soon as practicable, but no later than two hours, after the confirmation of a reportable release, in accordance with 25 Pa. Code Chapter 245, Subchapter D, Section 245.305(a)(4), and immediately initiate corrective action. See Attachment 1 for the appropriate release reporting telephone numbers.

In addition, certified installers must report to the department, utilizing the "Notification of Contamination" form, a release of regulated substance or confirmed or suspected contamination from regulated substances observed while performing tank handling activities. This reporting is required by 25 Pa. Code Chapter 245, Subchapter B, Section 245.132(a)(4) (relating to standards of performance).

#### C. Site Assessment

The purpose of a site assessment is to determine if contamination is present around each storage tank system as a result of any leaks and/or spills which may have occurred during the operation of the current or any previously existing storage tank system. It is important to remember that the storage tank system includes all underground piping and ancillary equipment. Subsurface piping should be exposed and the trench it was laid in carefully examined for signs of obvious contamination wherever access to the piping is possible. The tank system closure is <u>not</u> complete until a site assessment has been performed.

A site assessment is not required if:

- A properly installed, calibrated, operated and maintained vapor or ground water monitoring system is operating as a release detection method up to the time of permanent closure and the system has given no indication that a release has occurred (The specific requirements for vapor and ground water monitoring release detection systems are found at 40 CFR Part 280, Subpart D Release Detection, Sections 280.43(e) and (f), respectively); and
- A release does not occur during tank system closure; and
- No obvious contamination is observed during tank system closure.

In certain instances, the owner of an UST system may wish to close only a portion of the system. This "partial" closure of the UST system is a permanent closure and requires a site assessment of the portion(s) of the system that is/are to be closed (e.g. product delivery lines, dispensers, remote fills).

In completing the site assessment for a partial UST system closure, perform the site assessment for the part(s) of the system being closed according to the following sections for closure-by-removal or closure-in-place, depending on the option that is chosen.

Note that closure operations which pull or lift piping out of the ground are considered closure-in-place for purposes of site assessment, as they do not allow a thorough inspection and visual evaluation of the conditions in the vicinity of the piping.

In cases where the tank is located over a concrete pad, the decision to sample beneath the pad or at the edges of the pad and the specific locations where to take confirmatory samples is effected by factors such as the areal extent, condition, and thickness of the pad, and whether there is any slope or surface irregularities to the pad that could influence the direction of liquid flow through or off the pad. Because of the variability of conditions that may be encountered, the regional office should be contacted for specific requirements when tanks on concrete pads are encountered during removal or closure-in-place.

1. Tank System Removed from the Ground (See diagram on page 16)

If the storage tank system is going to be removed from the ground, the site assessment will be performed during the removal from service activities. Therefore, the person(s) conducting the site assessment must be present during the excavation of any material necessary to remove the tank system. The recommended site assessment procedures are as follows:

### a. Excavate Soil/Backfill

Begin by excavating only that amount of soil and backfill material necessary to remove the tank system from the ground while observing for evidence of obvious contamination. (Once the tank system is removed from the ground, removal of any soil more than three feet beyond the tank system in any direction, will be considered as remedial activity and will not require the use of a certified installer.) Obvious contamination includes, but is not limited to:

- (1) Product stained or product saturated soil or backfill,
- (2) Ponded product in the excavation,
- (3) Free product or sheen on the water in the excavation.

Obviously contaminated soils must be segregated from soils not suspected to be contaminated during excavation. This may be accomplished by visual observation and by field screening the soils as they are excavated using field instruments such as photoionization detectors, flame ionization detectors, portable gas chromatographs and other appropriate field measurement procedures. The document "Field Measurements: Dependable Data When You Need It," (EPA/530/UST-90/003) prepared for the U.S. Environmental Protection Agency, September 1990, describes a number of analytical field procedures.

Segregation of soils during excavation will facilitate laboratory testing, treatment and disposal. Also, excavated soils should be segregated from concrete and asphalt material. Soils should be stored in accordance with Section VI.B.3, page 9.

If obvious contamination is observed, the owner or operator must proceed as in Section "b." below. If obvious contamination is not observed, the owner or operator must proceed as in Section "c".

### b. Obvious Contamination

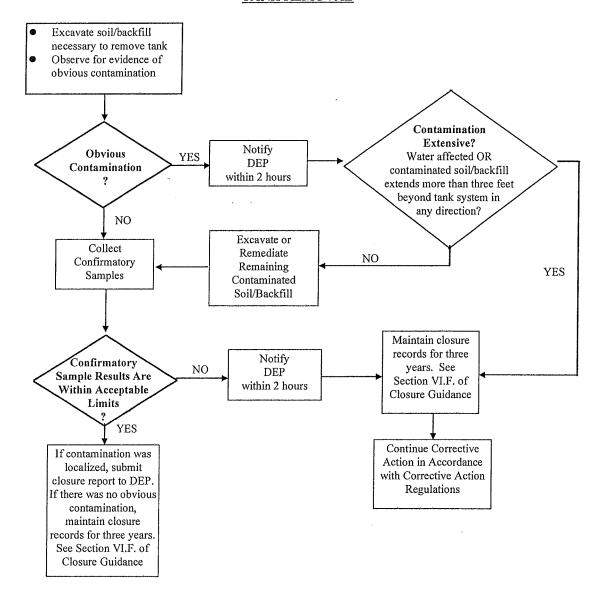
If obvious contamination is observed, the owner or operator must notify the appropriate regional office of DEP within two hours. See Attachment 1 for release reporting telephone numbers.

If obvious contamination is observed and the obviously contaminated soils are not segregated from soils not suspected to be contaminated, the excavated soils may not be placed back in the excavation without treatment and/or testing. If the obviously contaminated soils are segregated from soils not suspected to be contaminated, the believed to be "uncontaminated" soil pile must be sampled in accordance with Section "d.(5)" before being placed back in the excavation or reused on-site.

### (1) Localized Contamination

Localized contamination is defined as contamination that does not extend more than three feet beyond the tank system in any direction, and does not impact water in the excavation.

# SITE ASSESSMENT TANK REMOVAL



In order to check if contamination is localized, proceed with the excavation of up to three feet of soil extending from the tank system. If, after excavation, soil and any water in the excavation appear visibly uncontaminated, proceed with the confirmatory sampling protocol (Section "d"). Submit the closure report form (Attachment 4) or other report satisfying the requirements of §245.310(b) within 180 days of reporting the release (see Section VI.F., page 31). Note that the confirmatory sample locations in section "d" do not apply if the excavation has extended more than three feet from any part of the tank system being closed.

While it is advisable to leave the excavation open until the sample analysis results are known, safety considerations may warrant that the excavation be backfilled once the samples are obtained. In such a case, however, where sample results indicate unacceptable levels of contamination, additional corrective action will be required.

# (2) Extensive Contamination

Extensive contamination is defined as contamination which extends more than three feet beyond the tank system in any direction, or impacts water in the excavation. Additional site characterization and corrective action will be required in cases of extensive contamination. In this circumstance, the requirements of the corrective action process regulations must be followed.

Where contamination is extensive, confirmatory samples need not be obtained. However, it may be desirable to take samples for purposes of beginning the site characterization. Records of the closure site assessment must be maintained in accordance with Section VI.F.

### c. No Obvious Contamination

If obvious contamination is not observed, proceed with the confirmatory sampling protocol (Section "d."). Records of the closure site assessment must be maintained in accordance with Section VI.F.

If obvious contamination is not observed, the soil pile from the excavation does not have to be sampled if the soil is being reused on-site. However, if the confirmatory sampling performed in accordance with Section "d." reveals contamination exceeding the department's statewide standards/action levels, the department may require sampling of the soil pile.

While it is advisable to leave the excavation open until the sample analysis results are known, safety considerations may warrant that the excavation be backfilled once the samples are obtained. In such a case, however, where sample results indicate unacceptable levels of contamination, additional corrective action will be required.

# d. <u>Confirmatory Sampling Protocol/Tank System Removal</u> (See table on page 19)

This sampling protocol applies <u>only</u> where there is <u>no obvious contamination</u>, or where there is <u>localized contamination</u>. Where extensive contamination has been established, and a site characterization must be performed, a site-specific sampling protocol must be developed to determine the magnitude and extent of the contamination.

