

**Garden State Cleaners  
Minotola, New Jersey  
Region 2  
NJD053280160**

**Site Exposure Potential**

The Garden State Cleaners site is located in Minotola, New Jersey (Figure 1). Garden State Cleaners has used tetrachloroethylene at the site for dry cleaning of clothes since 1966 (NJDEP undated). In April 1981, during a remedial investigation by the New Jersey Department of Environmental Protection (DEP) of another facility in Minotola, it was determined that elevated levels of tetrachloroethylene were emanating from the Garden State Cleaners site. During a site inspection by the DEP, the owners acknowledged discharging wastes onto the ground. In December 1985, the DEP issued Garden State Cleaners an Administrative Consent Order to investigate the extent of soil and groundwater contamination. Another NPL site, South Jersey Clothing Company, is less than 250 meters from this site.

Groundwater flows south beneath the site toward two small streams, Cedar Brook and Panther Brook, 1.2 km southwest and southeast of the site, respectively (USGS 1970). Cedar Brook flows for 6 km and Panther Brook for 7 km before they merge and form Manantico Creek. Manantico Creek flows for 20 km before it enters the Maurice River. A dam on the creek 10 km below the site forms Manantico Lake. The Maurice River empties into Maurice Cove in the Delaware Bay, 33 km below the site.

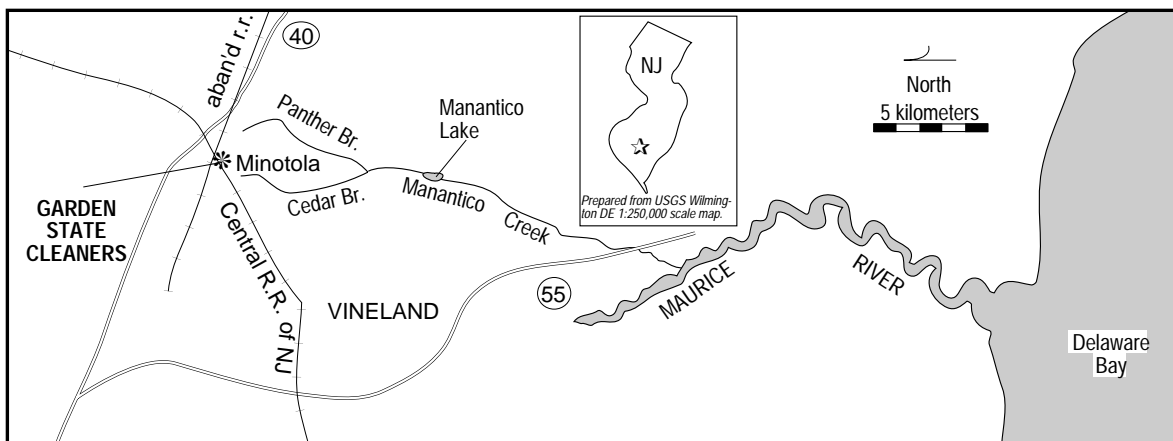


Figure 1. The Garden State Cleaners site in Minotola, New Jersey.

Groundwater flow to Manantico Creek is a possible contaminant migration pathway to NOAA trust resources.

**Site-Related Contamination**

VOCs are the contaminants of concern to NOAA at the site. Several VOCs were detected in the groundwater on-site but did not exceed their respective LOEL (Table 1) (NJDEP undated; EPA 1986). Soil samples collected from the immediate area of the discharge point contained elevated concentrations of several VOCs. No measurements of other substances were reported.

Table 1. Maximum concentrations of VOCs at the Garden State Cleaners Site (NJDEP undated) and LOEL (EPA 1986); concentrations in mg/kg for soil and in µg/l for water.

Contaminant	Soil	Groundwater	LOEL	
			Acute	Chronic
tetrachloroethylene	43	6,600	10,200	450
trichloroethylene	16.5	87	2,000	21,900
dichloroethylene	24	N/A	224,000	N/A
N/A: Not available				

### NOAA Trust Habitats and Species in Site Vicinity

No information was available on NOAA trust resource use of aquatic habitats of Cedar or Panther brooks. Manantico Creek is a continuously flowing, low-gradient stream with a total drainage area of 33 hectares. In the upper reaches the creek ranges from four to six meters wide and 0.5 to 1 meter deep (Bolton 1989). The substrate is sand or silty sand, and the water quality is generally good. Extensive wetland areas, mostly forested with white cedar, pine, and lowlands oak, border Manantico Creek to its confluence with the Maurice River. A good portion of Manantico Creek is in its natural state. Maurice River is three meters deep and 400 meters wide at its confluence with Manantico Creek, and has a silty sand substrate. The stretch of the river at the confluence is tidally influenced and has low salinity ranging from 0.5 to 5 ppt. The Maurice River is bordered by extensive wetland areas from its confluence with Manantico Creek to Maurice Cove (USFWS 1981).

American shad, alewife, white perch, and blueback herring are present at the mouth of Manantico Creek and may use the lower reaches of the creek up to the dam at Manantico Lake (Bolton 1989). The dam is in such disrepair that fish are not completely restricted by it (Byrne 1989). Blueback herring spawn in Manantico Creek and juveniles of blueback herring and alewife may use the creek as nursery area. American eel use Manantico Creek as adult habitat and may be present in the headwaters of the creek near the site. NOAA trust resources use the Maurice River as a spawning and nursery area and as a migratory route (Table 2) (USFWS 1981). There are recreational and commercial fisheries for alewife, striped bass, white perch, and American eel on the Maurice River. The Maurice River system is being reviewed by the U.S. Fish and Wildlife Service for possible classification as a Wild and Scenic River.

Table 2. NOAA trust resource use of Manantico Creek and Maurice River (USFWS 1981).

Species	Manantico Creek	Maurice River
alewife	M,N	M,S,N,C,R
American eel	A,M	A,M,C,R
American shad	M	M
Atlantic sturgeon		M
blueback herring	M, S,N	M,S,N
hickory shad		M
striped bass		M,C,R
white perch	M	S,N,A,M,C,R
M: Migration route    A: Adult area    S: Spawning area    N: Nursery area    C: Commercial fishery R: Recreational fishery		

**Response Category:** Federal Fund Lead

**Current Stage of Site Action:** RI/FS Workplan

**EPA Site Manager**

Steve Siepo	212-264-8667
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**NOAA Coastal Resource Coordinator**

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**References**

Bolton, F., fishery biologist, Bureau of Freshwater Fisheries, Lebanon, New Jersey, personal communication, January 3, 1989.

Byrne, D., fishery biologist, New Jersey Department of Fish and Game, Port Republic, New Jersey, personal communication, March 1, 1989.

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

NJDEP. Undated. Administrative Consent Order. Newark, New Jersey: New Jersey Department of Environmental Protection, Division of Water Resources.

USFWS. 1981. Atlantic coast ecological inventory: Wilmington. Washington, D.C.: U.S. Fish and Wildlife Service. 1:25000 scale map.

USGS. 1970. Buena, New Jersey. Washington, D.C.: U.S. Geological Survey. 7.5 minute series quadrangle. 1953 photorevised 1970.