

## **Environmental Fact Sheet**

### **Environmental Fact Sheet Former Lewis Chemical Hyde Park, MA**

Lewis Chemical was involved in the collection, transportation, storage, and processing of hazardous waste from 1963 until 1983. The facility was cited for numerous violations of Federal, State, and local laws regarding the safe handling, transport, storage, and treatment of hazardous materials during its operation. Lewis Chemical was forced to terminate operations under a Court Order issued by DEP in 1983. The City of Boston foreclosed on the property on October 18, 2000, due to non-payment of back taxes.

A Phase I Brownfields site assessment was conducted at the site in 2002 under the direction of the Massachusetts Department of Environmental Protection (DEP). The Phase I site assessment included:

- Background research to better understand the types of chemical involved, and how they were stored and processed;
- A detailed site inspection to identify sources of contamination and potential pathways into the environment;
- A geophysical survey to determine the presence of underground features such as tanks and drums;
- A field investigation program, including the installation of soil borings and monitoring wells, and the collection and analysis of soil, groundwater, surface water, and sediment samples to broadly evaluate current environmental conditions across the site; and
- The completion of an Imminent Hazard evaluation to determine if there is an immediate threat to human health or the environment, and if accelerated clean up efforts are warranted.

### **Summary of Site Assessment Results**

The background research successfully identified the types of chemicals that were present during operation of the facility, and provided details of where chemical processing operations were conducted.

- The site inspection identified a series of floor drains in the basement of the building. These drains provided a pathway for spilled chemicals inside the building to enter the subsurface. The site inspection also identified areas of filling, including possible process waste and construction-related debris.
- The geophysical survey identified two underground storage tanks along with numerous other objects, some of which may be buried drums.
- The field investigation program identified impacted soil and groundwater at several locations at the site, particularly between the building and the Neponset River. The

contaminants identified were consistent with the chemicals that Lewis Chemical stored and processed during their operation. The areas of highest impact coincided with the locations of the interior floor drains. The investigation also identified a limited number of locations with elevated concentrations of lead in surficial soil.

- The sediment and surface water sampling program in the Neponset River identified low concentrations of contaminants along the shoreline adjacent to the Lewis Chemical building.

### **Site Assessment Conclusions**

- The source or sources of the contaminants at this site are related to historical operations conducted by Lewis Chemical from 1963 to 1983. The floor drains were likely contaminant migration pathways to the subsurface. Additionally, documented and undocumented spills, and general poor waste handling activities, likely contributed to the current environmental conditions.
- Although additional assessment and clean up is needed at this site, there were no imminent hazard conditions identified. This conclusion is based on three important factors:
  1. The highest concentrations of contaminants are found in subsurface soils and groundwater. Since these areas are not readily accessible, there is limited exposure based on the current status (unoccupied) of the site.
  2. The site is currently fenced and secured, and access is restricted to occasional visits by City of Boston personnel. This also helps to limit exposure potential.
  3. The sampling results in the Neponset River indicated generally low concentrations of contaminants. This may be attributed to low permeable soils that are limiting migration of impacted groundwater to the river.

### **Future Activities**

The Phase I assessment provided valuable information regarding the types of chemicals at the site, and where the areas of highest concern are. The next phase of assessment will focus on collecting sufficient information to define the full extent of impact, which will allow for a more accurate estimation of clean up costs. This next step is crucial to the redevelopment and revitalization of this property.