South Jersey Clothing Company
Minotola, New Jersey
Region 2
NJD980766828

Site Exposure Potential

The South Jersey Clothing Company site is located in Minotola, New Jersey (Figure 1). South Jersey Clothing Company manufactures clothing for the military (NJDEP 1981). The dry cleaning involved in the process creates wastewater containing trichloroethylene and other VOCs. The wastewater was routinely discharged into the ground. The company has used 98,400 liters of trichloroethylene in the last 10 years. The extent of groundwater contamination was investigated in 1982 and 1984, and the company is conducting remedial actions (NJDEP undated). Groundwater is withdrawn from selected wells and treated at the Minotola Municipal Utilities Authority sewage treatment plant. Another NPL site, Garden State Cleaners, is less than 250 meters from this site.

Two small streams, Cedar Brook and Panther Brook, are located 1.4 km southwest and southeast, respectively, of the site (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.

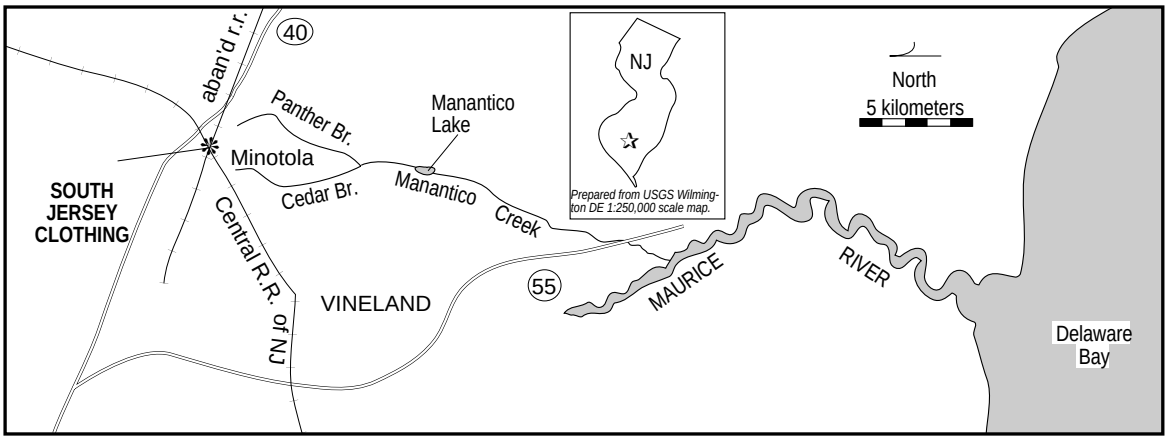

Figure 1. The South Jersey Clothing site in Minotola, New Jersey.

A possible contaminant migration pathway to NOAA trust resources is groundwater flow to Manantico Creek.

Site-Related Contamination

VOCs were the only contaminants analyzed for at the site. Of the VOCs detected in on-site groundwater, trichloroethylene exceeded the LOEL (Table 1) (NJDEP 1981; EPA 1986). VOCs were observed in a groundwater plume that has migrated off-site. Analysis of on-site sludges showed that 16 percent of the total mass is VOCs.

Table 1. Maximum concentrations of selected contaminants at the South Jersey Clothing site (NJDEP 1981); LOEL (EPA 1986); concentrations in μg/l.

Contaminant	Liquid†	Groundwater	LOEL Acute	LOEL Chronic
trichloroethylene	N/A	9,860	2,000	N/A
toluene	N/A	82	6,300	5,000
1,2-dichloroethane	N/A	159	113,000	N/A
ethylbenzene	3450	N/A	430	N/A
o-xylene	9,189	N/A	N/A	N/A
n-butyl benzene	4,530	N/A	N/A	N/A

† Liquid/solid from a puddle near the outfall pipe; N/A: Data not available

NOAA Trust Habitats and Species in Site Vicinity

No information was available regarding the aquatic habitats of Cedar Brook and Panther Brook. Manantico Creek is a continuously flowing, low-gradient stream whose upper reaches range from four to six meters wide and 0.5 to 1 meters deep (Bolton 1989). The substrate is sand or silty sand. The water quality is generally good. Extensive wetland areas border Manantico Creek to its confluence with the Maurice River. The wetlands are mostly forested with white cedar, pine, and lowlands oak. A good portion of Manantico Creek is in its natural state. The Maurice River is three meters deep and 400 meters wide at its confluence with Manantico Creek. The stretch of the river at the confluence is tidally influenced and has salinity ranging from 0.5 to 5 ppt. The substrate is silty sand. The Maurice River is bordered by extensive wetland areas from the confluence of 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 presently in such disrepair that fish are not completely restricted by it (Byrne 1989). Blueback herring may spawn in the creek and juveniles of blueback herring and alewife may use the creek as nursery area. American eel use the 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 presently under review 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

NOAA Coastal Resource Coordinator

John Lindsay 404-347-5231

References

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

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