

NPL Site Narrative for Woodbrook Road Dump

WOODBROOK ROAD DUMP South Plainfield, New Jersey

Conditions at Proposal (September 13, 2001): The Woodbrook Road Dump site (Dismal Swamp) is an inactive, non-permitted dumping area located in South Plainfield, Middlesex County, New Jersey. The site, which is bisected by Bound Brook, has approximately 34 acres. It is located on two undeveloped properties north of Woodbrook Road. The properties are within wetlands of the Dismal Swamp, a natural wildlife refuge designated as "priority wetlands" by the U.S. Fish and Wildlife Service and the U.S. Environmental Protection Agency (EPA). Both parcels are currently owned by Texas Eastern Terminal Company (TETCO), a subsidiary of Duke Energy Corporation. The properties were operated as dumps by previous owners during the 1940s and 1950s, accepting household and industrial wastes until shut down by the New Jersey Department of Environmental Protection (NJDEP) in 1958. Investigations at the site have revealed the presence of household refuse, building debris, automotive parts, large quantities of bottles, and leaking electrical capacitors.

The leaking capacitors were discovered in September 1999. On September 13, 1999, NJDEP sampled the material inside one capacitor, and recorded greater than 50 parts per million (ppm) of polychlorinated biphenyls (PCBs). NJDEP referred the Dismal Swamp site to the EPA for removal action consideration in October 1999. EPA performed an investigation of the site in October 1999, observing that the leaking capacitors were located at a swampy meadow area next to a small stream in Dismal Swamp. EPA collected soil, sediment, and sludge samples in and near the capacitors. Sludge and soil samples showed extremely elevated concentrations of PCBs. Metals analysis was performed for one soil sample, showing elevated levels of lead and smaller amounts of other heavy metals, including mercury, selenium, and thallium. EPA performed oversight of capacitor removal by the property owner on March 8 and 9, 2000. The condition of the capacitors ranged from intact and unrusted to completely rusted or no outside covering.

EPA conducted an Integrated Assessment at the site in July 2000. Surface water, sediment, drinking water well, and background soil samples were collected. The results of the sampling showed PCBs in on-site soil samples at elevated concentrations. Lead and other hazardous substances detected in on-site soils at elevated concentrations include bis(2-ethylhexyl)phthalate, benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, antimony, arsenic, barium, cadmium, chromium, cobalt, mercury, and zinc.

PCBs were detected in the surface water and sediment samples collected from the Secondary Tributary at elevated concentrations. The Secondary Tributary receives runoff from the area where the leaking capacitors were found. The surface water and sediment samples contaminated with PCBs delineate approximately 4,370 feet of wetland frontage subject to actual contamination. There are approximately 11 additional miles of wetland frontage along the surface water pathway potentially threatened beyond the contaminated portion. The contaminated stream within the Dismal Swamp converges into Bound Brook, which since 1998 has a fish consumption advisory due to PCB contamination related to a site located within 1.4 mile downstream of the Woodbrook Road Dump site.

The property owner has found evidence of people using the site for recreation. The trails at the site are used for nature hikes. Hunters and recreational vehicle users have been observed in the area where the leaking capacitors were found despite actions taken by the property owner and EPA to limit access. Preventive measures included installation of a fence and warning signs around the disposal area, and installation of guard rails and warning signs at access points to the site.

Ground water threatened by the Woodbrook Road Dump site serves approximately 62,000 people. The downstream surface water pathway includes Bound Brook and the Raritan River, which are classified as fisheries. The total population within 4 miles of the site is approximately 186,000 people. There are approximately 3,000 acres of wetlands located within four miles of the site.

Status (April 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) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.