

**Mattiace Petrochemical Company, Inc.**  
**Glen Cove, New York**  
**Region 2**  
**NYD000512459**

**Site Exposure Potential**

The Mattiace Petrochemical site occupies one hectare in an industrial area of Glen Cove, New York (Figure 1). Mattiace Petrochemical receives chemicals by tank trucks and stores the chemicals in 24 above- and 32 below-ground tanks. Drums are filled with petrochemical products in an open-sided building and distributed to clients. M & M Drum Cleaning Company, owned by Mattiace Industries, also operated in the open-sided building on the site until 1982. Other facilities on-site include a hangar, an office trailer, and three concrete loading platforms. A 1980 New York State Department of Environmental Conservation site inspection discovered numerous drums containing suspected hazardous wastes buried along the western side of the site. In addition, liquid wastes from the drum-cleaning operation had been discharged into subsurface leaching pools (vertically placed, open-ended concrete pipes partially buried in the soil) in the northwestern corner of the site (Woodward-Clyde 1986).

The site is 170 meters north of Glen Cove Creek, a tidal tributary of Hempstead Harbor in Long Island Sound. Glen Cove Creek flows north for 1 km to Hempstead Harbor. There are designated tidal wetlands in and along Glen Cove Creek, Hempstead Harbor, and Long Island Sound. The site slopes at a three percent grade towards Glen Cove Creek. Surface water runoff from the site is collected and routed by way of a shallow underground

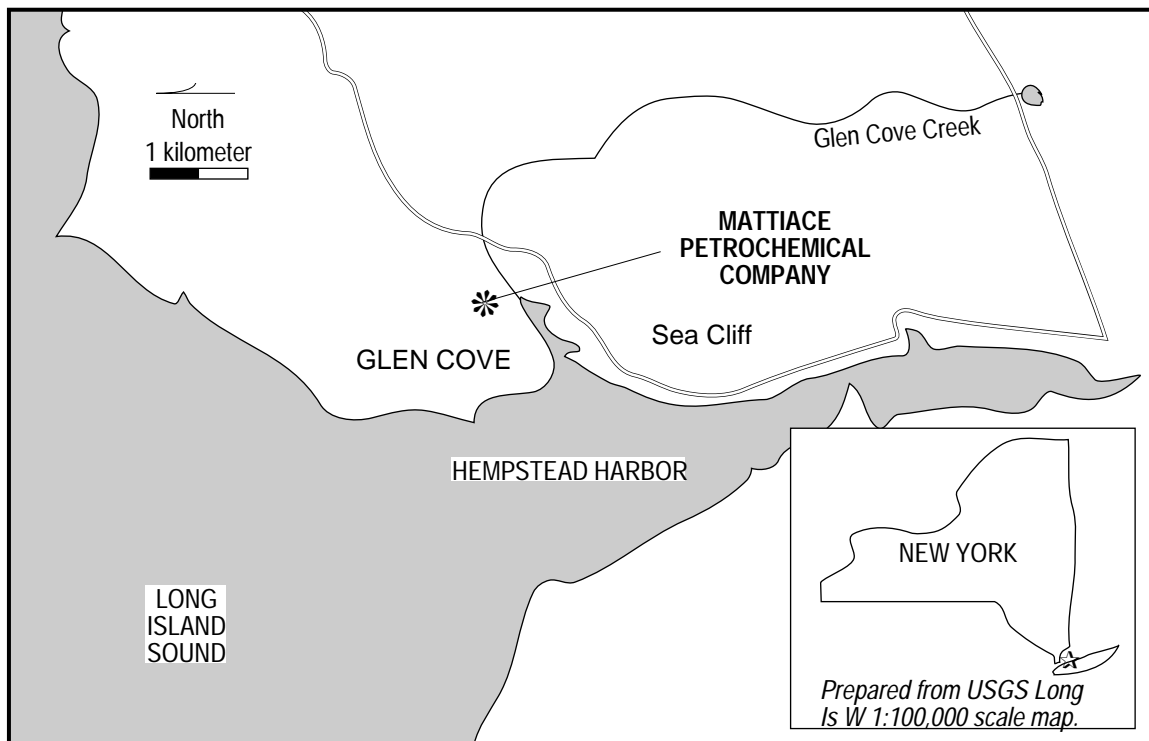


Figure 1. The Mattiace Petrochemical site in Glen Cove, New York.

