

**Brook Industrial Park
Bound Brook, New Jersey
Region 2
NJD078251675**

Site Exposure Potential

The Brook Industrial Park is a two-hectare, multi-service manufacturing site in Bound Brook, New Jersey (Figure 1). Activities at this site included chemical and insecticide manufacturing and storage, metal plating, plastics extrusion, and steel fabrication. From February 14 to March 27, 1980, Jame Fine Chemical, Incorporated illegally discharged cooling water used in the manufacture of mandelic acid (a urinary antiseptic) via surface drainage channels to the Raritan River. From 1971 to 1982, Blue Spruce International formulated pesticides that were banned from use in the United States (the pesticides were manufactured for export only). Investigations performed by the New Jersey Department of Environmental Protection and the local health department showed frequent spills in the facility's basement and adjacent outdoor areas. National Metal Finishing, Incorporated, still operating at the site, has been cited for discharging metal plating wastes to the groundwater without a permit from approximately 1976 to 1986 (NUS 1986).

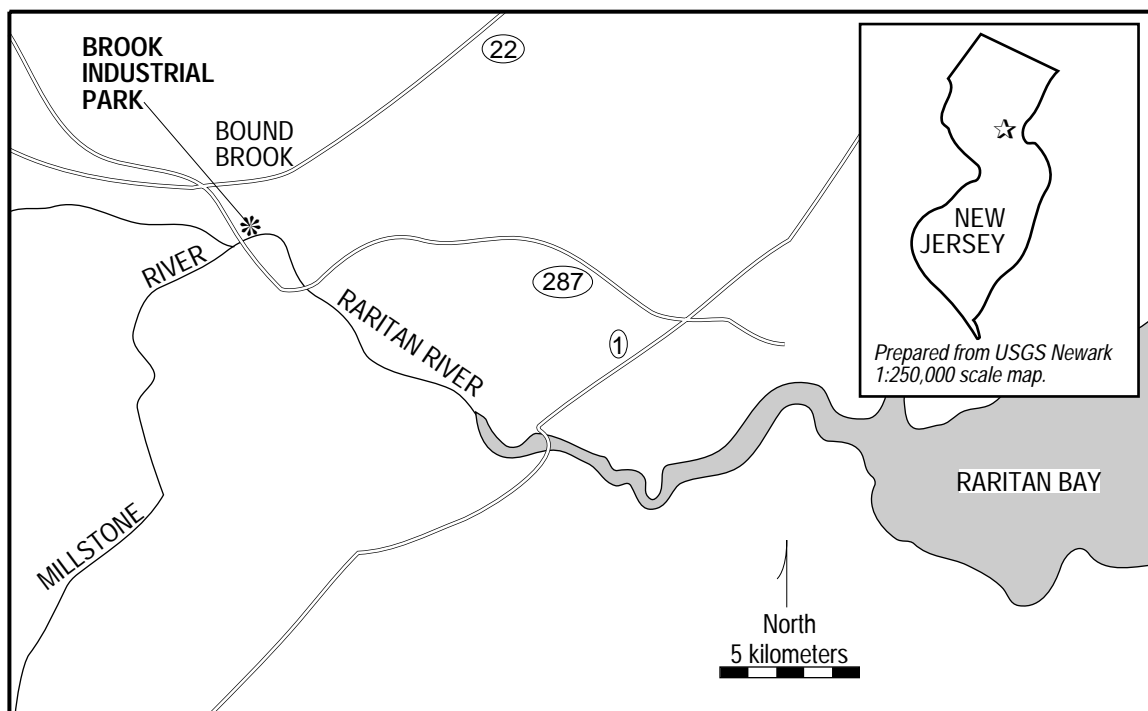


Figure 1. The Brook Industrial Park site in Bound Brook, New Jersey.

The site is on the northern bank of the Raritan River, 60 meters from the river. Surface water runoff drains into two ditches that discharge into the river. The Raritan River flows 25 km before it enters Raritan Bay. Flooding often occurs in the lower reaches of the river and the site is known to have been flooded (NUS 1986).

Possible contaminant migration pathways to NOAA trust resources are groundwater flow, surface water runoff of spills, direct discharge, and erosion and runoff of contaminated surface soils to the Raritan River.

Site-Related Contamination

Contaminants of concern to NOAA include pesticides, trace metals, and volatile and semi-volatile organic compounds. Very limited information was available regarding the concentrations of these substances at the site. VOCs were measured in groundwater and surface water (Table 1). The concentration of tetrachloroethene measured in on-site surface water exceeded LOEL (EPA 1986; NUS 1986). No information was available on contaminants in on-site soil.

Table 1. Maximum concentrations of selected contaminants at the Brook Industrial Park site (NUS 1986); LOEL (EPA 1986); concentrations in µg/l.

Contaminant	On-site Groundwater	On-site Surface Water	LOEL	
			Acute	Chronic
Volatile Organic Compounds				
benzene	260	N/A	5,300	N/A
ethylbenzene	N/A	65	32,000	N/A
tetrachloroethene	N/A	6,300	5,280	840
toluene	9,000	175	17,500	N/A
trichloroethane	N/A	2,400	18,000	9,400
trichloroethene	N/A	80	45,000	21,900
xylenes	3,140	N/A	N/A	N/A
N/A: Data not available				

NOAA Trust Habitats and Species in Site Vicinity

The Raritan River is a continuously flowing, low-gradient river system that flows through the gently rolling coastal plain of New Jersey. The drainage area of the Raritan River at the Brook Industrial Park site is 2,033 km². The river is an average of 30 meters wide and 0.3 to 2 meters deep, with a substrate of shale and sandy silt. Water quality is fair and the river is tidally influenced up to a point 5 km downstream of the site (USFWS 1980; Stuart 1989).

American shad, blueback herring, and alewife use the reaches of the river near the site as a migratory route. There are also adult American eel in the river. Chinook salmon and steelhead trout have been planted in the Raritan River to introduce runs of these species to the river (Stuart 1989). The State of New Jersey lists American shad as a threatened species (USFWS 1980).

Response Category: Federal Enforcement

Current Stage of Site Action: RI/FS Workplan

EPA Site Manager

Pat Evangelista 212-264-6311

NOAA Coastal Resource Coordinator

John Lindsay 404-347-5231

References

EPA. 1986. Quality Criteria for Water. Washington, D.C.: Office of Water Regulations and Standards, Criteria and Standards Division. EPA 440/5-86-001.

NUS. 1986. Final Draft Site Inspection Report and Hazard Ranking System Model Brook Industrial Park, Bound Brook, New Jersey. Edison, New Jersey: Environmental Service Division, U.S. Environmental Protection Agency.

Stuart, R., biologist, New Jersey Bureau of Freshwater Fisheries, Lebanon, New Jersey, personal communication, January 12, 1989.

USFWS. 1980. Atlantic coast ecological inventory: Newark. Washington, D.C.: U.S. Fish and Wildlife Service. 1:25,000 scale map.