



# Industri-plex Superfund Site, Operable Unit 2

U.S. EPA | HAZARDOUS WASTE PROGRAM AT EPA NEW ENGLAND



**THE SUPERFUND PROGRAM** protects human health and the environment by investigating and cleaning up often-abandoned hazardous waste sites and engaging communities throughout the process. Many of these sites are complex and need long-term cleanup actions. Those responsible for contamination are held liable for cleanup costs. EPA strives to return previously contaminated land and groundwater to productive use.

The Industri-plex Superfund Site located in Woburn, MA was added to the Superfund National Priority List in 1983 and includes industrial, commercial and undeveloped properties. Various chemical and glue manufacturing facilities operated at the Industri-plex Superfund Site from 1853 to 1969. As a result of these industrial operations, soil, sediment, groundwater, surface water and air became contaminated with various compounds including arsenic, lead, chromium, ammonia, benzene, toluene, and hydrogen sulfide. Successor companies to those that performed the industrial operations are conducting the cleanup work. They are termed the "Settling Defendants" in the various legal documents for the Site.

EPA established a 1986 Record of Decision (ROD) for the first phase of cleanup at Industri-plex (known as Operable Unit 1 or OU1), which included the construction of various protective caps over approximately 110 acres of soils contaminated with heavy metals and animal hide wastes. These caps include grass and graveled areas, parking lots, and building foundations. Construction of these caps was completed in 1998.

## CLEANUP PLAN FOR THE ABERJONA RIVER:

Currently, contaminated groundwater from Industri-plex travels into the Halls Brook Holding Area Pond (HBHA), which flows into the Aberjona River. A portion of the contaminants entering the pond travel downstream in surface water and sediment. Contaminants have accumulated in sediments within the HBHA Pond, Aberjona River and Cranberry Bog Conservation Area within the Industri-plex Site. In 2006, EPA established a second cleanup plan (or ROD) to address this contamination.

The Settling Defendants for OU2 at the Industri-plex Superfund Site are responsible for implementing the second phase of cleanup (known as Operable Unit 2 or OU2). In 2008, EPA and the Settling Defendants entered into a Consent Decree settlement for implementing the OU2 cleanup. The Settling Defendants have hired **de maximis, inc.** to oversee the design and implementation of the cleanup. Work began on the initial stage of the cleanup in 2014. The final stage of the cleanup has been designed and is ready to be implemented over the next 8 months.

## KEY CONTACTS:

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**WHAT HAS ALREADY BEEN DONE:**

EPA and the Settling Defendants already completed the following portions of OU2 cleanup:

- Removal of contaminated sediment from Lower South Pond (LSP) at the northern portion of the Site (completed 2014); and
- Preparation of HBHA Pond for treatment by installing structures in the pond and controlling storm water conditions (completed 2015).

**NEXT STEPS OF THE OU2 CLEANUP PLAN:**

*The next portion of the OU2 cleanup began this May.*

- Construction of a laydown area near Cabot Road in Woburn;
- removal of sediments from southern half of the HBHA Pond (referred to as the secondary treatment cell) and installation of aeration/treatment equipment and a settling zone (Figure 1);
- removal of sediments from the Wells G&H Wetland and Cranberry Bog Conservation Area along the Aberjona River in Woburn and restoration of the area (Figure 2);
- construction of new wetlands near Cabot Road in Woburn, enhancement of wetland habitat near Rifle Range Road in Woburn, and construction of a fish ladder in Winchester (Figures 1 and 2); and
- Implementation of environmental monitoring.

**2016 CONSTRUCTION:****Sediment Removal from the Southern Half of HBHA Pond (known as Secondary Treatment Cell)**

From May – July 2016, the Settling Defendant's contractor, DA Collins, has mobilized to the HBHA Pond to prepare the laydown area for supporting construction activities and implement temporary stormwater management activities along the HBHA Pond to support sediment removal. DA Collins will then remove sediment from the southern half of the pond, place the sediment on the sediment management pad constructed inside the laydown area, and transport the sediment off-site to a permitted facility. A crane will be placed on a floating platform in the pond and will remove sediment with an "environmental clam shell bucket." The clam shell bucket is designed to minimize sedi-

ment disturbance in the pond while removing the contaminated material. DA Collins will add amendments to these sediments, such as cement, to further reduce their wetness at the laydown area. Regular monitoring of surface water quality conditions will be conducted within, upstream, and downstream of the dredging area in the pond. After the sediments have been removed, DA Collins will install aeration treatment units and establish a settling zone within the secondary treatment cell to help further reduce contamination in the surface water. The aeration treatment units will look like floating docks in the pond with bubbles coming from them.