All confirmatory samples (with the exception of "uncontaminated" soil pile sampling) must be discrete samples collected in the native soil, one foot below the product delivery

line and two feet below product dispensers, tanks and remote fills. Where bedrock and backfill interface, samples of the backfill may be collected. Where water is encountered, both soil and water samples must be collected. Soil samples are to be taken just above the soil/water interface.

Samples must be collected from <u>all</u> of the following locations for <u>each</u> tank system:

- (1) <u>Product Dispensers</u>: one sample below each product dispenser, including dispensers which distribute multiple products.
- Product Delivery Lines: one sample from within the piping trench below the product delivery line, directly below a swing joint, flex connector or pipe elbow, if one exists. In cases where there is no swing joint, flex connector or pipe elbow, one sample must still be taken. The exact location of the sample should be chosen by the person conducting the site assessment at a location which in their judgment is most likely to indicate any release of regulated substance. If product delivery lines to different tanks lie within two feet of each other and carried the same product (e.g. gasoline), the piping runs may be sampled as if only one product delivery line was present.

Closure operations which involve pulling or lifting the piping out of an unexposed or unexcavated trench are to be considered closure-in-place as they do not allow a thorough inspection and evaluation of the soil conditions in the vicinity of the piping. See Section VI.C.2.e.(2), page 22.

The location of the sample along the piping run must be shown on the sampling plot plan. Photographs showing the exposed piping trench should be included with the closure records.

### (3) Tanks:

Where water is not encountered in the tank excavation, soil samples must be collected as follows:

• For tank capacities up to and including 1,000 gallons, one sample below the bottom of the tank directly below the fill connection and one sample below the bottom of the tank directly below the product.

# CONFIRMATORY SAMPLING PROTOCOL TANK REMOVAL Number of Samples

er erskriger erstelske		NO WATER E	NCOUNTERED			
	TANKS*		PRODUCT	DELIVERY	REMOTE FILL	
	<= 1000 GAL	1001-20000 GAL	DISPENSERS	LINES	(IF PRESENT)	
SOIL**	2	3	1	1***	1	
COMMENTS	Take Samples 2 Ft. Tank-See Section d 20 For Specific Loc	. (3), Pages 18 and	Take 1 Sample Per Dispenser, 2 Ft. Below Surface Directly Under Dispenser	Take 1 Ft. Below Line	Take 2 Ft. Below Fill Opening	

	The second of the state of the	WATER ENC	COUNTERED			
	TANKS*		PRODUCT	DELIVERY	REMOTE FILL	
	<= 1000 GAL	1001-20000 GAL	DISPENSERS	LINES	(IF PRESENT)	
SOIL**	2	2	1	1***	1	
WATER	1	2	****	****	****	
COMMENTS	Take Soil Samples Just Above Soil/Water Interface Along Each Long Wall Of Excavation-Take Water Samples From Water Surface In Excavation		Take 1 Sample Per Dispenser, 2 Ft. Below Surface Directly Under Dispenser	Take 1 Ft. Below Line	Take 2 Ft. Below Fill Opening	

- \* For tanks in excess of 20,000 gallons, contact the DEP-Regional Office responsible for the county in which the tank is located.
- \*\* Where obvious contamination is observed, one composite sample per 100 cubic yards of the uncontaminated soil pile must be collected at a minimum depth of 12 inches, if it is intended to be reused on-site. Also, for up to 100 cubic yards, one discrete sample for each 50 cubic yards or fraction thereof, of the contaminated soil pile must be collected, if it is intended to be reused on-site. One discrete sample for each additional 100 cubic yards of contaminated soil must also be taken. The samples are to be taken from the most obviously contaminated areas based upon visual observation and field screening.
- \*\*\* If piping is closed-in-place, see Section VI.C.2.e. (2), p. 22.
- \*\*\*\* Assumes water is not encountered.

delivery line connection. In cases involving the removal of more than one tank from a single excavation, soil samples are to be collected for each individual tank.

- For tank capacities of 1,001 up to and including 20,000 gallons, one sample below the bottom of the tank directly below the fill connection, one sample below the bottom of the tank directly below the product delivery line connection, and one sample below the bottom center line of the tank away from the fill and product delivery line connection sampling locations. In cases involving the removal of more than one tank from a single excavation, soil samples are to be collected for each individual tank.
- For tank capacities over 20,000 gallons, additional samples may be required. Contact the appropriate regional office for further guidance.

In cases where more than two feet of soil has been removed from below the tank to remove localized contamination, take samples from the surface of the bottom of the excavation as soon as possible following tank removal.

Where water is encountered in the tank excavation, water samples must be collected in addition to soil samples, as follows:

- For tank capacities up to and including 1,000 gallons, one water sample from the water surface in the excavation and one soil sample from each long wall (total of two soil samples) just above the soil/water interface. In cases involving the removal of more than one tank (assuming each tank is 1,000 gallons or less in size) from a single excavation, the excavation may be sampled as if it contained only one tank. For example, if a single excavation was opened to remove three 1,000 gallon tanks, the sampling requirement would continue to be one water sample from the water surface in the excavation and two soil samples, one from each long wall of the excavation taken just above the soil/water interface.
- For tank capacities of 1,001 up to and including 20,000 gallons, two water samples from the water surface in the excavation and one soil sample from each long wall (total of two soil samples) just above the soil/water interface. In cases involving the removal of more than one tank (assuming at least one is 1,001 up to and including 20,000 gallons in size), from a single excavation, the excavation may be sampled as if it contained only one tank.
- For tank capacities over 20,000 gallons, additional samples may be required. Contact the appropriate regional office for further guidance.
- (4) <u>Remote Fills:</u> if a remote fill is present, one sample below the fill opening.
- (5) <u>Soil Pile Sampling:</u> In cases where obvious contamination was observed (either localized or extensive) and soil was segregated into "presumably contaminated" and "presumably uncontaminated" piles:
  - (a) One composite sample per 100 cubic yards of the "presumably uncontaminated" soil must be collected and analyzed prior to reuse of the soil on-site. Each composite sample should consist of four subsamples

of the soil pile collected at a minimum depth of twelve inches into the soil pile.

(b) For up to 100 cubic yards, one discrete sample for each 50 cubic yards or fraction thereof, of the "presumably contaminated" soil must be collected and analyzed prior to reuse of the soil on-site. One discrete sample for each additional 100 cubic yards of soil must also be taken. The samples are to be taken from the most obviously contaminated areas based upon visual observation and field screening. Sampling may be conducted prior to or following any treatment. Treatment and disposal options for contaminated soil are discussed in Section VI.B.7.c., page 13.

It is important to understand that soil which exhibits contaminant levels below the department's statewide standards/action levels provided in Attachment 5 is not necessarily considered "clean fill." This soil, which frequently contains some level of contamination, can be spread on the site or placed back in the excavation provided the "standards for reuse of soil on-site" values of Attachment 5 are met. In addition, there must be no free liquids left in the soil based on visual inspection and the soil should not create any odor nuisance. If off-site use of the soil is desired, the owner of the soil should contact the appropriate regional office waste management staff.

2. Tank System Closed-in-Place or Change-in-Service (See diagram on page 23)

The department does not recommend closure of tanks in-place. However, there may be certain instances where structural considerations or access problems prevent tank system removal. The recommended site assessment procedures are as follows:

- a. Physically determine whether water will be encountered in the sampling process (i.e. between the ground surface and two feet below the bottom elevation of the tank).
- b. If water is not encountered, samples must be collected in the native soil, one foot below the product delivery line and two feet below product dispensers, tanks and remote fills. Where bedrock and backfill interface, samples of the backfill may be collected. Samples are to be collected in accordance with Section "e." below.
- c. If water is encountered, both soil and water samples must be collected. Soil samples are to be taken just above the soil/water interface. Samples are to be collected in accordance with Section "e." below.
  - Note: Where water is encountered between the ground surface and bottom elevation of the tank, sampling through the bottom of the tank should not be conducted. In this instance, tank sampling should be performed by conducting perimeter soil borings as in Section "e. (3)(b)" below. Perimeter soil borings are also necessary when performing a "change-in-service," regardless of water conditions.
- d. In the conduct of determining depth to water, performing soil borings or obtaining soil or water samples, observe the soil or water for evidence of obvious contamination (i.e. product stained or product saturated soil, sheen or free product in the water sample).
- e. Except where noted, samples must be collected from <u>all</u> of the following locations for <u>each</u> tank system (Also see table on page 25):
  - (1) <u>Product Dispensers</u>: one sample below each product dispenser, including dispensers which distribute multiple products.

