

## PROJECT DESCRIPTION

**Site Name:** Former Manufacturing Facility  
**Project Location:** Commerce Drive, Montgomeryville, PA  
**Project Type:** Storage Tank Closure, Transformer Removal & Soil Remediation, Groundwater Assessment, and Act 2 Land Recycling Completion  
**Purpose:** Remediation of Environmental Conditions Prior to Property Transfer  
**Date Completed:** December 2015  
**Client / Lender:** Alden Industries, Inc. / Confidential

Land Recycling Solutions, LLC, was retained by the owner of an industrial manufacturing and warehouse facility to complete remediation activities at the site prior to the planned transfer of the subject property. The activities included equipment decommissioning, storage tank management and subsurface soil remediation and assessment. The activities were completed in response to the findings of a previous Phase I Environmental Site Assessment (ESA) completed for the property, in advance of the planned ownership transfer of the property. The previous ESA indicated that the available data reviewed during the assessment was inconclusive in determining the potential adverse impact to the environmental integrity of the site subsurface, as a result of the historical use of an actively leaking, PCB-laden transformer and multiple underground storage tanks (USTs) at the site.

LRS completed the project activities within an expedited (20-day) time frame in an effort to complete the required efforts prior to the transfer of the property at the end of the calendar year. These activities included:

1. Testing of the transformer and electrical equipment located in the substation transformer compound at the southern corner of the subject property to confirm the concentration of PCBs within the transformer.
2. Removal and proper disposal of electrical equipment, oil stained soil and gravel, and the concrete pads located in the former substation transformer compound. Collection of post excavation soil samples and laboratory analysis for PCBs and PAHs, based on the characterization of the dielectric fluid contained in the leaking transformer unit.



**Transformer Removal**



**PCB Laden-Oil Leakage**

3. Removal of the 10,000-gallon UST that was temporarily out-of-service at the property since approximately 1998. Collection and analysis of post excavation soil and groundwater samples for PADEP heating oil short list parameters to assess subsurface quality and identify if additional investigation or remediation is required.





**Storage Tank Excavation**

4. Sampling of the three existing groundwater monitoring wells located in the vicinity of a second 10,000-gallon capacity UST (previously abandoned in place) for PADEP heating oil short list parameters to assess groundwater quality in the vicinity of the former storage tank and determine if additional investigation or remediation is required.

Based on the completed remediation and assessment activities completed by LRS, residual hydrocarbon impact above Medium Specific Concentrations (MSCs) was determined to be localized to the subsurface groundwater in the immediate vicinity of the removed storage tank. Based on the findings of the completed site activities, the client and buyer were able to accurately determine the subsurface quality at the identified areas of concern prior to the transfer of the property, and set aside appropriate funds required to address the identified localized groundwater impact.

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In response to the dissolved groundwater impact that was detected above MSCs, a subsequent groundwater characterization along with the completion of the Act 2 Land Recycling process was completed. Since the subject storage tank was unregulated (i.e., used for heating oil for onsite consumptive use), completion of activities under the Act 2 Land Recycling Program (i.e., voluntary cleanup program) was applicable, as opposed to the Corrective Action Process (CAP regulations) for regulated storage tanks governed by the *Storage Tank and Spill Prevention Act* (Act 32 of 1989). A Notice of Contamination was filed with the Pennsylvania Department of Environmental Protection (PADEP) and a Notice of Intent to Remediate (NIR) was also completed to enter the site into the Act 2 Program.

The subsequent scope of work performed by LRS included completion of all required investigative and assessment activities that will allow for the eventual release of liability afforded by the *Land Recycling and Environmental Remediation Standards Act* (Act 2 of 1995) for the previously identified impact. The scope of work included completion of the following:

1. Supplemental Soil & Groundwater Characterization / Plume Delineation
  - Monitoring Well Installation and Sampling
  - Aquifer Testing (Hydraulic Characteristics)
  - Vapor Intrusion Assessment / Inhalation Pathway Risk Evaluation
  - Sensitive Receptor Survey
  - Site Characterization Report Preparation
2. Groundwater Attainment Monitoring
3. Act 2 Final Report Preparation
4. Regulatory Liaison / Project Management



Storage Tank Closure & Act 2 Land Recycling Project (continued)  
Former Alden Industries, Inc. - Montgomeryville, PA

The installed monitoring well network included a total of three (3) representative wells (1 source area well and 2 downgradient wells) in the area of identified impact. Analytical results of subsequent groundwater attainment sampling (8 consecutive quarters) indicated that residual petroleum impact in the subsurface groundwater remained localized to the immediate vicinity of the former storage tank location. It was demonstrated through actual field data and fate and transport analysis that the two (2) downgradient point of compliance wells did not exhibit impact above applicable MSCs. As such, attainment of Statewide Health Standards was successfully demonstrated for all heating oil indicator compounds in the groundwater media.

Due to the shallow presence of bedrock in the site subsurface, results of the previous storage tank closure assessment sampling (excavation sidewall samples) were used to demonstrate attainment of Statewide Health Standards for the soil media.



**Monitoring Well Installation (Air Rotary Drilling Method)**

Using the existing soil quality data and the collected quarterly groundwater quality data, it was demonstrated through direct comparison of the most stringent MSCs that attainment of Statewide Health Standards was completed for the identified petroleum impact at the site.