

Former Lewis Chemical

12 & 0 Fairmount Court Hyde Park

March 2010 Update

City of Boston DND REMS

Thomas Barrasso – Senior Environmental Program Manager Reay Pannesi-Senior Project Manager of Land Sales

Property Location Overview



Property History



- •Leather Tannery: 1940s-1960s
- •Lewis Chemical: Solvent recovery from waste liquids: 1963-1983
 - •MA DEP Revokes Lewis Chemical hazardous waste handling license and Lewis Chemical ceases operation: 1983
 - •Building owner leases property to various tenants
- •City of Boston receives property through tax foreclosure: 2000

SUMMARY OF COMMUNITY MEETINGS (1)

- October 29, 2003: DND Director met with HP business leaders, Southwest Boston Community Development Corp., HP Mains Streets to obtain feedback on the site redevelopment and obtain support for applying for EPA grant funds.
- November 14, 2003: Community notification letter sent to neighborhood to elicit comments on possible reuses.
- **December 4, 2003**: Community meeting to explain MGL Chapter 30B property disposition process, obtain community input for site reuses.

SUMMARY OF COMMUNITY MEETINGS (2)

- **February 3, 2005:** DND received a Public Improvement Plan (PIP) petition request.
- March 8, 2005: Community meeting explaining the environmental testing plan and the PIP.
- April 5, 2005: Public meeting to present draft PIP.
- April 24, 2007: Community meeting to present Interim Phase II Environmental Report.
- April 27 & June 23, 2009: Community meetings to review the subsurface investigation and explain the subslab remediation system.

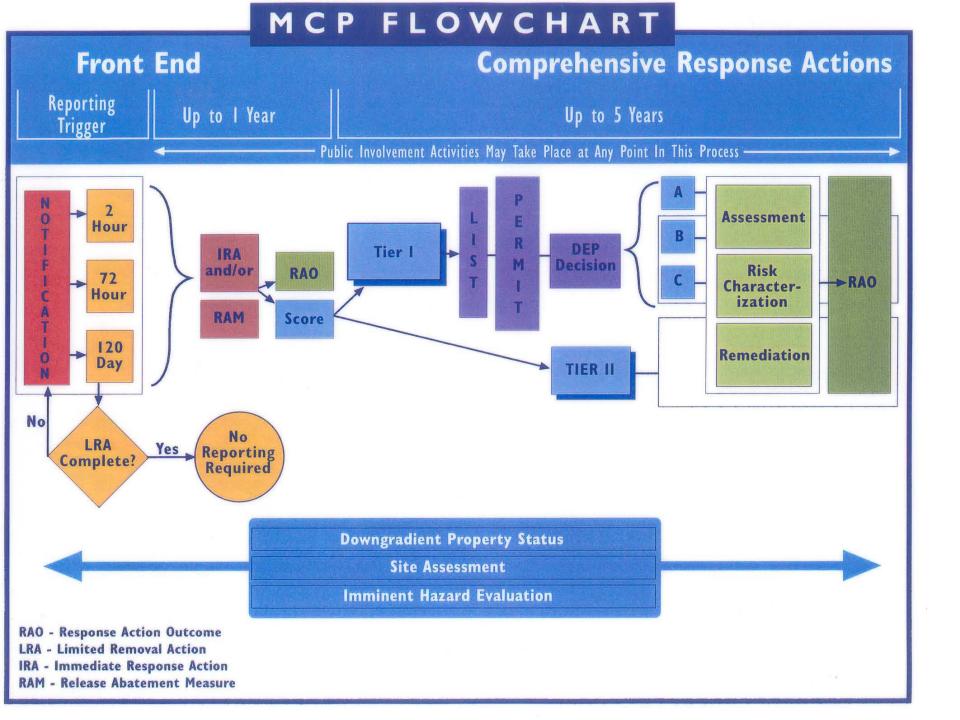
Grant Wins

- 2004 U.S. EPA Site Assessment Grant
 - Conduct assessments of the site
- 2006 U.S. EPA Site Assessment Grant
 - Conduct follow-up assessments and sampling
- 2008 Former Lewis Chemical Cleanup Grant
 - Site specific cleanup activity
 - Installation and 1 year operation of Soil Vapor Extraction System (SVE)

City of Boston Site Investigation History:

- 2002: "Phase I Brownfields Site Assessment," completed by Environmental Strategies & Management
- 2007: "MCP Interim Phase II Comprehensive Site Assessment MA DEP RTN# 3-1616/Method 3 Risk Characterization completed by Environmental Strategies & Management
- 2009: "Supplemental Soil Investigation" completed by Woodard & Curran, Inc.

