

**Harbor at Hastings (Operable Unit No. 2)****Site Description**

The Harbor at Hastings Site is located along the east shore of the Hudson River in the Village of Hastings on Hudson, Westchester County, New York. The site has been segregated into two Operable Units (OUs): the 26-acre upland property (OU1) and the off-site contamination in the sediments and ecosystem of the Hudson River (OU2).

**Site History**

From 1919 to 1977, the upland property was owned and operated by the Anaconda Wire and Cable Company, which manufactured copper wire, lead-covered cable and insulated wire. In the 1930s, polychlorinated biphenyl- (PCB-) containing mixtures were used to impregnate paper- and asbestos-wrapped cable before the outer sheathing was applied.

In July 1989, the site was listed as a Class 2 site in the Registry of Inactive Hazardous Waste Disposal Sites in New York by the New York State Department of Environmental Conservation (NYSDEC).

In November 1995, ARCO Environmental Remediation, Ltd. (AERL) entered into an Order on Consent with the NYSDEC to perform a Remedial Investigation and Feasibility Study (RI/FS) for the site. The on-site investigation led to the discovery of highly contaminated soil in the northwest corner of the property. As an extension of the RI/FS for OU1, a series of 43 sediment borings were completed within the Hudson River between July and September 1998 that confirmed the presence of PCBs and certain metals (i.e., copper, lead, mercury, nickel, silver and zinc).

OU2 was designated in September 1998. At that time, fish samples were also collected and PCBs exceeding local background and health-based levels were determined to be accumulating in the flesh of certain species. The New York State Department of Health (NYSDOH) subsequently issued a fish advisory to eat no American eel collected near the site.

The ROD for OU1 was signed in March 2004.

**Potential Responsible Parties (PRPs)**

The identified PRP for the site is AERL, which is a subsidiary of BP/ARCO.

ARCO declined the opportunity to perform the RI/FS for OU2 in conjunction with their supplemental OU1; consequently, the OU2 RI/FS was referred to the NYSDEC for implementation under the state Superfund program.

### **Threat and Contaminants**

Primary constituents of concern (COCs) within the sediment include PCBs and various metals, including lead, which were released to the sediments and surface waters from previous site operations. The maximum PCB concentrations in the surficial sediments (upper 6 inches) obtained during RI/FS activities in the 1995 investigation ranged from non-detect to 5,200 ppm. Total PCBs in the subsurface sediments ranged from non-detect to 5,500 ppm.

### **Cleanup Approach and Remedial Activities**

A Proposed Remedial Action Plan (PRAP) for OU2 was released by the NYSDEC in October 2003. The proposed remedial technologies considered for OU2 in the PRAP include the following:

- No action — involves continued monitoring.
- Capping — includes the installation of a 30-inch cap constructed with 24 inches of clean sand material and a 6-inch erosion protection layer.
- Removal of sediment — involves either mechanical or hydraulic dredging of contaminated sediments.

In the 2003 PRAP, the NYSDEC selected removal of near-shore sediments containing greater than 1 part per million (ppm) PCBs and metals exceeding preliminary remediation goals (PRGs), long-term monitoring and periodic reviews as the proposed remedy for the OU2. The total volume of sediment to be removed under this remedy is approximately 65,000 cubic yards. The proposed remedy of nearshore sediment would remove 71 percent of PCBs and 75 percent of the copper from OU2. The estimated cost associated with the remedy proposed in the PRAP is approximately \$51.4 million.

Since PCB contamination in sediment varies widely in the lower Hudson River, some of which exceed sediment screening criteria, background levels were considered in developing site-specific remediation goals. Ten sediment samples were collected from locations upstream and across the river from the site to establish background levels of

PCBs in the lower Hudson River sediments. PCB levels in these samples ranged from nondetect to 1.2 ppm. As a result, the FS considered 1 ppm as the remedial goal based on the background conditions.

Long-term monitoring, including annual surficial sediment and biota sampling and surface-water sampling in the Hudson River in vicinity of the site, would be required since contaminated sediment will remain at the site under the NYSDEC's proposed remedy.

Periodic remedial reviews would be conducted to determine if the proposed remedy is protective of human health and the environment, and meets the project's remedial goal. Pending the results of the first periodic review, additional remedial actions may be proposed.

In November 2006, ARCO submitted a Supplemental Northwest Corner Investigation Work Plan (WP) for OU1 and OU2 to the NYSDEC. The WP was prepared to support the selection of the final bulkhead alignment, so as to minimize the creation of pathways for downward movement of PCB material and to minimize the "drag-down" of PCB impacted soils and/or PCB material during construction of the bulkhead (Haley & Aldrich. 2007).

New York State's contractual costs for performing the RI/FS at the site are \$1,745,770. This does not include BP/ARCO's costs for conducting their own studies in the river since 1998 - that information is unavailable. This amount does not include the State's in-house administrative costs for the RI/FS phase.

### **Scheduled Activities**

The field investigations in OU1 and OU2, as outlined in the Supplemental Northwest Corner Investigation Work Plan (WP), are scheduled to begin on July 30, 2007. The investigation will determine where and how deep the sheet pile bulkhead will be driven for OU1, and how much sediment can be excavated adjacent to the bulkhead for OU2.

The Record of Decision (ROD) for OU2 is scheduled for issuance in March 2008, depending upon the results of the supplemental northwest corner investigation (Personal communication with Mr. George Heitzman).

## **References**

Telephone interview with Mr. George Heitzman, NYSDEC Central Office in Albany, New York on April 24, 2007.

Electronic mail communication with Mr. George Heitzman, NYSDEC Central Office in Albany, New York on July 11, 2007.

NYSDEC. 2003. Proposed Remedial Action Plan – Harbor at Hastings Operable Unit No. 2-Village of Hastings-on-Hudson, Westchester County, New York. October 27, 2003.

Haley & Aldrich. 2007. Supplemental Northwest Corner Investigation Work Plan, Atlantic Richfield Company, Former Anaconda Wire And Cable Plant Site, Hastings-On-Hudson, New York NYDEC Site # 3-60-022. Haley & Aldrich of New York Rochester, New York, January 2007.