



Aberjona River

Industri-Plex and Wells G & H Superfund Sites, Woburn, MA

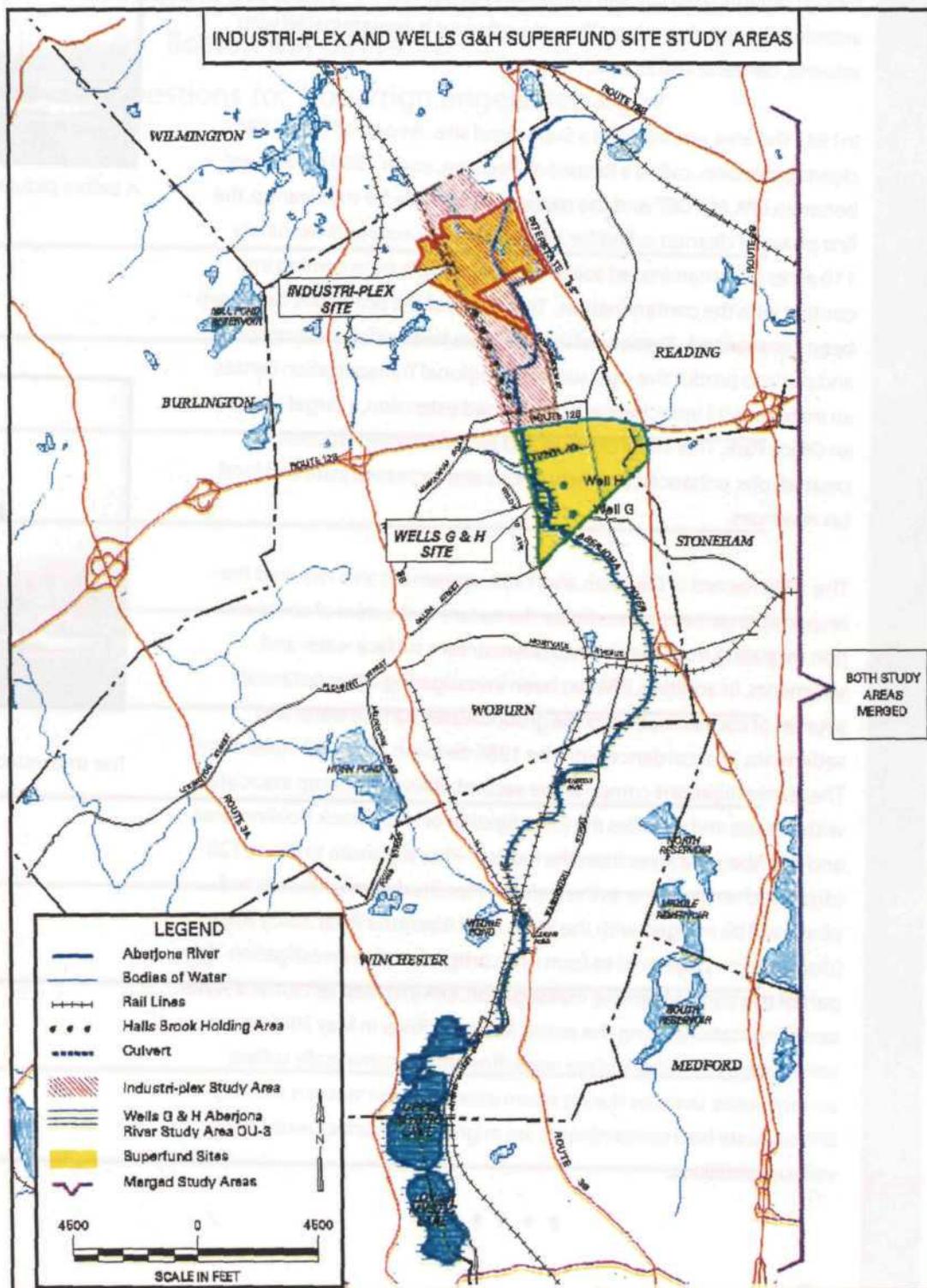
Spring 2002

EPA Merges Two Aberjona River Studies

The Industri-Plex and Wells G&H Superfund Sites require two separate studies of the Aberjona River to evaluate the nature and extent of contamination and assess its potential threat to human health and the environment. The Industri-Plex Study Area, illustrated on the map with red hash lines, investigates the Halls Brook Holding Area and a portion of the upper reach of the Aberjona River; and the Wells G&H Aberjona River Study Area, illustrated on the map with green hash lines, investigates the lower reach of the Aberjona River. EPA plans to merge these studies into one, which will provide a more efficient and cost effective approach to managing the investigation of the Aberjona River.