# (2) <u>Product Delivery Lines</u>:

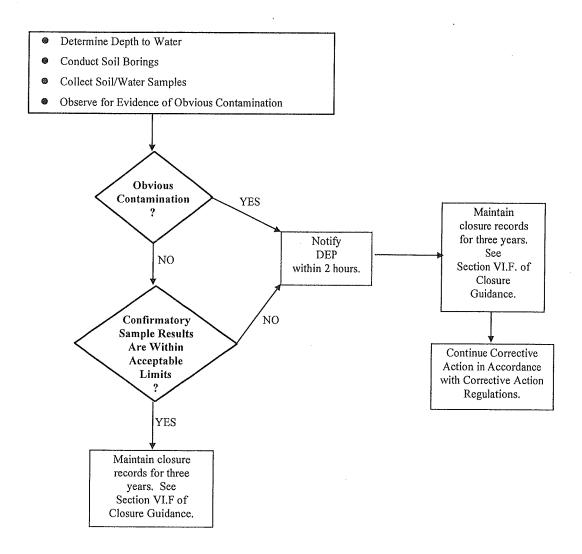
Where product delivery lines are going to be left in-place, pulled or lifted from the ground such that the trench they were installed in cannot be thoroughly inspected and evaluated visually, the lines are to be considered as closed-in-place and the sampling protocol is as follows:

One sample every 20 linear feet below each product delivery line or portion thereof (one sample minimum) up to a maximum of five samples for 81-100 feet of piping. Where the product delivery line is less than 20 feet in length, one sample is still required. Sampling locations should be evenly spaced. Indicate total length of piping in Section III of the Closure Report Form. If product delivery lines to different tanks lie within two feet of each other and carried the same product (e.g., gasoline), the piping runs may be sampled as if only one product delivery line was present. If an individual product delivery line consists of more than 100 linear feet or if it is inaccessible because of a building or some other obstacle, contact the regional office responsible for the county in which the tank is located for site-specific guidance.

# (3) <u>Tanks:</u>

- (a) Where soils under the tank are accessible, samples are to be collected as follows:
  - For tank capacities up to and including 1,000 gallons, one sample below the bottom of the tank directly below the fill connection and one sample below the bottom of the tank directly below the product delivery line connection.

# SITE ASSESSMENT TANK CLOSED-IN-PLACE OR CHANGE-IN-SERVICE



- For tank capacities of 1,001 up to and including 20,000 gallons, one sample below the bottom of the tank directly below the fill connection, one sample below the bottom of the tank directly below the product delivery line connection, and one sample below the bottom center line of the tank away from the fill and product delivery line connection sampling locations.
- For tank capacities over 20,000 gallons, additional samples may be required. Contact the appropriate regional office for further guidance.
- (b) Where access to soils under the tank is restricted or where water is encountered between the ground surface and bottom elevation of the tank, samples are to be collected by conducting perimeter soil borings. The borings are to be located as close to the tank as possible, preferably within the backfill, at a distance no greater than five feet from the perimeter of the tank, as follows:
  - For tank capacities up to and including 3,000 gallons, one boring along each of the four sides of the tank.
  - For tank capacities of 3,001 up to and including 20,000 gallons, two borings along each long wall and one boring along each end wall of the tank.
  - For tank capacities over 20,000 gallons, additional borings may be required. Contact the appropriate regional office for further guidance.
- (4) Remote Fills: one sample below the fill opening.
- f. If obvious contamination is observed, the owner or operator must notify the appropriate regional office within two hours. See Attachment 1 for release reporting telephone numbers. In this circumstance, the requirements of the corrective action process regulations must be followed. Site characterization will be required. Confirmatory samples and laboratory analysis are not necessary to complete the tank closure. Do not fill the tank with an inert, solid, non-shrinking material, until it has been determined that it will be unnecessary to remove the tank as part of the corrective action process. See Section VI.F., page 31, for options on submission and maintenance of closure site assessment records.
- g. If obvious contamination is not observed, all samples collected must be quantified by a laboratory. Do not fill the tank with an inert, solid, non-shrinking material until the analytical results are received and it has been determined that corrective action will not be necessary. See Section VI.F., page 31, for options on submission and maintenance of closure site assessment records.

# CONFIRMATORY SAMPLING PROTOCOL CLOSURE-IN-PLACE OR CHANGE-IN-SERVICE Number of Samples

	SOIL UNDER TANK ACCESSIBL  TANKS*		PRODUCT	DELIVERY	REMOTE FILL
	<= 1000 GAL	1001-20000 GAL	DISPENSERS	LINES	(IF PRESENT)
SOIL	2	3	1	1**	1
COMMENTS	Tank-See Section e. (3)(a), Pages 22 and 24 For Specific Locations		Take 1 Sample Per Dispenser, 2 Ft. Below Surface Directly Under Dispenser	Take 1 Ft. Below Line	Take 2 Ft. Below Fill Opening
	SOIL UNDER W TAN <= 1000 GAL	VITHIN 2 FEET O	BLE - WATER EN OF TANK BOTTO PRODUCT DISPENSER	COUNTERED M DELIVERY LINES	REMOTE FILI (IF PRESENT)
SOIL	2	3	1	1**	1
WATER	2.	3	***	***	***
COMMENTS	Take Soil Samples I Soil/Water Interface Samples From Water Section e. (3)(a), Pa Specific Locations	e-Take Water er Surface-See	Take 1 Sample Per Dispenser, 2 Ft. Below Surface Directly Under Dispenser	Take 1 Ft. Below Line	Take 2 Ft. Below Fill Opening
ВЕТ	SOIL UNDER TAI WEEN TANK BOT	NK NOT ACCESS TOM AND GRO	IBLE OR WATE	R ENCOUNTERED  Jsing Perimeter Bo  DELIVERY	Orings) REMOTE FILI
	<3000 GAL	3001-20000 gal	DISPENSER	LINES	(IF PRESENT)
SOIL	4	6	1	1**	1
WATER	4	6	***	***	***
COMMENTS			Take 1 Sample Per Dispenser, 2 Ft. Below Surface	Take 1 Ft. Below Line	Take 2 Ft. Below Fill Opening

<sup>\*</sup> For tanks in excess of 20,000 gallons, contact the DEP Regional Office responsible for the county in which the tank is located.

<sup>\*\*</sup> If piping is also closed-in-place, see Section VI.C.2.e. (2), p. 22.

<sup>\*\*\*</sup> Assumes water is not encountered.

# D. Sampling Requirements

Samples collected to comply with the site assessment requirements shall comply with the following requirements:

- 1. Because of the volatile nature of many products, perform collection and handling of samples in such a way as to disturb the samples as little as possible. With the exception of uncontaminated soil pile sampling, samples must be discrete samples which are representative of the conditions at one location and not composite samples. Samples should be collected promptly and water samples should be as free of sediment as possible.
- 2. If the excavation, piping trench or tank can be entered in accordance with applicable OSHA regulations, samples may be collected using a hand auger or trowel for non-volatile analytes, or with an appropriate sampling device for volatile analytes.
- 3. If the excavation or piping trench cannot be entered safely for sampling, samples may be collected using a hand auger extension or from a backhoe bucket. Samples should be collected as rapidly as is physically possible to reduce the loss of volatile analytes.
- 4. If the samples are to be collected by drilling, split spoon and thin-walled samplers are required. Grab samples collected from drill cuttings are not acceptable. The department recommends that drilling and sample collection be conducted in accordance with applicable American Society of Testing and Materials (ASTM) standard methods or other comparable methods. For information, contact the ASTM, 1916 Race Street, Philadelphia, PA 19103, telephone 215-299-5400. Ask for Publication 4.08.
- 5. All soil samples must be taken from freshly exposed soil.
- 6. All soil sampling tools should be thoroughly cleaned before use at each sampling point using water/detergent, methanol or other appropriate solvents. All rinsates must be collected and properly disposed. Dedicated or disposable sampling tools may also be used.
- 7. Perform sample collection and handling in accordance with protocol established for the analytical methodology to be utilized. See page 28 for a table of the containers, preservatives, and holding times that are specified in the analytical methods used in the Pennsylvania DEP storage tank program.
- 8. Sample containers should be clearly labeled and promptly sealed and placed on ice for transport to the laboratory. Reusable ice packs ("blue ice") are not acceptable unless samples have been pre-chilled. Samples should be shipped to the laboratory as soon as possible. Do not allow samples to be held so that the maximum holding time is violated. Follow and document proper chain-of-custody procedures. Laboratories must document that samples meet all applicable preservation requirements.