FLOW CHART Property a YES Enter Site listed site? FIGURE 5 FLOW CHART OF THE CHECKLIST SCREENING PROCESS File review of property and/or nearby sites of NO concern Property YES near sites of NO REC concem? No Recognizable ASTM No REC Possible **Environmental Condition** Phase I impact to property? NO REC VES. Knowledge of YES adverse site Possible REC MCP NO history? MADEP LRA Trigger 2hr | 72hr | 120 days Reporting NO Redevelopment Filter IRA and/or RAM RAO Priority Priority Priority Level 2 Level 3 Level 1 Scoring Tier# Tier! Marketing Funding Standby List **OBD Support** Filter List Permit MADEP Assessment Decision Risk Characterization Remediation Environmental Tier LA Assessment A: EPA Monies B; MA Monies C: City Monles Tier I B Tler IC



Defining "SITE" MA DEP & U.S. EPA

•What makes a property a

"site"?

- -Source
- -Migration
- -Targets



Site Areas of Concern

- 3 Areas of concern assessed and remediated
 - UST, Suspected Fill Area, and Suspected Drum Area
- Soil and groundwater beneath the building footprint contaminated with volatile organic compounds (VOC)
 - Toluene, Trichloroethylene (TCA), Trichloroethane
 (TCE), Perchloroethylene (PCE)
- Discrete areas of soil contaminated with heavy metals and Polychlorinated Biphenyl (PCB)

UST Removal



8000 Gallon Petroleum UST



Bedrock Monitoring Well Installation and Soil Borings



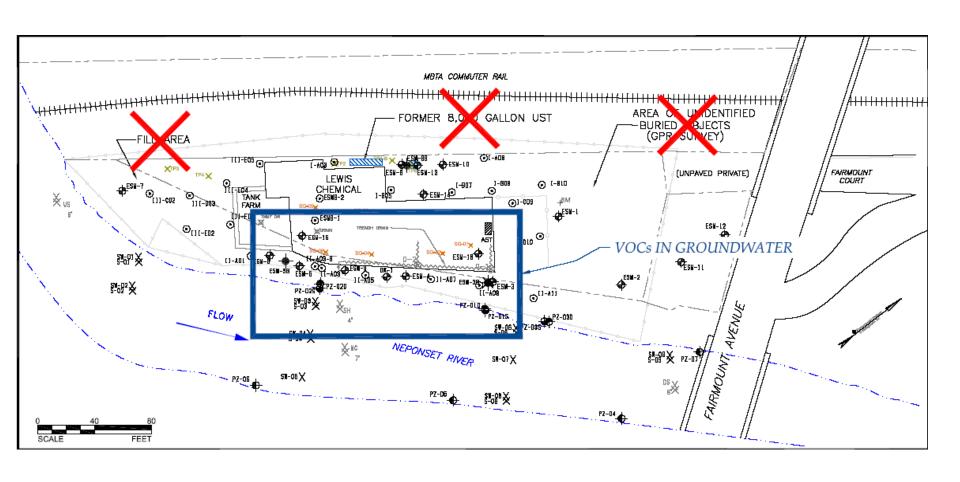
In Building Monitoring Well Installation and Soil Borings



Test Pits and Exploration



Site Overview



Concerns for Human Health and the Environment

- Volatile organic compound (VOC) vapors from the soil and groundwater under the building
 - Building access must be, and is restricted, no reuse of building possible
- Impacts to the Neponset River
 - Reduction of source material under the building
- Contaminated Soil
 - Property access restricted

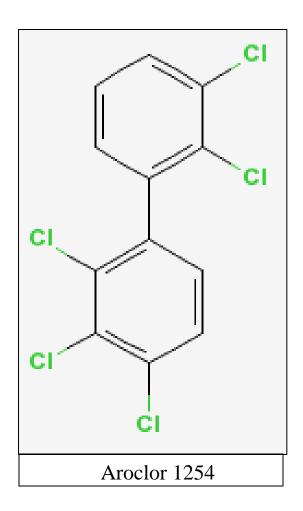
The Contamination

Trichloroethylene (TCE) Reductive dechlorination Cis-1,2-Dichloroethylene (DCE) Reductive dechlorination Vinyl Chloride (VC) Reductive dechlorination Ethene

TCE

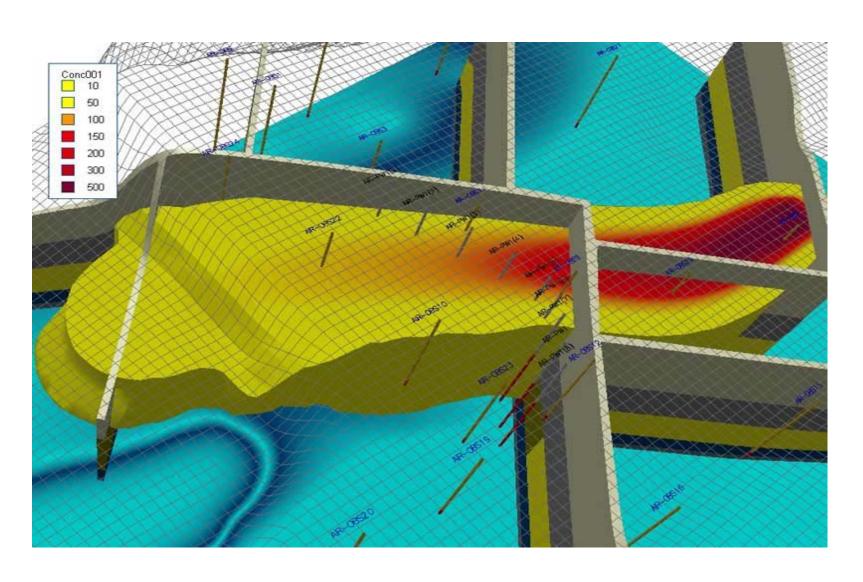
Polychlorinated Biphenyls (PCB)