The Aberjona River flows north to south from its headwaters in Reading through the Industri-Plex Superfund site and along Commerce Way and then merges with the Halls Brook Holding Area at Mishawum Road in Woburn. The River then proceeds under Route 128,

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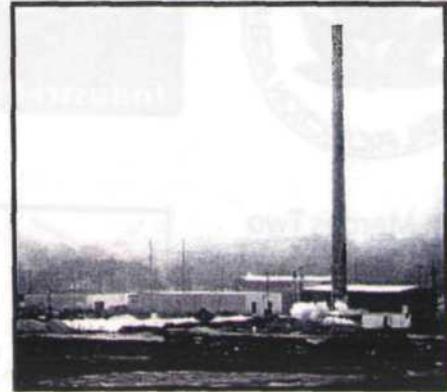
The Aberjona River and current Industri-Plex and Wells G & H study areas which will be merged into one.

Progress & Renewal: Industri-Plex Site

The Industri-Plex Superfund Site is a 245-acre industrial park. From 1853 until 1980, the site was used for manufacturing and then was developed for industrial use. The by-products and wastes from nearly 130 years of chemical manufacturing, light industry, and glue manufacturing contaminated soil and wetlands with heavy metals including arsenic, lead and chromium. The groundwater is contaminated with toluene, benzene and arsenic.

In 1983 the area was listed as a Superfund site. As part of EPA's 1986 cleanup decision, called a Record of Decision, and a 1989 agreement between EPA, MA DEP and the parties responsible for the cleanup, the first phase of cleanup called for a protective cap over approximately 110 acres of contaminated soil to prevent people from coming into contact with the contamination. To date, all of the protective caps have been constructed. Portions of the site have been safely redeveloped and put into productive uses such as a Regional Transportation Center, an Interstate-93 interchange, a public road extension, a Target Store, and an Office Park. This initial cleanup and redevelopment success has created jobs, enhanced property values and increased state and local tax revenues.

The 1986 Record of Decision and 1989 agreement also required the responsible parties to investigate the nature and extent of contamination migrating from the site into downstream surface water and sediments. In addition, EPA has been investigating other potential sources of contamination to the groundwater, surface water and sediments, in accordance with the 1986 decision and 1989 agreement. These investigations comprise the second phase of cleanup associated with the site and includes the investigation of Halls Brook Holding Area and the Aberjona River from the Industri-Plex site south to Route 128 (displayed on page one as the Industri-Plex Study Area). This second phase will be merged with the Wells G&H Aberjona River Study Area (displayed on page one) to form one comprehensive investigation. As part of this comprehensive investigation, EPA installed ten surface water sampling stations along the entire Aberjona River in May 2001 to continuously monitor surface water flow and automatically collect surface water samples during storm events. These stations will help EPA evaluate how contaminants are migrating in surface water under various conditions.



A before picture of the Industri-Plex site.



The smokestacks were demolished in 1996.



Genuity Building, Metro North Office Park



I-93 Interchange & Target Store



110 acres of the Industri-Plex site were capped with engineered caps, generally comprised of a geotextile fabric barrier and 16 inches of clean fill, or with pre-existing caps (building foundations and asphalt parking lots).

An aerial view of the Industri-Plex site redevelopment plan.



