

NPL Site Narrative for Centredale Manor Restoration Project

CENTREDALE MANOR RESTORATION PROJECT North Providence, Rhode Island

Conditions at Proposal (October 22, 1999): The site consists of an area of contaminated fill on parts of both the Centredale Manor and Brook Village apartment complex properties in North Providence, Rhode Island. The 4.7-acre Centredale Manor property and the 4.3-acre Brook Village property are bordered by Route 44 (Smith Street) to the north, a small wooded area and an unpaved perennial drainage channel (alternately referred to as the drainage channel or former tail race) to the east, a wooded wetland area to the south, and the Woonasquatucket River to the west.

The site comprises an area of contaminated fill where the dioxin 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) and other hazardous substances have been disposed or have come to be located. From at least 1921 to 1940, the site was used for textile manufacturing by the Centredale Worsted Mill and then the Olneyville Wool Combing Company. It is currently unknown what type of activities occurred at the site between 1940 and 1943. Between 1943 and 1971, the site was used by two companies, the Atlantic Chemical Company/Metro-Atlantic, Inc., for chemical manufacturing and New England Container Company, Inc. for drum recycling. Aerial photographs taken during the 1960s and 1970s show areas of uncovered, outdoor drum storage in the central area of the site, along with disturbed areas in the southern portion of the site. On-site observations of the disturbed areas indicate that they comprise areas of fill containing glass, concrete, paint, and other wastes. Sanborn Fire Insurance Rate maps compiled in 1956 and 1965 depict areas of drum storage and drum cleaning bordering the former tail race (now the drainage channel) in the southern portion of the site. During the early 1970s, the mill buildings that housed the former textile and chemical companies on the property were demolished. The fate of the demolition debris is unknown. Brook Village was constructed sometime between 1976 and 1979 on Lot 200 (northern end) and Centredale Manor was constructed in 1982 on Lot 250 (southern end).

In 1977, the Rhode Island Department of Health, Division of Air Pollution Control responded to complaints of fumes at the property, which resulted in the discovery of greater than 50 abandoned drums. In the early 1980s, additional abandoned drums were identified at the site by the Rhode Island Department of Environmental Management (RI DEM) Division of Air and Hazardous Waste Management. One drum apparently contained polychlorinated biphenyls (PCBs), while some drums may have contained an acid or caustic material (based on the presence of polyliners), solvents, and ink wastes. A Notice of Violation was issued for violations of the State Hazardous Waste Management Act. In February 1982, approximately 300 drums were removed under the supervision of RI DEM.

The Woonasquatucket River borders the site to the west and a drainage channel borders to the east. The drainage channel was formerly a channel that extended north of Route 44, diverting water for use at the Centredale Worsted Mill. It is now blocked to the north of Route 44, and receives storm water runoff via a head wall at its northern end, via overland flow from the eastern half of the site, and via a drainage pipe from the roof of the Centredale Manor building. The site includes portions of the Woonasquatucket River 10-year floodplain. A low-lying area in the west-central portion of the site has been documented to flood

during periods of high water for the Woonasquatucket River. Surface water runoff from the site enters the Woonasquatucket River and drainage channel at numerous points.

Contaminated fill (an estimated 219,869 square feet) at the site is located on a peninsula bounded by Route 44 to the north, the Woonasquatucket River to the west, the drainage channel to the east, and extends approximately 135 feet south of the southernmost parking area to the south. TCDD has been disposed or has come to be located on parts of Lot 200 and Lot 250. Historical information indicates that former mill and drum recycling activities took place in portions of the area of contaminated fill. The source of the hazardous substances present in the contaminated fill is unknown, but is likely due to the largely unregulated use, storage, and disposal of hazardous substances on the property from at least 1921 until 1977.

On February 16 and 17, 1999, shallow soil samples were collected from the contaminated fill. TCDD was detected at concentrations up to 115.82 parts per billion (ppb). Additional analytical results from previous sampling events indicated the presence of volatile organic compounds, semivolatile organic compounds, pesticides, PCBs, and inorganic elements in samples collected on or around Lot 200 and Lot 250. However, for purposes of HRS scoring, only the TCDD analytical results are evaluated at this time.

Status (February 2000): EPA is considering various alternatives for this site.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at [ATSDR - ToxFAQs](http://www.atsdr.cdc.gov/toxfaqs/index.asp) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.