NPL Site Narrative for Troy Mills Landfill

TROY MILLS LANDFILL
Troy, New Hampshire

Conditions at Proposal (April 30, 2003): The Troy Mills Landfill (a.k.a. Rockwood Brook Landfill), which is owned and operated by Troy Mills, Inc., is located off a dirt road on a mostly wooded property consisting of 270 acres. The landfill covers 10 to 13 acres approximately 1.5 miles south of the town of Troy, New Hampshire and has been used since 1967 as an industrial disposal area by the owner, a local fabric manufacturer. Contaminated leachate has been documented seeping from the landfill into a stressed wetland area, which is hydraulically connected to Rockwood Brook. Rockwood Brook flows north toward the town of Troy. Sand Dam Pond, a recreational pond used for swimming and fishing is located on Rockwood Brook approximately 1 mile downstream of the landfill. The site is being proposed to the NPL because elevated levels of metals, volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs) are leaking from an estimated 11,000 buried drums and uncontainerized waste at the landfill, endangering the downstream fisheries, recreation areas, and wetlands.

Part of the Troy Mills landfill is still active, receiving fabric wastes, cleaning wastes containing Varsol and methyl ethyl ketone, building materials, damaged fiberboard drums, and plant equipment parts and tools. The smaller portion of the landfill, now closed, received surplus mixes and tank residues of vinyl resins, top-coating products, plasticizers, pigments, industrial organic solvents and chemicals, and numerous steel drums between 1968 and 1978.

In July and August 1980, the New Hampshire Water Supply and Pollution Control Division collected samples from the landfill leachate, indicating the probable presence of inorganic constituents above background concentrations. Additional studies conducted by Troy Mills, Inc., in the 1980s identified crushed drums and drummed liquid and sludge wastes throughout the landfill, with approximately 11,000 drums estimated to be buried in the landfill. Sampling of the wastes identified metals, SVOCs, and VOCs, including xylenes up to 19,000 ppb, bis (2-ethylhexyl) phthalate up to 110,000 ppb, benzyl butyl-phthalate up to 13,000, di-n-octyl phthalate up to 6,200 ppb, and cadmium, chromium, and zinc at varying concentrations. Elevated levels of iron and manganese were detected in ground water and leachate, as well as 1,1,1-trichloroethane, ethylbenzene, toluene, trichloroethylene, 1,2-dichloroethane, 1,1-dichloroethane, benzene, methylene chloride, and tetrachloroethylene detected in ground water. These studies also noted visibly stressed vegetation at leachate outbreaks downgradient of the drum disposal area.

In 1986, the New Hampshire Department of Environmental Services (NH DES) and Troy Mills, Inc., entered into a consent order that required remedial work at the landfill. In 1992, Troy Mills, Inc., completed a feasibility study detailing a proposed remedy that included capping the inactive disposal area, installing additional monitoring wells, and, if necessary, implementing a ground water recovery and treatment system.

EPA conducted an Expanded Site Inspection (ESI), including a wetland delineation, in October and December 2001. Surface water and sediment samples were collected from the leachate seep, wetlands, and Rockwood Brook. The results document an observed release to a wetland area west of the toe of the landfill. The leachate was found to be contaminated and directly discharging to the wetland. The primary

contaminants of concern in the ESI were manganese, lead, cadmium, copper, chromium, zinc, bis (2-ethylhexyl) phthalate, di-n-octylphthalate, cis-1,2-DCE, xylenes (total), ethylbenzene, and toluene. These contaminants threaten downstream fisheries, a designated recreation area, and wetlands.

Status (September 2003): 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) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.