- 9. Do not conduct field screening of soil samples with field instrumentation such as flame ionization detectors, photoionization detectors and portable gas chromatographs on the portion of the soil sample to be submitted to a laboratory for analysis. Place soil samples for laboratory analysis in a sample container immediately after collection. A portion of this sample can be retained in a separate clean container for the field screening procedure.
- 10. Store all samples at 4°C until analysis. Sample storage should be in an area free of organic solvent vapors and direct or intense light.
- 11. EPA Method 5035 is a new sample collection protocol that <u>must</u> be applied whenever soil samples are collected for volatile analyses. The method provides two different sample collection and preservation procedures based on the level of contamination present in the soil sample. Procedures are supplied for collecting and preparing soil samples containing low and high concentrations of volatile organic compounds (VOCs). However, based on the lowest cleanup level, the low level concentration procedures will not apply except in the case of analyses of 1,2-Dibromoethane. Low level concentrations of contaminants are defined in the method as soils containing 0.5 to 200 ug/kg of contaminants. Samples that are expected to be greater than 200 ug/kg should be sampled using the high level concentration procedures. For samples with low concentration of VOCs there are two options for the collection and preservation of the sample:
  - place soil into a soil sample vial which contains a preservative compound.
  - collect the soil in an apparatus which is airtight and affords little to no headspace (such as the En Core™ sampler) in order to eliminate loss of contaminants due to volatilization. Soil from this type of sampler must be transferred to a soil sample vial containing a preservative as soon as possible, or analyzed within 48 hours, to prevent loss of contaminants due to biodegradation.

For samples with high concentration of VOCs there are three options for the collection and preservation of the sample:

- place soil into a soil sample vial which contains a preservative compound.
- collect the soil in an apparatus which is airtight and affords little to no headspace (such as the En Core™ sampler) in order to eliminate loss of contaminants due to volatilization. Soil from this type of sampler must be transferred to a soil sample vial containing a preservative as soon as possible, or analyzed within 48 hours, to prevent loss of contaminants due to biodegradation.
- ollect sample without preservation, however, the sample container must be filled as much as possible in order to minimize headspace. Sampling without preservation procedures should only be done when it is not possible to sample with preservatives in the sample container, or when a soil collection device which is airtight and affords little to no headspace (such as the En Core™ sampler) cannot be used. The department does not recommend the use of this option, and will require adequate justification of its use before accepting the analytical data.

Documentation of which option(s) was/were used in sample collection must accompany the analytical results.

# RECOMMENDED CONTAINERS, PRESERVATIVES AND HOLDING TIMES FOR SAMPLES COLLECTED DURING CLOSURE SITE ASSESSMENTS

Medium	Method	Container/ Sample Size	Preservative	Holding Time	Reference
Aqueous Samples With No Residual	5030B/8011, 5030B/8021B or 5030B/8260B	2 X 40-mL vials with Teflon- lined septum caps	Cool to 4°C and adjust pH to < 2 with H <sub>2</sub> SO <sub>4</sub> , HCL or solid NaHSO <sub>4</sub>	14 Days	Table 4-1, SW-846, Revision 3, December 1996
Chlorine Present <sup>1</sup>	8270C or 8310	1-gal., 2 X 0.5-gal., or 4 X 1-L amber glass container with Teflon-lined lid	Cool to 4°C	Samples extracted within 7 days and extracts analyzed within 40 days after extraction	
	504.1	2 X 40 mL vials with Teflon- lined septum caps	Cool to 4°C	14 days	EPA Method 504.1, Revision 1.1, (1995)
	524.2	2 X 40-mL vials with Teflon- lined septum caps	Adjust pH to < 2 at time of collection <sup>2</sup> , using two drops of 1:1 HCL for each 40-mL of sample. Cool to 4°C.	14 days	EPA Method 524.2, Revision 4.1, (1995)
	525.2	1-gal., 2 X 0.5-gal., or 4 X 1-L amber glass container with Teflon-lined lid	Adjust pH to < 2 at time of collection <sup>2</sup> , using 6 N HCL. Cool to 4°C.	Samples extracted within 14 days and extracts analyzed within 30 days after extraction	EPA Method 525.2, Revision 2.0, (1995)
	6020 or 7421	600-mL glass or plastic containers. Use only polyethylene or fluorocarbon containers for Method 6020.	Filter on site through .45-μm filter, preserve with HNO <sub>3</sub> to pH < 2	6 months	Table 3-1, SW- 846, Revision 3, December 1996; and Table 11-1, SW-846, Revision 0, September 198
Solid Samples (e.g. soil, sediments, sludges, ash)	5035/8021B <sup>3, 4</sup> or 5035/8260B <sup>3, 4</sup>	Low Concentration Soil Samples 2 X 40 mL glass vials containing a clean magnetic string bar with Teflon-lined septum caps, OR use a soil collection device which is airtight and affords little to no headspace (such as the En Core <sup>TM</sup> sampler), which can also serve as a storage container after sample collection.	Collect 5.0± 0.5 g of sample in a glass vial preserved with l g of sodium bisulfate and 5 mL of organic-free reagent water. If samples are markedly smaller or larger than 5 g, adjust the preservative amount by 0.2 g for each 1 g of sample, OR use a soil collection device such as the En Core™ sampler. Cool to 4°C.	14 days. Soil collected and stored in a sampling device like the En Core™ sampler must be transferred to a sample container with the appropriate preservative, as soon as possible, or analyzed within 48 hours of collection.	Table 4-1, SW-846, Revision 3, December 1996 and EPA Method 5035, Revision 0, December 1966
		High Concentration Soil Samples 2 - glass vials capable of holding 5 g of soil or solid material to be tested and 10 mL of methanol and can be sealed with a screw- cap containing a Teflon-lined septum, OR use a soil collection device such as the En Core <sup>TM</sup> sampler.	Collect $5.0 \pm 0.5$ g of sample in a glass vial preserved with 10 mL of methanol, OR use a soil collection device such as the En Core <sup>TM</sup> sampler. Cool to 4°C.		
	8270C or 8310	250-mL widemouth glass container with Teflon-lined lid	Cool to 4°C	Samples extracted within 7 days and extracts analyzed within 40 days after extraction	
	6010B or 7420	200 g plastic or glass container	None	6 months	Table 3-1, SW-846, Revision 3, December 1996; and Table 11-1, SW-846, Revisior 0, September 1986

### Footnotes:

- 1. If samples are possibly chlorinated, collector must follow dechlorination procedures listed within each method.
- 2. Addition of HCL to the sample bottles prior to shipping to the sampling site is not permitted.
- 3. Each type of soil sample (low and high concentration) will require one additional sample that is <u>not</u> preserved for moisture determination. Use at least a 40-mL glass vial teflon-lined cap.
- 4. Documentation of the sampling option(s) used must accompany the laboratory results.

# E. Analytical Requirements

The following table specifies the analytical requirements for soil and water samples collected during the site assessment to determine whether a storage tank site may be closed pursuant to this guidance document or is subject to the corrective action process regulations. Other recognized methods may be used if approved by the appropriate DEP regional office.