Anderson Regional Transportation Center

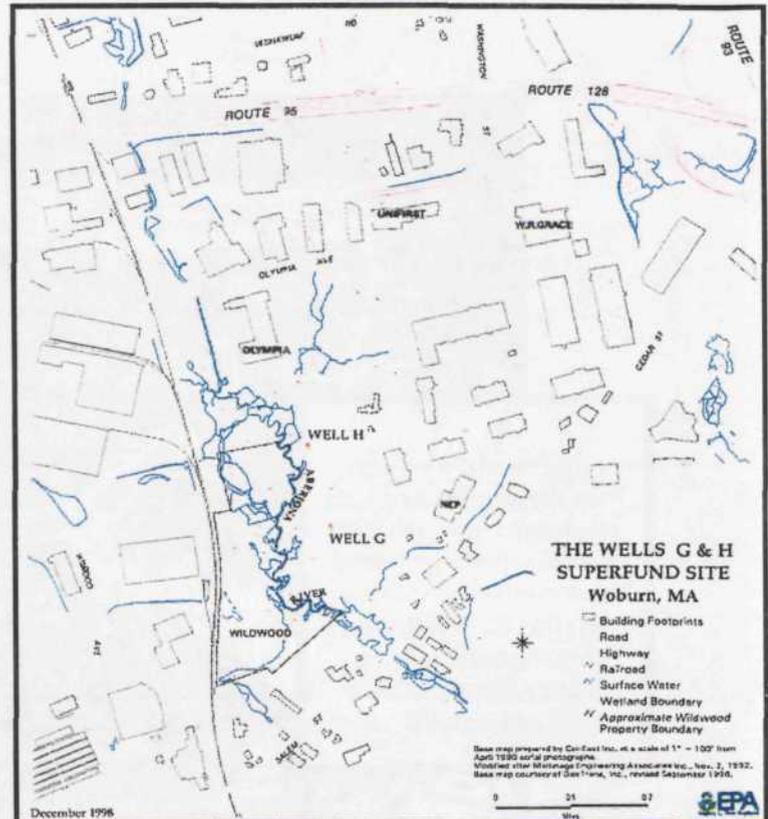
Wells G & H Site Update:

In 1964 and 1967, two municipal wells (Wells G & H) were constructed to supplement the water supply for the City of Woburn. The wells supplied 30% of the city's drinking water until they were shut down in 1979. The wells were shut down after the City discovered they were contaminated with trichloroethylene, tetrachloroethylene, and other contaminants. Five separate properties (W.R. Grace, UniFirst, Olympia, Wildwood and New England Plastics) were found to be contaminating the aquifer from which the wells drew water. The 330 acre area was listed as a Superfund site in 1983. There are three phases to the cleanup of the site. The first phase of cleanup is underway at all five properties.

To date, the first phase of cleanup has resulted in the extraction and treatment of over 200 million gallons of groundwater, and over 4,000 pounds of volatile organic compounds (VOCs) have been removed from the groundwater. At three properties, groundwater pump and treat systems have been operating successfully for up to 9 years. Soil contamination has been successfully addressed at the fourth property. EPA is currently designing the cleanup for the fifth property, the Olympia Property, and negotiating with the owner to conduct the cleanup. EPA has been actively working on the Olympia property and in the adjacent wetlands of the Aberjona River. The Agency is installing groundwater monitoring wells throughout that area. Some large equipment associated with this work can be seen from the roads and commuter rail.

The second phase of cleanup includes a Central Aquifer investigation to evaluate the quality of groundwater outside of the five source areas. The investigation also focuses on properties along the southwest area of the site. This spring, sediment, soil and groundwater samples from these three properties will be analyzed. This data will be used to complete a risk assessment of the southwest properties.

