Fletcher's Paint Works and Storage Milford, New Hampshire Region 1 NHD001079649

Site Exposure Potential

The Fletcher's Paint Works site consists of two properties: the main complex on a 0.06-hectare lot at 21 Elm Street, Milford, New Hampshire, and a warehouse 200 meters south on Mill Street. Fletcher's Paint Works began operations at the Elm Street site in the early 1950s. The primary activity at the facility is the manufacture, distribution, and sale of paints and stains for commercial and residential uses. Annual production is estimated at 94,600 to 132,500 liters. Approximately 250 drums with unknown contents are stored on a parking lot at the plant. Many of the drums are bulging and show signs of spills on the ground in the area. Two additional underground steel storage tanks, containing naphtha and 100% mineral spirits, are located on the property. Each of these tanks has a capacity of 5,680 liters, is unlined, and has no leak detection system (NUS 1986).

The warehouse has been owned by Fletcher's Paint Works for approximately 30 years. During this period, it has either lain idle or been used for storing dry paint pigment. The warehouse is on a 1,200 m² lot. Numerous drums have been stored outside of the building. Most of the drums were open, empty, and stored on their sides in an area without a liner or other containment system (NUS 1987).

Before its use by Fletcher's Paint Works, the Elm Street site was an industrial finishing facility that manufactured baked enamels, lacquers, and hampers (NUS 1986). A portion of the site was formerly occupied by the town dump and operated as a burning dump from the turn of the century to the 1920s. The property on Mill Street is thought to have been occupied by a grain storage shed that burned prior to the purchase by Fletcher's Paint Works (NUS 1987).

The site is in a valley formed by the Souhegan River (Figure 1). The valley walls rise from 90 to 150 meters above the valley floor. The Elm Street property is on the floodplain next

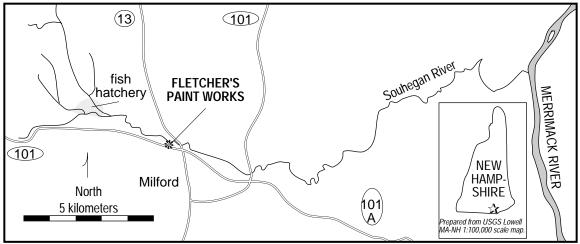


Figure 1. The Fletcher's Paint Works site in Milford, New Hampshire.

to the river. A waste and drum storage area at the edge of the river bank slopes toward the river at about 45 degrees. The parking area is surrounded by a 0.3-meter high berm that

appears to be constructed of coarse, sandy material. Surface runoff from the parking area is collected in an underground steel storage tank periodically emptied directly into the Souhegan River.

The warehouse facility is on a flat river terrace 12 meters above the river. A wetland covering 4.5 hectares adjacent to the Mill Street property drains northward into a ditch that flows along the western boundary of the warehouse lot. Surface runoff from the lot discharges into the ditch or into a storm drain that empties into the wetland. The drainage ditch runs northward, intersects the Hampshire Paper Company property, and then discharges into the Souhegan River. The part of the Hampshire Paper property that contains the drainage ditch is included in the Fletcher's site (NUS 1986, 1987).

The Souhegan River flows 18 km to the Merrimack River, which enters the Atlantic Ocean 105 km below the site.

Contaminant pathways of concern to NOAA are surface water runoff and groundwater discharge to the Souhegan River.

Site-Related Contaminants

Contaminants of concern to NOAA include VOCs, PCBs, and trace metals, which have been detected in Elm Street site surface soil, Souhegan River sediments, and Souhegan River surface water (NUS 1986, 1987). Trace metals detected in on-site soils included chromium, copper, lead, nickel, and zinc. PCBs have been detected in on-site surface soils as high as 1,250 mg/kg. Groundwater data is lacking at this site. Preliminary screening results from the warehouse on Mill Street found soil samples containing VOCs, PCBs, and trace metals.

NOAA Trust Habitats and Species in Site Vicinity

Resources of concern to NOAA include blueback herring, American shad, Atlantic salmon, and alewife in the Merrimack River. NOAA resources are prevented from migrating to the site by two dams on the Souhegan River located at Milford (0.8 km below the site) and at the confluence of the Souhegan and Merrimack rivers (18 km below the site). There are plans to install a fish ladder in the dam at the mouth of the Souhegan River as part of the current state and Federal Merrimack River Atlantic Salmon Restoration program. This will allow alewife, American shad, and Atlantic salmon to migrate to within 0.8 km of the site. There are no plans to place fish ladders on any other dams on the Souhegan River (McKeon 1988).

There is a State fish hatchery on the Souhegan River upstream of the Fletcher site. The Souhegan River is stocked with fingerlings and smolts of Atlantic salmon on a yearly basis, with these fish moving downstream past the Fletcher site and into the Merrimack River. This management program is intended to augment salmon populations in the Merrimack River (McKeon 1989).

Response Category: Not determined

Current Stage of Site Action: RI/FS Workplan

EPA Site Manager

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References

DHHS. 1988. Memorandum from David Mellard, Emergency Response Branch, to Marilyn DiSirio, Public Health Advisor, EPA Region 1. May 3, 1988. Department of Health and Human Services. Concord, New Hampshire: Department of Health and Human Services.

EPA. 1983. Hazardous Waste Land Treatment. Washington, D.C.: Office of Water Regulations and Standards, Criteria and Standards Division. SW-874.

McKeon, J., fishery biologist, U.S. Fish and Wildlife Service, Concord, New Hampshire, personal communication, December 1, 1988.

McKeon, J., fishery biologist, U.S. Fish and Wildlife Service, Concord, New Hampshire, personal communication, March 13, 1989.

NUS Corporation. 1986. Fletcher's Paint Works, Milford, New Hampshire. Final Site Inspection Report, TDD No. FI-8506-10. Boston: U.S. Environmental Protection Agency, Region 1.

NUS Corporation. 1987. Fletcher's Paint Storage Facility, Milford, New Hampshire. Final Site Inspection, TDD No. Fl-8611-32. Boston: U.S. Environmental Protection Agency, Region 1.