PRODUCT STORED	PARAMETERS TO BE TESTED IN SOIL	ANALYTICAL METHOD (reported on a dry weight basis)	PARAMETERS TO BE TESTED IN WATER	ANALYTICAL METHOD
Leaded Gasoline,	Benzene	EPA Method 5035/8021B or	Benzene	EPA Method
Aviation	Toluene	5035/8260B	Toluene	5030B/8021B,
Gasoline,	Ethyl Benzene		Ethyl Benzene	5030B/8260B or 524.2
and Jet Fuel	Xylenes (total)		Xylenes (total)	]
	Gumene		Cumene	]
	Naphthalene	]	Naphthalene	
	Dichloroethane, 1,2-		Dichloroethane, 1,2-	7
	Dibromoethane, 1,2- (Ethylene Dibromide)		Dibromoethane, 1,2- (Ethylene Dibromide)	EPA Method 8011 or 504.1
	Lead (total)	EPA Method 6010B or 7420	Lead (dissolved)	EPA Method 6020 or 7421
Unleaded	Benzene	EPA Method 5035/8260B	Benzene	EPA Method
Gasoline	Toluene		Toluene	5030B/8260B or 524.2
	Ethyl Benzene		Ethyl Benzene	
	Xylenes (total)		Xylenes (total)	
	Cumene		Cumene	
	Methyl Tert-Butyl Ether (MTBE)		Methyl Tert-Butyl Ether (MTBE)	
	Naphthalene		Naphthalene	
Kerosene,	Benzene	EPA Method 5035/8021B or	Benzene	EPA Method
Fuel Oil No. 1	Toluene	5035/8260B	Toluene	5030B/8021B,
	Ethyl Benzene		Ethyl Benzene	5030B/8260B or 524.2
	Cumene		Cumene	
	Naphthalene		Naphthalene	
	Fluorene	EPA Method 8270C or 8310	Fluorene	EPA Method 8270C, 8310 or 525.2
Diesel Fuel,	Benzene	EPA Method 5035/8021B or	Benzene	EPA Method
Fuel Oil No. 2	Toluene	5035/8260B	Toluene	5030B/8021B,
	Ethyl Benzene		Ethyl Benzene	5030B/8260B or 524.2
	Cumene		Cumene	
	Naphthalene		Naphthalene	
	Fluorene	EPA Method 8270C or 8310	Fluorene	EPA Method 8270C,
	Phenanthrene	1	Phenanthrene	8310 or 525.2

PRODUCT STORED	PARAMETERS TO BE TESTED IN SOIL	ANALYTICAL METHOD (reported on a dry weight basis)	PARAMETERS TO BE TESTED IN WATER	ANALYTICAL METHOD
Fuel Oil Nos.	Benzene	EPA Method 5035/8021B or	Benzene	EPA Method
4, 5 and 6, and	Naphthalene	5035/8260B	Naphthalene	5030B/8021B,
Lubricating Oils				5030B/8260B or 524.2
and Fluids	Fluorene	EPA Method 8270C or 8310	Phenanthrene	EPA Method 8270C,
	Anthracene		Pyrene	8310 or 525.2
	Phenanthrene		Chrysene	
	Pyrene			
	Benzo(a)anthracene			
	Chrysene			
	Benzo(b)fluoranthene			
	Benzo(a)pyrene			
	Benzo(g,h,i)perylene			
Used Motor Oil	Benzene	EPA Method 5035/8021B or	Benzene	EPA Method
	Toluene	5035/8260B	Toluene	5030B/8021B,
	Ethyl Benzene		Ethyl Benzene	5030B/8260B or 524.2
	Cumene		Cumene	
	Naphthalene		Naphthalene	
	Pyrene	EPA Method 8270C or 8310	Pyrene	EPA Method 525.2
	Benzo(a)anthracene		Benzo(a)anthracene	
	Chrysene		Chrysene	
	Benzo(b)fluoranthene		Benzo(b)fluoranthene	
	Benzo(a)pyrene		Benzo(a)pyrene	
	Indeno(1,2,3-cd)pyrene		Indeno(1,2,3-cd)pyrene	
	Benzo(g,h,i)perylene		Benzo(g,h,i)perylene	,
	Lead (total)	EPA Method 6010B or 7420	Lead (dissolved)	EPA Method 6020 or 7421
Other Petroleum Products Blended Petroleum				
Products	Contact Regional Office	Responsible for County in Whic	ch Tank is Located	
Unknown		•		
Petroleum				
Products				
Other Regulated Substances				

# Notes:

When reporting non-detects (ND), the data must be accompanied by a numerical quantitation limit that takes into account dilution, sample preparation, and matrix effects.

The responsible party has the obligation to ensure that the analytical methodologies and techniques employed are suitable to provide data that meets the minimal data quality objectives outlined and referenced in this document.

Laboratories must document that samples meet all applicable preservation requirements.

### F. Submission and Maintenance of Closure Site Assessment Records

Federal regulations governing closure of USTs, published at 40 CFR Part 280, Subpart G, became effective on December 22, 1988. On September 20, 1991, the department incorporated those regulations into Pennsylvania law by reference at 25 Pa. Code §245.2. Section 280.74 of the federal (and Pennsylvania's) regulations states that the results of the tank system excavation zone assessment (site assessment) must be maintained for at least three years after completion of permanent closure or change-in-service in one of the following ways:

- (a) By the owners and operators who took the UST system out of service;
- (b) By the current owners and operators of the UST system site; or
- (c) By mailing these records to the implementing agency if they cannot be maintained at the closed facility.

At least one option must be chosen. If option (c) is chosen, the site assessment records should be sent to the DEP regional office responsible for the county in which the tank was located. The department has developed an "Underground Storage Tank System Closure Report Form" (Attachment 4). A completed Closure Report Form will satisfy the site assessment records requirement. Also keep in mind that an amended "Registration of Storage Tanks" form must be submitted to the Division of Storage Tanks indicating that the UST or USTs have changed status to permanently closed.

### G. Evaluation of Need for Corrective Action

Based on the analytical results for the confirmatory samples collected during the site assessment, the owner or operator may be required by the department to undertake or continue corrective action.

On May 19, 1995, Governor Tom Ridge signed the Land Recycling and Environmental Remediation Standards Act (Act 2) into law. This law became effective on July 18, 1995. Act 2 establishes cleanup levels and liability protection for releases from storage tanks regulated under Act 32. However, Section 904(c) of Act 2 preserves the corrective action process for the remediation of releases from storage tanks regulated by Act 32.

The department has established statewide cleanup standards/action levels for soil and water necessary to interpret the results from confirmatory sampling at closure of petroleum USTs. These are provided in Attachment 5.

Where the results of the site assessment indicate that no obvious contamination was encountered and the analytical results of the confirmatory sampling showed levels below the statewide standards/action levels, no further action is required regarding the closure of the tanks. Because no release has been documented, liability protection under Act 2 is not applicable to this closure.

Where the results of the site assessment indicate that obvious, localized soil contamination was encountered and the analytical results of the confirmatory sampling, following excavation of the contaminated soil, show levels below the statewide standards/action levels, no further action is required regarding the closure of the tanks and remediation of the site. In this case, the completed closure report form may be used to satisfy the site characterization report requirements of Section 245.310(b) of the Corrective Action Process regulations. The closure/site characterization report must be submitted to the department within 180 days of verbally reporting the release. Because a confirmed, reportable release occurred, liability protection under Act 2 is automatically afforded to this release for soils.

Where the results of the site assessment indicate that no obvious contamination or obvious, localized contamination was encountered, but the analytical results of the confirmatory sampling show levels above the statewide standards/action levels; or where there is obvious, extensive contamination, the department

must be verbally notified of the release within two hours and corrective action must continue in accordance with the CAP regulations. A copy of the closure report should be submitted as part of the site characterization report to satisfy the requirements of Section 245.310(a)(8) of the CAP regulations.

For more information on conducting cleanups in accordance with Act 2, contact any of our six regional offices. To obtain a manual and fact sheets concerning the new program contact the Land Recycling Program at 717-783-7509.

