

CASE STUDY: Redevelopment Dry Cleaning/Printing Site

Project Description: Urban County Demolition Project
Removal/Disposal of all Hazardous Materials for Demolition

Scope of Services: AET was contracted by a Redevelopment Authority to provide engineering and environmental consulting services to identify the location, quantity, and methods to remove/dispose all hazardous materials at three (3) industrial properties prior to demolition. AET was also responsible for hazardous material remediation planning, oversight and verification of remediation effectiveness.

AET's Investigative Approach/Findings/Conclusions:

- 1. Phase I Environmental Site Assessment... identified previous dry cleaning/printing at the site. Confirmed Perchloroethylene (PCE) staining** was noted on a concrete floor slabs in the former drum storage area, loading dock and dry cleaning machine area. Floor drains were also impacted based on direct reading VOC measurements.

Note: PCE is a colorless, non-flammable liquid comprising 80-85% of the dry cleaning fluids used in the US. PCE liquids when spilled do not bind well with soil and moves rapidly into the groundwater. NIOSH considers PCE a potential human carcinogen.
- 2. Phase II Environmental Site Assessment... utilized soil borings to evaluate PCE levels below the concrete floor slab and adjacent grounds for comparison to PA Act 2 Standards for Non-Residential Use.** Groundwater and soil vapor samples were also collected. PCE levels in the soil and soil vapors were below PA Act 2 Standards however, groundwater samples exceeded PA Act 2 Non-Residential Use Standards.
- 3. Technical Specifications for Environmental Remediation and Demolition.... were prepared by AET for public notice of this pending work and to obtain competitive bids from remediation/demolition contractors.** Contract documents were prepared for the selected approved bidder. Remediation efforts also included asbestos, lead and PCB and Mercury containing items at the site. Demolition included removal/disposal of the concrete floor slab exposing the soil contamination below.
- 4. Remedial Action Plan... was formulated and submitted to the State of PA and included AET's findings, conclusions and site planning.** Significantly stained soil was removed from the site and properly disposed of. Additional soil and groundwater sampling and vapor intrusion sampling/modeling was also completed.

CONCLUSION: All hazardous material at the site were remediated. Demolition was completed. The site received Act 2 Liability Protection under the Site Specific Standard Provisions.

When you need professional Property Redevelopment advice email Alan Sutherland, CIH, CHMM at a.sutherland@aetinc.biz or call 610-891-0114. We provide nationwide services; phone consultations are free. Check out the full range of environmental contracting/consulting services on our website www.aetinc.biz.

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