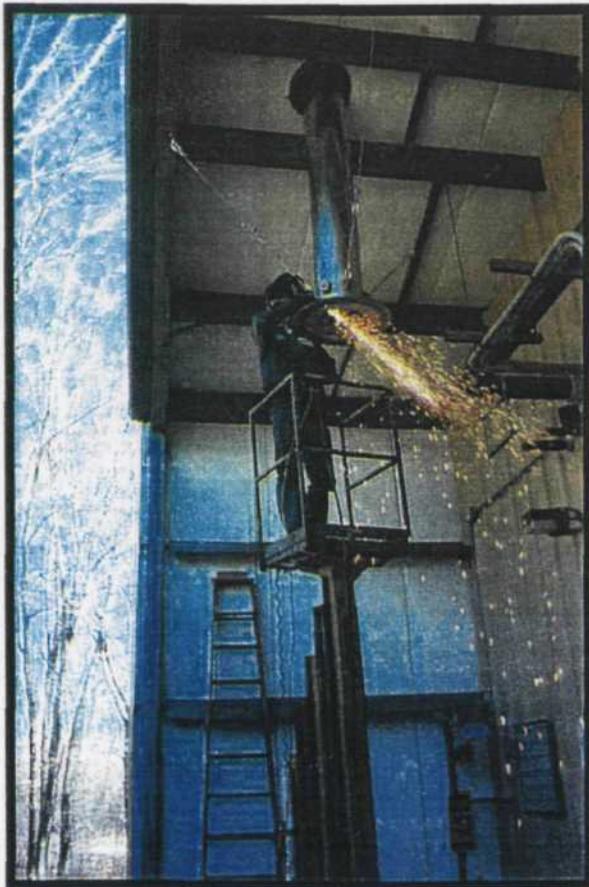
As part of the third phase of the cleanup, EPA has been collecting surface water and sediment data from the Aberjona River which flows through the middle of the Wells G & H site. This data will be incorporated into an Aberjona River Study Baseline Risk Assessment.



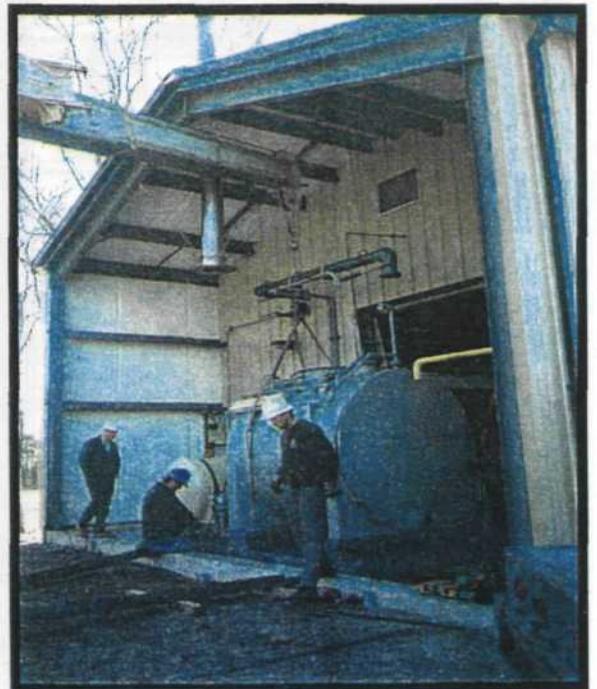
The five groundwater contamination source areas at the Wells-G & H Site



Visiting scholars from the Harvard School of Public Health standing next to Well G during a tour the Wells G & H site with EPA Project Manager Mary Garren (far left).



A welder puts together a treatment unit.



A catalytic oxidation unit used to treat VOCs on site.

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through the Wells G & H Superfund site and continues south until it discharges into the Mystic Lakes in Winchester.

As part of the investigation, EPA has been studying the levels and types of contaminants that may be present in the river and how the contaminants may be migrating.

In addition to identifying any contamination problems, the study will evaluate whether cleanup along the river is needed based upon contamination levels which pose an unacceptable risk to people or the environment. Ultimately, any cleanup that is required will be accomplished under one comprehensive plan. EPA expects to complete the data collection and risk assessment reports by the summer of 2002. Once completed, EPA will schedule a public information meeting.



Additional Information

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Information Repository:

Reading Public Library

45 Pleasant St.

Woburn MA

Additional information can be found on EPA's website.
The following links are particularly informative:

The Industri-Plex Site Narrative Update:

<http://www.epa.gov/region01/superfund/sites/industriplex>

Returning Superfund Sites to Productive Reuse:

<http://www.epa.gov/superfund/programs/recycle/casestud/iplxcsi.htm>

Superfund Redevelopment Success Fact Sheet:

<http://www.epa.gov/superfund/accomp/redevel/iplx.htm>

Wells G & H Site Narrative Update:

<http://www.epa.gov/region01/superfund/sites/wellsgh/sitesum.html>

Additional Wells G & H Site Information:

<http://www.epa.gov/region01/superfund/sites/wellsgh>