APPENDIX A Page A-1

# PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION ENVIRONMENTAL CLEANUP PROGRAM STORAGE TANK SECTION

**REGION:** 

Southeast

CONTACT:

Stephan Sinding

INFORMATION:

610-832-5949

RELEASE REPORTING:

610-832-6000 (24-hour number including weekends and holidays)

**FAX:** 610-832-6143

**REGION:** 

Northeast

CONTACT:

Ronald Brezinski

INFORMATION:

717-826-5475

RELEASE REPORTING:

717-826-2511 (24-hour number including weekends and holidays)

FAX:

717-820-4907

**REGION:** 

Southcentral

**CONTACT:** 

Gregory Bowman

INFORMATION:

717-705-4705

RELEASE REPORTING:

717-705-4705 (24-hour number including weekends and holidays)

FAX:

717-705-4830

**REGION:** 

Northcentral

CONTACT:

Philip Zechman

INFORMATION:

570-321-6525 570-321-6525 (8 a.m. to 5.p.m., M-F)

RELEASE REPORTING:

570-327-3636 (after hours, weekends and holidays)

**FAX:** 570-327-3420

**REGION:** 

Southwest

**CONTACT:** 

Anna Marie Tempero

INFORMATION:

412-442-4000

RELEASE REPORTING:

412-442-4000 (24-hour number including weekends and holidays)

FAX:

412-442-4194

**REGION:** 

Northwest

CONTACT:

Daniel Peterson

INFORMATION:

814-332-6648

**RELEASE REPORTING:** 

814-332-6945 (8 a.m. to 5 p.m., M-F)

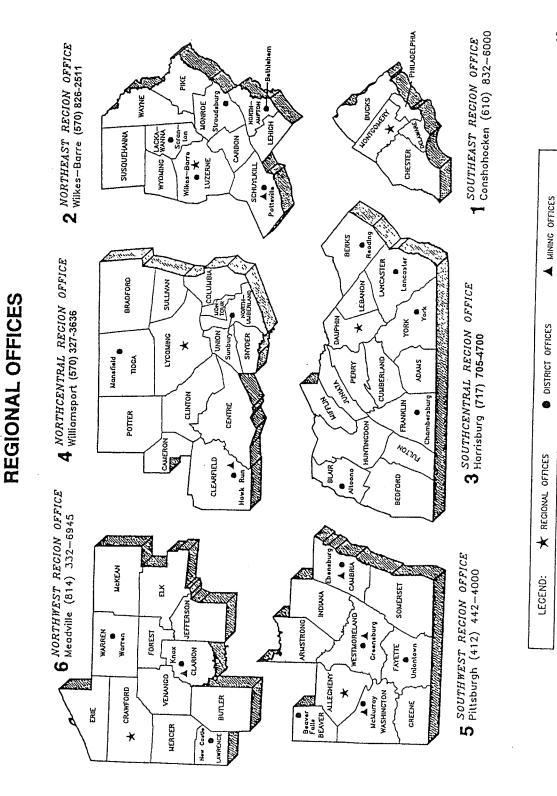
800-373-3398 (after hours, weekends and holidays)

FAX:

814-332-6121

In the event no contact is made with the appropriate region, or there is a question regarding which region to call, releases should be reported to the Harrisburg Central Office at 717-787-4343 or 800-541-2050 (in Pa. Only). These numbers are active 24 hours a day, including weekends and holidays.





2530-FM-LRWM0126 4/96

# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

# PLANNING FOR PERMANENT CLOSURE CHECKLIST

"Closure Notification Form" sent to appropriate DEP regional office with copy sent to Pennsylvania State Police (or appropriate office in Philadelphia or Allegheny County) at least 30 days prior to initiating permanent closure.
"Registration of Storage Tanks" form submitted to appropriate DEP regional office, if the USTs are required to be registered and they are not.
Pennsylvania "One-Call" contacted (800-242-1776) to have utilities mark their lines.
Local municipality contacted to obtain any necessary permits or approvals for UST system closure.
DEP certified installer hired to perform tank handling activities.
Arrangements made for site assessment and laboratory analysis of samples collected.
Material Safety Data Sheets (MSDS) obtained for all hazardous substances stored in the USTs to be closed.
Arrangements made for treatment/disposal of any contaminated soils encountered.  NOTE: Unless this item is specified in the contract, it can remain a continuing burden of the owner/operator.
"Registration of Storage Tanks" form obtained to amend facility status and submit to the Division of Storage Tanks after UST system closure is performed.  *NOTE: Unless an amended registration form is sent to the Division of Storage Tanks, registration and USTIF billing will continue.

# APPENDIX C

Page C-1

DATE RECEIVED:

2530-FM-LRWM0127 4/96

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

ATTACHMENT 3

# UNDERGROUND STORAGE TANK SYSTEM CLOSURE NOTIFICATION FORM

NOTE: Notification of permanent closure must be received by the appropriate regional office of the Department at least 30 days prior to initiation of the closure activities.

I.	Owner of Tank System						
	Owner Name						
	Street Address				Phone Nu	mber	
	City	State	;			Zi	p Code
II.	Location of Tank System						
	Facility Name			Facility Ide	entification	Number	
	Street Address	Cit	ty			State PA	Zip Code
	Municipality	Со	unty	y			
	Contact Person			Pl (	none Numb	er	
III.	Month/Day/Year of Proposed Closure//						
IV.	Certified Installer/Company Performing Tank Handling Activities	es					
	Certified Installer Name			Installer Co	ertification	Number	
	Street Address			Phone Nun	ıber	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
	City	State				Zip	Code
	Certified Company Name			Company (	Certification	1 Numbe	r
V.	Contractor/Individual Performing Site Assessment Activities		·············			***	
	Name of Contractor or Individual						
	Street Address				Phone Nu	mber	
	City	State		<u></u>		Zip	Code
VI.	Description of Underground Storage Tank Systems (See reverse si	de of f	orm	1)		<del></del> -	
VII.	Will this closure involve replacement of at least one old tank with	a new	tan	ık?			
	Yes No						
VIII.	Signature of Tank System Owner			Dat	e		

Page C-2

VI.	/I. Description of Underground Storage Tank System (Complete for each tank undergoing closure)						
*****	Tank Registration Numbe	r					
	Estimated Total Capacity		ons)				
	Substance(s) Stored Throughout Operating Life of Tank (Check All That Apply)	a.	Petroleum Unleaded Gasoline Leaded Gasoline Aviation Gasoline Kerosene Jet Fuel Diesel Fuel Fuel Oil No. 1 Fuel Oil No. 2 Fuel Oil No. 4 Fuel Oil No. 5 Fuel Oil No. 6 New Motor Oil Used Motor Oil Other, Please Specify	00000000000	000000000000		000000000000
		b.	Name of Principal CERCLA Substance AND Chemical Abstract				
			Service (CAS) No.				
	Duonessal	c.	Unknown Removal				
	Proposed Closure Method	a. b.	Removal Closure-in-Place				
	(Check Only One)	c.	Change-In-Service				
	Partial System Closure (Y	es or					
	Tank Registration Numbe	r					
	Estimated Total Capacity						
	Substance(s) Stored Throughout Operating Life of Tank (Check All That Apply)	a.				0 0000000000000000000000000000000000000	
	Proposed Clasura Mathad	a.	Removal Closure-in-Place				
	Closure Method (Check Only One)	b. c.	Change-In-Service		H H	ä	
	Partial System Closure (Y	es or	No)				

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

# UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

		Fa	acility I.D	
		Municipality		County
		Dat	te Prepare	d
		Name of Perso (Ple	on Submit	
			pany Nan Applicable	
			Title	
Clos	ure Method (Check all that apply):		Site	Assessment Results (Check all that apply):
	Removal			No Obvious Contamination - Sample Results Meet Standards/Levels
	Closure-In-Place			No Obvious Contamination - Sample Results Do Not Meet Standards/Levels
	Change-In-Service			Obvious, Localized Contamination - Sample Results Meet Standards/Levels
				Obvious, Localized Contamination - Sample Results Do Not Meet Standards/Levels
				Obvious, Extensive Contamination

COMMONWEALTH OF PENNSYLVANIA	
DEPARTMENT OF ENVIRONMENTAL PROTECTION	
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT	

DATE RECEIVED:	
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# UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Owners who are permanently closing underground storage tanks may use this form to demonstrate that an underground storage tank closure was performed in accordance with the "Closure Requirements for Underground Storage Tank Systems" document. PLEASE PRINT OR TYPE. COMPLETE ALL QUESTIONS.