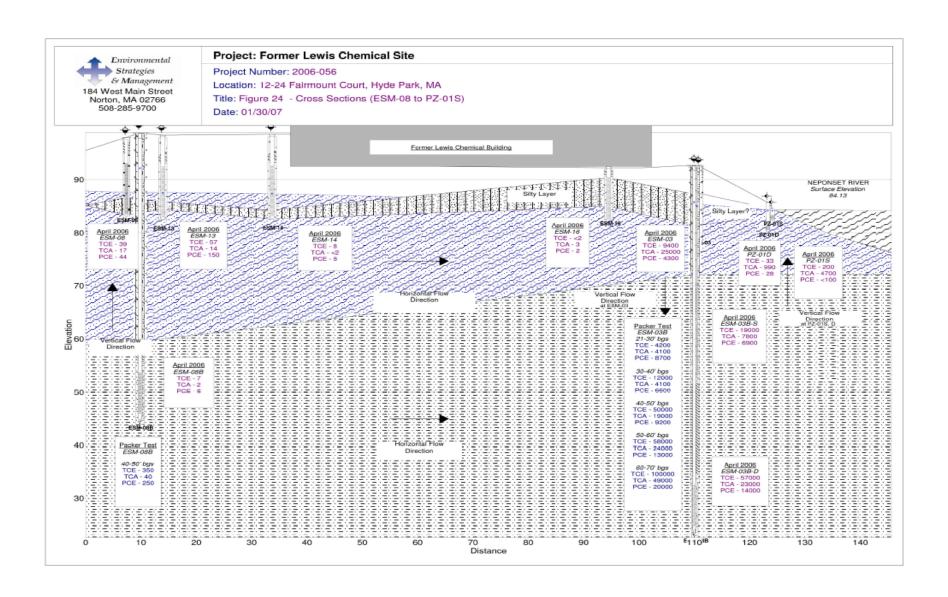


Former Lewis Chemical site: Aroclor 1248 and 1242 detected

Beneath the Building



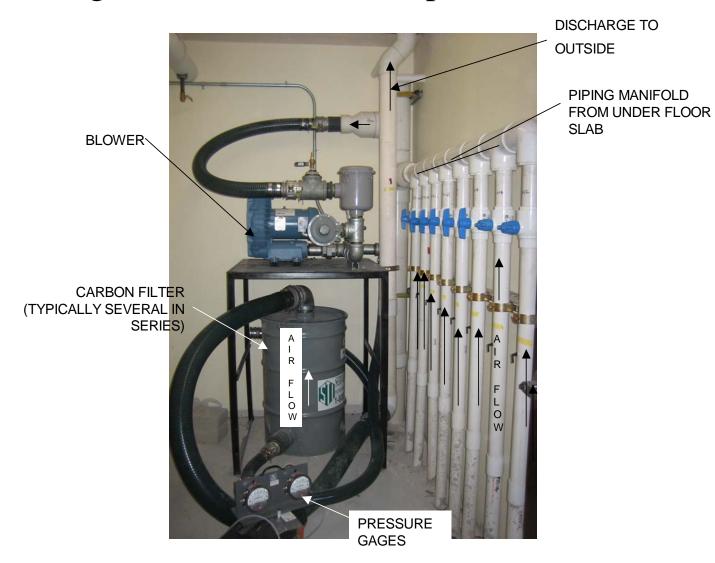
Actual Cross Section



Phase II Investigations & Remediation

- City of Boston Remediation with EPA Cleanup Grant Funds
 - \$200,000 EPA and COB \$40,000
 - Focus is to reduce the TCE source material beneath the building
 - 2008-2009: We determined the nature and extent of the contamination, designed the SVE remediation system, and designed the power grid to run the machinery.

Reducing the Source – Soil Vapor Extraction (SVE)



Remediation Execution

Activity and Timetable:

1. Electric Power Installation

- 1. Fieldwork begins this Thursday March 25
- 2. Estimated completion: March 31

2. SVE Installation estimated start:

- 1. Main SVE installation: May21
- 2. System activation and testing: June4
- 3. System run and monitoring: 1 full year
- 3. SVE Evaluation and Plume Data Analysis
- 4. Report on effectiveness: August 2011