The workers will typically be on-site Monday through Friday from 6:00 AM to 5:00 PM, and will wear appropriate personal protective equipment for the work being performed. This protective equipment is a precautionary measure to ensure workers are not exposed to contaminated sediments during their work. If odors are encountered, DA Collins will minimize odors with foam sprays. Truck traffic in the project area will increase during transportation of contaminated material off site. Up to 12 trucks per day are expected to move either in or out of the site area. The truck traffic will be generally routed from Commerce Way to Cabot Road in order to enter the site, and will leave the site using the same roads. This truck traffic route has been coordinated with the City of Woburn.

**Sediment Removal and Restoration Wells G&H Wetland and Cranberry Bog Conservation Area (CBCA)**

During June – September 2016, the Settling Defendant's contractor, DA Collins, will sequence through the three wetland areas below (1 through 3) conducting preparation, sediment dredging and restoration:

1. Wells G&H Wetland Area (East Side): Access to the area will occur off Rifle Range Road. Duration: 4 weeks
2. Wells G&H Wetland Area (West Side): Access to the area will occur off-Salem Street. Duration: 4 weeks
3. CBCA (West Side): Access to the area will occur off Washington Circle. Duration: 4 weeks

DA Collins anticipates it will take approximately four weeks for each work area to complete sediment removal and restoration cleanup activities, and work will progress in the above order (1, 2, 3). The work will include installation of temporary

port-o-dams/cofferdams to minimize water management during sediment removal and restoration. The sediments will be excavated using mechanical excavation equipment, such as a backhoe and water tight dump trucks. As sediments are excavated, they will be loaded on to trucks and transferred to the sediment management pad, and transported off-site for disposal at a permitted facility. Where necessary, DA Collins will add amendments to the sediments, such as cement, to further reduce their wetness. Regular surface water monitoring of water quality conditions will be conducted within, upstream, and downstream of the work areas. Clean organic soils will be brought on-site to restore all disturbed areas. The wetlands will be restored with native plantings. When excavating contaminated sediments in the areas, there is potential for an odor to be generated from the work area. Any potential odors would come from disturbing the organic material in the wetland sediments and not from any contamination that may exist there (the contamination in these sediments is primarily metals, such as arsenic). If odors are encountered, DA Collins will minimize odors with foam sprays. At the completion of the work in area 1, the east side of the Wells G&H wetland, the access roads created will be converted to walking trails and the truck entrance to this area will be converted to a small parking lot for future recreational use (this property is owned by the City of Woburn).

Workers will typically be on-site 5 days per week Monday through Friday from 6:30 AM to 5:00 PM (except for the CBCA work near residential areas which will be from 7:00 AM to 5:00 PM). Workers will wear appropriate personal protective equipment for the work being performed. This protective equipment is a precautionary measure to ensure workers are not exposed to contaminated sediments during their work. Truck traffic will increase during transportation of contaminated sediment off site and while bringing in clean organic soil. Up to 24 trucks per day are expected to move either in or out of the site area. The truck traffic will be routed from Washington Street to Salem Street and/or Washington Circle to enter the sites, and will leave the site going the same way. These truck traffic routes have been coordinated with the City of Woburn.

### **Wetland Mitigation**

A summary of Industri-plex Phase 2 (OU2) cleanup wetland/floodplain mitigation is as follows (see Figures 1-2):

- Approximately 2.4 acres of new wetlands will be created at 32 Cabot Road, Woburn, MA;
- Approximately 1 acre of floodplain habitat enhancements will be created off Rifle Range Road, Woburn, MA, including the removal of various debris

piles from the floodplain. In addition, a conservation easement is planned for this area to maintain it as undeveloped land. These enhancements will also help support the City of Woburn's plan for future open green space of the area;

- Greater than 6,000 cubic yards of flood storage space will be created in Woburn, MA;
- A fish ladder will be constructed at Center Falls Dam, Winchester, MA, and is expected to expand habitat for migratory fish, such as herring, upstream of the ladder.

The above mitigation projects have been coordinated with the City of Woburn and Town of Winchester.

### **AIR MONITORING:**

Air monitors that monitor for dust will be placed around the work areas along the perimeter of the site/work areas during construction. If dust is detected at elevated levels, work will be stopped, and dust controls will be put in place to eliminate the potential for dust leaving the site. DA Collins will implement dust controls (e.g. wetting of soil, etc.) as needed to manage and minimize airborne dust throughout construction. If odors are encountered, DA Collins will minimize odors with foam sprays. Monitoring for volatile organic compounds and other contaminants will be conducted within the active work zones to evaluate construction worker health and safety, need for increased levels of personal protection, and/or modification of work practices.