# SECTION I. Owner/Facility/Tank/Waste Management and Disposal Information

<ol> <li>Facility ID Number</li> </ol>		2. Facility Name				
3. Facility County	4. Facility Mu	nicipality				
5. Facility Address						
6. Facility Contact Person _		7. Facil	ity Telephone Nu	mber ()		
8. Owner Name						
9. Owner Mailing Address						
10. Description of Undergrou	und Storage Tanks (Complete fo	r each tank closed)				
DATE OF TANK CLOSU	JRE (Month/Day/Year)					
Tank Registration Number						
Estimated Total Capacity (C						
Substance(s) Stored Throughout Operating Life of Tank (Check All That Apply)	a. Petroleum Unleaded Gasoline Leaded Gasoline Aviation Gasoline Kerosene Jet Fuel Diesel Fuel Fuel Oil No. 1 Fuel Oil No. 2 Fuel Oil No. 4 Fuel Oil No. 5 Fuel Oil No. 6 New Motor Oil Used Motor Oil Other, Please Specify			000000000000000		
NOTE: If Hazardous Substance Block is Checked, Attach Material Safety Data Sheets (MSDS)	b. Hazardous Substance Name of Principal CERCLA Substance AND				· .	
SHEETS (MISDS)	Chemical Abstract Service (CAS) No.					
	c. Unknown					
Closure Method (Check Only One)	<ul><li>a. Removal</li><li>b. Closure-in-Place</li><li>c. Change-In-Service</li></ul>					
Partial System Clasura (Va				<u> </u>		

DATE OF TANK CLOSURE (Month/Day/Year)				Month/Day/Year)		<u> </u>			
Tank Registration Number									
Estimated Total Capacity (Gallons) Substance(s) Stored a. Petroleum									
				a.	Petroleum				
Throughout Operating					Unleaded Gasoline				
Life of Tank				Leaded Gasoline					
(Check All That Apply)					Aviation Gasoline				
					Kerosene				
					Jet Fuel				
					Diesel Fuel				
					Fuel Oil No. 1				
					Fuel Oil No. 2				
					Fuel Oil No. 4				
					Fuel Oil No. 5				
					Fuel Oil No. 6				
					New Motor Oil				
					Used Motor Oil				
					Other, Please Specify				
NOT	E: If Ha	zardo	us b	٠.	Hazardous Substance				
Subst	ance Blo	ock is	Checked,		Name of Principal				
Attacl	h Mater	ial Sat	ety Data		CERCLA Substance				
Sheet	s (MSD	S)			AND				<del></del>
	`	,			Chemical Abstract			Ì	•
					Service (CAS) No.				
			c.		Unknown				
C	losure N	/letho			Removal				
((	Check C	nly O	ne) b		Closure-in-Place				
`		•	c.		Change-In-Service				
P	artial Sy	stem	Closure (Yes or )	No	o)				north and a second
Yes	N/A								
2 0.5	1 1/12								
642		11.	Briefly descri	b€	the storage tank facility a	and the nature of	f the operations	which were cor	nducted at the
,			facility (both)	hi	storical and present) include	ling use of tank	ks:		
			·						
		10	A = 12 = 1 = = 21 =		1 1 0 0 1				
		12.	A site location	1 8	and sampling map of the si	te, drawn to scal	e, is attached. S	See page 11 of 1	1.
П		12	0-1-11				1 12 1 1		
		13.			photographs of the closure	process are atta	ached (i.e., insid	de of excavation	n/piping runs,
			pit water, tank	S	showing condition).				
		1.4							
		14.	An amended '	"R	Legistration of Storage Tar	ıks" form was s	submitted to the	DEP, Bureau	of Watershed
			Conservation,	D	ivision of Storage Tanks, I	P.O. Box 8762, 1	Harrisburg, PA	17105-8762.	
			Date:						
		15.	If a reportable	e :	release was confirmed, th	e appropriate r	egional office o	of DEP was no	tified by the
			owner or opera			T. F F K.	J	1145 110	The of the
			•						
			Date:			Office: _			

Yes	N/A										
		16.	If tanks were cleaned on-site:  a. Briefly describe the disposition of usable product:								
			b. Briefly describe the disposal of unusable product, sludges, sediments, and wastewater generated during cleaning. Provide the name and permit number of the processing, treatment, storage or disposal facility. (Attach documentation of proper disposal):								
			c. If tank contents were determined/deemed to be hazardous waste, provide:								
			(1) Generator ID Number:								
			(2) Licensed Hazardous Waste Transporter Name and ID Number:								
		17.	If tanks were removed from the site for cleaning:								
			a. Provide the name and permit number of the processing, treatment, storage or disposal facility performing the tank cleaning:								
			b. If tank contents were d determined/deemed to be hazardous waste, provide:								
			(1) Generator ID Number:								
			(2) Licensed Hazardous Waste Transporter Name and ID Number:								
		18.	Briefly describe the disposition of tanks/piping (Attach documentation of proper disposal):								
		19.	If contaminated soil is excavated:								
			a. Briefly describe the disposition and amount (tons) of contaminated soil. Provide the name and permit number of the processing, treatment, storage or disposal facility. (Attach documentation of proper disposal):								
			b. If contaminated soil is determined/deemed to be hazardous waste, provide:								
			(1) Generator ID Number:								
			(2) Licensed Hazardous Waste Transporter Name and ID Number:								

Yes	N/A		
		20.	Briefly describe the disposition of and amount (tons) of uncontaminated soil (attach analyses):
			·
[,	•	t Nam	<i>'</i>
			norities) that I am the owner of the above referenced storage tank(s) and that the information provided re report (Section I) is true, accurate and complete to the best of my knowledge and belief.
			Signature of Tank Owner Date

# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

# UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

# **SECTION II. Tank Handling Information**

Fa	cility	ID	Number		

Yes	N/A		
		1.	Briefly describe the excavation and initial on-site staging of uncontaminated/contaminated soil:
		2.	Briefly describe the method of piping system closure and the closure of the piping systems including the quantity and condition of the piping:
		3.	Briefly describe the condition of the tanks and any problems encountered during tank removal:
		4.	Briefly describe the method used to purge the tanks of and monitor for explosive vapors:
		5.	If tanks were cleaned on-site:  a. Briefly describe the tank cleaning process:
			b. If subcontracted, name and address of company that performed the tank cleaning:
		6.	If tanks were closed-in-place, briefly describe the tank fill material:
		7.	If contamination was suspected or observed, the "Notification of Contamination" form was submitted.

# SECTION II. (continued)

(Print Name) (Print Name) (Alsification to authorities) that I am the certified installer who closure of the above referenced storage tank(s) and that the information accurate and complete to the best of my knowledge and be	ormation provided by me in this closure report (Section I) is
Signature of Certified Installer	Date
Installer Certification Number	Company Certification Number
	Company Name
	Street
	City/Town, State, Zip
	Phone

# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

# UNDERGROUND STORAGE TANK CLOSURE REPORT FORM

	Tank	Registration # (complete one sheet for EACH tank system and attach ALL laboratory sheets pertaining to that system)									
		Facility ID Number									
A.		ride depth of <i>BEDROCK</i> and <i>WATER</i> <u>IF</u> encountered during excavation or soil boring (write "N/A: if NOT nuntered).									
	Bedr	rock feet below land surface Water feet below land surface									
В.		ride Length of <i>PIPING</i> <u>IF</u> piping was closed-in-place (write "N/A" if NOT closed-in-place).  gth of piping feet									
C.	TAN	NK SYSTEM REMOVED FROM THE GROUND									
	1).	Was obvious contamination observed while excavating?									
	□ NO										
	☐ YES										
		→ Complete item C.2. below.									
	2). Was contamination <u>localized</u> (within three feet of the tank system in every direction with no obvious contamination)?										
		☐ YES									
		See end of this section for options on submission and maintenance of closure records									
		□ NO									
D.	TAľ	NK SYSTEM CLOSED-IN-PLACE OR CHANGED-IN-SERVICE									
	Was	obvious contamination observed during sampling, boring or assessing water depths?									
	NO Conduct confirmatory sampling See end of this section for options on submission and maintenance of closure records.										
		YES									
		Continue with corrective action> See end of this section for options on submission and maintenance of closure records> Call Indemnification Fund (717-787-0763).									

E. If the answer to C.1. is "no", the answer to C.2. if "yes" or the answer to D. is "no", confirmatory samples are required. Use the sample/analysis information sheet on page 10 of 11 to provide the information on confirmatory sampling and complete the diagram on Page 11 of 11.

### Options for Submission and Maintenance of Closure Site Assessment Records

Records of the site assessment must be maintained for <u>at least three years</u> after completion of permanent closure or change-in-service in one of the following ways:

- (a) By the owners and operators who took the UST system out of service;
- (b) By the current owners and operators of the UST system site; or
- (c) By mailing these records to the implementing agency if they cannot be maintained at the closed facility.

