



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION



August 11, 2010

David M. Share
Olin Corporation
3855 North Ocoee Street, Suite 200
Cleveland, TN 37312

RE: UST Protocol
Newhall Street Neighborhood Remediation Project
Hamden, Connecticut

Dear Mr. Share:

The purpose of this letter is to transmit to Olin Corporation (Olin), the *Protocol for the Removal of Residential Home Heating Oil Tanks*, prepared by the Remediation Division of the Bureau of Water Protection and Land Reuse (the Department), for the Newhall Street Neighborhood Remediation Project. The attached protocol has been developed to provide Olin and its contractors guidelines for the removal of residential home heating oil underground storage tanks, in the event that they may be encountered during the excavation of waste fill at non-public properties in the Newhall Street Neighborhood. This protocol has been developed in consultation with the Department's Emergency Response and Spill Prevention Division, and has taken into account comments and changes proposed by Olin and its contractors. The protocol is a tool to aid Olin during its efforts to conduct remediation of non-public properties in accordance with Consent Order #SRD-128.

If you have any questions pertaining to this matter, please contact Ray Frigon of my staff at 860-424-3797.

Sincerely,

A handwritten signature in black ink, appearing to read "P. F. Bowe", with a long horizontal line extending to the right.

Patrick F. Bowe
Director
Remediation Division
Bureau of Water Protection and Land Reuse

Attachment

Copy:
Carrie Hunt, Olin Corp.
Nelson Walter, MACTEC
Rod Pendleton, MACTEC
Raymond Frigon, DEP
Jill Barrett, FHI

**PROTOCOL FOR THE REMOVAL OF RESIDENTIAL UNDERGROUND
HOME HEATING OIL TANKS**

**NEWHALL STREET NEIGHBORHOOD
REMEDIATION PROJECT
HAMDEN, CT**

Note: For the purpose of this protocol, it is assumed that the underground storage tanks (USTs) to be encountered will be heating oil tanks for residential use only and have been determined to be located within the area of waste fill.

If the tank is located within the waste fill, then the following protocol is recommended:

1. Notify Olin and DEP Project Manager that an UST will need to be removed.
2. Olin will contact property owner and discuss the removal of the tank. If the UST is determined to be in use, then Olin will discuss the installation of a new aboveground storage tank (AST) with the property owner. Town of Hamden requires all new (replacement) tanks to be installed aboveground. Olin will need to coordinate the details of the UST removal and conversion to an AST with the property owner.
3. Following approval from Olin and property owner to proceed, notify Town Fire Marshal's office.
4. Clean, remove and dispose of, or recycle, the tank and piping in accordance with applicable laws and regulations. Note: If the UST cannot be removed without compromising the integrity of a nearby structure (i.e. close proximity to field stone foundation, etc.), then the UST can be abandoned in place in accordance with the local Fire Marshall's office. To abandon tank in place:
 - Remove contents of tank
 - Clean and rinse inside of tank, as well as vent and fill pipe
 - Remove vent and fill pipe
 - Evacuate rinseate
 - Fill tank with clean sand or other approved material (or alternate method acceptable to the Town of Hamden Building Department)
 - Once tank is filled with inert material (i.e. clean sand), seal/cap all openings in tank

5. Observe soil beneath UST and piping for evidence of a release. If release from UST is observed through visual, olfactory, or field screening techniques then DEP Spills and homeowner must be notified (see contact info on Page 4). When calling the DEP Spills hotline, state that the release was discovered during excavation activities associated with DEP's Newhall Street Neighborhood Remediation Project. Fire Marshal does not need to be notified if soil contamination is encountered, as long as DEP Spills is notified.
6. If oil product is visible in the UST grave as a result of the deterioration of the UST and/or associated piping, DEP must be notified immediately. DEP, together with Olin's environmental consultant, will evaluate the potential for the oil product to impact nearby receptors based on field observations (example: stormwater/sewer lines, catch basins, drinking water/irrigation wells, basements, surface water, etc). If the potential for impact of nearby receptors is likely, corrective measures to abate the "emergency" condition should be performed in consultation with DEP staff. If such work is required, DEP will incur 100% of the cost of emergency response efforts to abate pollution below 4' from ground surface and is caused by a leaking residential UST.
7. Petroleum impacted material removed from UST graves may be evaluated to determine if it can be placed at the Tire Pond site in accordance with the Tire Pond Material Acceptability Protocol (MAP). If the petroleum impacted material does not meet the Tire Pond MAP, then it should be segregated and disposed of at a permitted disposal facility. If excavation and disposal of materials at depths greater than 4' is required, DEP will reimburse Olin for 100% of the cost. DEP must be notified as soon as possible once it is determined that excavation and disposal of materials at depths greater than 4' will be required.
8. Property-Specific Remedial Action Report must document UST removal activities, including photodocumentation and the removal of any associated contaminated soil.
9. The local Fire Marshal must be copied on the Property-Specific Remedial Action Report documenting the removal of the heating oil tank and any associated material impacted by petroleum product.

INSTALLATION OF NEW (REPLACEMENT) HEATING OIL TANKS (when replacing an existing in-service UST removed during remediation)

1. Olin must discuss with homeowner regarding the installation of new heating oil tank as part of Olin's "best efforts" requirement.
2. New/replacement residential heating oil tank must be AST only. The conversion to an AST will be included as part of the property restoration. (*conversion to natural gas may be an option, but homeowner would incur any costs in the conversion that would exceed the cost of the replacement AST and associated piping*).
3. Olin to consult with Town of Hamden Building Department for requirements on replacement AST. Maximum allowable oil storage capacity is 660 gallons for residential properties. Homeowner can have multiple tanks, but cannot exceed the total capacity of 660 gallons.
4. ASTs can be located inside or outside the house. If AST is to be located outside the house, it needs to be surrounded by an enclosure with a roof on top of a concrete pad. If installed outside, near a driveway or area subject to vehicular traffic, it would require concrete bollards for protection.
5. ASTs can be steel or polyethylene. Single-walled with containment or double-walled without containment.
6. Obtain permit from Town of Hamden Building Department (\$25 fee - to be waived by the town). State mandated education fee for installs. \$0.22/\$1,000 (part/labor of install).
7. Installation requires inspection by the Town of Hamden Building Department.
8. Licensed plumber is required to make plumbing connections.

CONTACT INFORMATION

DEP SPILLS HOTLINE (24 hours – Spill Reporting)

860-424-3338

DEP EMERGENCY RESPONSE DISTRICT COORDINATOR

Contact: *Matt Williamson*

Office Phone: 860-418-5976

Cell: 860-490-4021

DEP REMEDIATION PROJECT MANAGER

Contact: *Ray Frigon*

Office Phone: 860-424-3797

Cell: 860-916-3984

COMMUNITY RESOURCE LIASON

Contact: *Richard Pearce*

Office Phone: 203-248-3677

FIRE MARSHAL (removal of tanks)

Contact: *Brian Badomo*

Office Phone: 203-407-3182

TOWN OF HAMDEN BUILDING DEPARTMENT (tank installs)

Contact: *Bill DeMatteo, Plumbing & Heating Inspector*

Office Phone: 203-287-7159

Cell: 203-996-2551

OLIN CONTRACTOR

Contact: Severson on-site Project Manager

Headquarters Office Phone: 716-284-0431