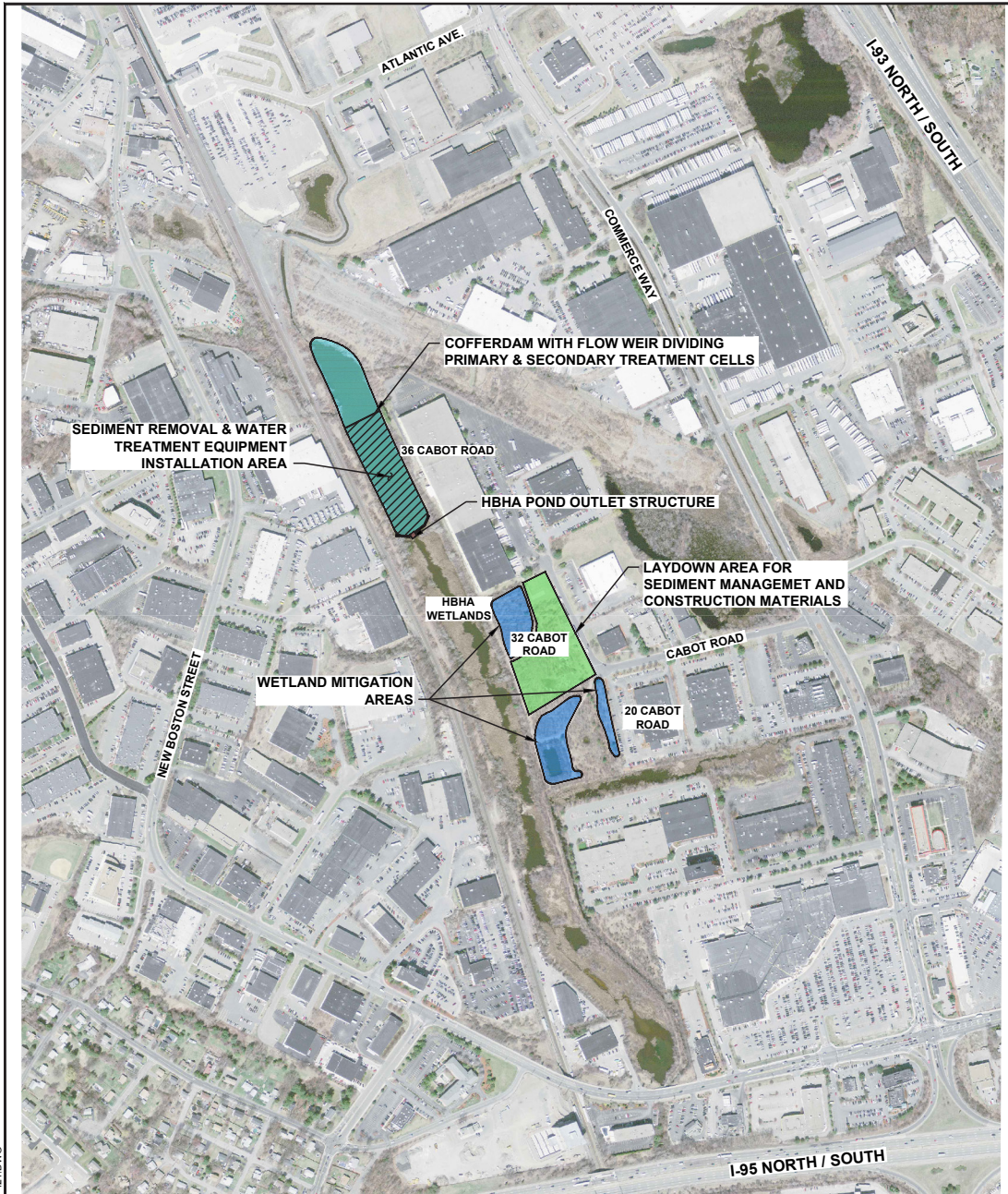
**EPA Public Informational Meeting 7:00 PM, June 27, at the Woburn City Hall; and**

**EPA Neighborhood Open House 4:00 PM – 7:00 PM, July 19 outside at the Cranberry Bog Conservation Area, off Washington Circle, Woburn, MA**

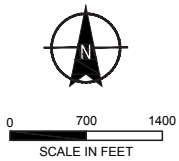
EPA has scheduled the above meetings to discuss with the community the sediment removal and restoration construction activities, environmental monitoring, and answer any neighborhood questions.

### **Additional Contacts**

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INDUSTRI-PLEX  
OPERABLE UNIT 2 SUPERFUND SITE  
WOBURN, MASSACHUSETTES

### HBHA POND DREDGING AND WETLAND MITIGATION COMPONENTS SUMMER - FALL 2016

SCALE: AS SHOWN  
MAY 2016

FIGURE 1



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