At least one option must be chosen. If option (c) is chosen, the closure report form should be sent to the DEP regional office responsible for the county in which the tank is located.

Where the results of the site assessment indicate that obvious, localized soil contamination was encountered and the analytical results of the confirmatory sampling show levels below the statewide standard/action levels, this closure report form (Sections I, II, and III) or some other acceptable site characterization report must be received by the Department within 180 days of verbally reporting the release.

Where the results of the site assessment indicate that no obvious contamination or obvious, localized contamination was encountered, but the analytical results of the confirmatory sampling show levels above the statewide standard/action levels, or where there is obvious, extensive contamination, Section 245.310(a)(8) of the CAP regulation requires that details of removal from service be included in the site characterization report. A copy of the completed closure report form should be submitted as part of the site characterization report to satisfy the requirements of Section 245.310(a)(8) of the CAP regulations.

I,(Print Name)	, hereby certify, under penalty of l	aw as provided in 18 Pa. C.S. §4904 (relating to unsworn
falsification to authorities the above referenced stor	that I am the person who performed rage tank(s) and that the information performed the best of my knowledge and belief.	the site assessment activities associated with the closure of provided by me in this closure report (Section III) is true,
Signature of Pers	on Performing Site Assessment	Date
Title of Person	Performing Site Assessment	Name of Company Performing Site Assessment

## COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

# UNDERGROUND STORAGE TANK SYSTEM CLOSURE REPORT FORM

Sample/Analysis Information (Attachment for Section III.) Facility ID Number

Sample I.D. (See diagram)	Parameter	Analytical Method <sup>1</sup>	Media	Result (units)	Detection Limit (units)	Date Sample Taken	Date Sample Analyzed
•							
	· .						
					July July Black Flatter		
		•					
						1	

Where EPA Method 5035 is required, indicate sample collection option in the right hand box of this column using the following codes:

P - Samples placed in a soil sample vial with a preservative present.

E - Samples collected and stored in a soil collection device which is airtight and affords little to no headspace.

N - Samples placed in soil sample vial without a preservative present.

Site Location and Sampling Map - Use this page or suitable facsimile to provide a large scale map of the site where tanks were closed. Scales between 1" = 10 and 1" = 100 feet frequently work out well. Include the following information as each applies to the site: facility name and I.D., county, township or borough, property boundaries or area of interest, buildings, roads and streets with names or route numbers, utilities, location and ID number of storage tanks removed including piping and dispensers, soil stockpile locations, excavations or other locations of product recovery, north arrow, approximate map scale and legend. Also show depth and location of samples with sample ID numbers cross-referenced to the same ID numbers shown on Page 10 of 11.

Facility Name and ID:			
County:			
Township/Borough:			
	•		
			·
		•	

#### APPENDIX E

# STANDARDS/ACTION LEVELS FOR CONFIRMATORY SAMPLES COLLECTED AT CLOSURE SITE ASSESSMENTS\*

### \* \* \* NO WATER ENCOUNTERED \* \* \*

Parameter	Unsaturated Soil Standard/Action Level (mg/kg)	Standard for Reuse of Soil On-Site (mg/kg)
Anthracene	350	350
Benzene	0.5	0.5
Benzo[a]anthracene	25/320	25/110
Benzo[a]pyrene	2.5/46	2.5/11
Benzo[b]fluoranthene	25/170	25/110
Benzo[ghi]perylene	180	180
Chrysene	230	230
Cumene	780/1600	780/1600
Dibromoethane, 1,2-	.005	.005
(Ethylene Dibromide)		
Dichloroethane, 1,2-	0.5	0.5
Ethyl Benzene	70	70
Fluorene	3000/3800	3000/3800
Indeno [1,2,3-cd] pyrene	25/28,000	25/110
Lead (Total)	450	450
Methyl Tert-Butyl Ether (MTBE)	2	2
Naphthalene	25	25
Phenanthrene	10,000	10,000
Pyrene	2200	2200
Toluene	100	100
Xylenes (Total)	1,000	1,000

Note: In cases where two numbers are shown for a parameter's soil standard/action level, the lower number applies to residential sites and the higher number applies to non-residential sites.

Because only a limited site characterization is required to be conducted in localized contamination situations, the more conservative statewide standards are presented. For instance, in soil, the confirmatory sampling will be assumed to be conducted within 2 to 15 feet of the surface. Therefore, the more stringent of the direct contact or highest soil to groundwater numeric values will apply. Where the soil to groundwater values apply, it will be assumed that the aquifer is used with a TDS < or = 2,500. It will also be assumed that any soil reused on-site will be placed back in the excavation to grade and/or spread on the site. All sample results must attain the statewide standards. Please recognize that the standards presented above are based on these assumptions. Depending on the particular contamination situation, different statewide standards may apply or other cleanup options may be available.

<sup>\*</sup> The numeric standards contained in Appendix E reflect updated standards that are a part of the Chapter 250 regulations, which were approved by the Scientific Advisory Board, the Environmental Quality Board and the Independent Regulatory Review Commission and were published in the Pennsylvania Bulletin on November 24, 2001.

# STANDARDS/ACTION LEVELS FOR CONFIRMATORY SAMPLES COLLECTED AT CLOSURE SITE ASSESSMENTS\*

\* \* \* WATER ENCOUNTERED \* \* \*

Parameter	Saturated Soil <sup>1</sup> Standard/Action Level (mg/kg)	Unsaturated Soil Standard/Action Level (mg/kg)	Water Standard/Action Level (ug/l)	Standard for Reuse of Soil On-Site (mg/kg)
Anthracene	35	350	-	35
Benzene	0.5	0.5	5	0.5
Benzo[a]anthracene	7.9/32	25/320	0.9	7.9/32
Benzo[a]pyrene	2.5/4.6	2.5/46	0.2	2.5/4.6
Benzo[b]fluoranthene	12/17	25/170	0.9	12/17
Benzo[ghi]perylene	18	180	0.26	18
Chrysene	23	230	1.9	23
Cumene	110/230	780/1600	1,100	110/230
Dibromoethane, 1,2- (Ethylene Dibromide)	.005	.005	.05	.005
Dichloroethane, 1,2-	0.5	0.5	5	0.5
Ethyl Benzene	70	70	700	70
Fluorene	300/380	3,000/3,800	1,500	300/380
Indeno [1,2,3-cd] pyrene	25/2,800	25/28,000	0.9	25/110
Lead (Dissolved)	_	-	5	
Lead (Total)	45	450	-	45
Methyl Tert-Butyl Ether (MTBE)	2	2	20	2
Naphthalene	10	25	100	10
Phenanthrene	1,000	10,000	1,100	1,000
Pyrene	220	2200	130	220
Toluene	100	100	1,000	100
Xylenes (Total)	1,000	1,000	10,000	1,000

<sup>&</sup>lt;sup>1</sup> These standards apply to soil/water interface samples only.

Note: In cases where two numbers are shown for a parameter's soil standard/action level, the lower number applies to residential sites and the higher number applies to non-residential sites.

Because only a limited site characterization is required to be conducted in localized contamination situations, the more conservative statewide standards are presented. For instance, in soil, the confirmatory sampling will be assumed to be conducted within 2 to 15 feet of the surface. Therefore, the more stringent of the direct contact or highest soil to groundwater numeric values will apply. Where the soil to groundwater values apply, it will be assumed that the aquifer is used with a TDS < or = 2,500. More stringent standards may apply to samples collected at the soil/water interface. Where water is encountered, it will be assumed to be groundwater in a used aquifer with a TDS < or = 2,500. Where any soil is reused on-site, it will be assumed that the soil will be placed back in the excavation to grade and/or spread on the site. All sample results must attain the statewide standards. Please recognize that the standards presented above are based on these assumptions. Depending on the particular contamination situation, different statewide standards may apply or other cleanup options may be available.

<sup>\*</sup> The numeric standards contained in Appendix E reflect updated standards that are a part of the Chapter 250 regulations, which were approved by the Scientific Advisory Board, the Environmental Quality

Board and the Independent Regulatory Review Commission and were published in the Pennsylvania Bulletin on November 24, 2001.

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