drainage system and is discharged at the southwest corner of the site. This water then flows towards the south on the driveway leaving the site. The documents reviewed provided no information on the eventual fate of this runoff. The depth to groundwater in the site area is eight meters. Shallow groundwater flow in the vicinity of the site is to Long Island Sound, northwest of the site (Woodward-Clyde 1986).

Possible contaminant migration pathways to NOAA trust resources include groundwater flow and surface water runoff to Glen Cove Creek, Hempstead Harbor, and Long Island Sound.

### Site-Related Contamination

The contaminants of concern to NOAA are VOCs and phenols (Table 1). Groundwater samples contained high concentrations of VOCs, with the levels of six compounds exceeding LOEL (EPA 1986). Toluene was the only VOC detected in on-site surface water samples. VOC levels reported from soil/sediment samples were not high. Moderate levels of total phenols were detected in on-site soils, sediment, surface water, and groundwater.

Table 1. Maximum concentrations of selected contaminants at the Mattiace Petrochemical site (NCDH 1982; Woodward-Clyde 1986); LOEL (EPA 1986); water concentrations in µg/l and soil concentrations in mg/kg.

Contaminant	On-Site Soil	Culvert On-Site Sediment	Ground- water	Culvert Surface water	LOEL	
					Acute	Chronic
<u>Volatiles</u>						
methylene chloride	7.9	N/A	N/A	N/A	N/D	N/D
1,1-dichloroethane	1.7	1.0	15,000	ND	118,000	20,000
trans-dichloroethylene	8.4	ND	120,000	ND	11,600	N/D
1,1,1-trichloroethane	17	2.3	21,000	ND	N/D	N/D
trichloroethylene	46	ND	84,000	ND	45,000	21,900
tetrachloroethylene	19	ND	5,100	ND	5,280	840
toluene	1,400	34	88,000	6,600	17,500	N/D
xylene	3,100	86	540,000	ND	N/D	N/D
ethylbenzene	920	16	140,000	ND	32,000	N/D
4- methyl-2-pentenone	0.48	ND	170,000	ND	N/D	N/D
<u>Semi-Volatiles</u>						
total phenols	0.62	1.2	7,000	57	10,200	2,560
ND: Not detected		N/A: Not available		N/D: Not determined		

### NOAA Trust Habitats and Species in Site Vicinity

Habitats of interest to NOAA include Glen Cove Creek, Hempstead Harbor, and Long Island Sound. Glen Cove Creek and Hempstead Harbor are tidal estuarine systems with tidal wetlands. Hard clams use both Glen Cove Creek near the site and Hempstead Harbor as spawning, nursery, and adult areas. Hard clams are recreationally fished in both areas. Long Island Sound is a high-salinity estuarine system with extensive habitat areas used by NOAA trust species (Table 2). NOAA trust resources use Long Island Sound as a spawning and nursery area, including soft shell clams, American lobster, winter flounder, and blue crab.

Table 2. Selected NOAA trust resource use of Long Island Sound (USFWS 1980; Research Planning Institute 1985).

Species	Spawning Area	Nursery Area	Adult Area	Migration Route	Recreational Fishery	Commercial Fishery
<b>INVERTEBRATES</b>						
blue crab	X	X				
soft shell clam	X	X	X		X	X
hard clam	X	X	X			
<b>FISH</b>						
American eel			X		X	X
American lobster	X	X	X		X	X
American shad				X		
Atlantic menhaden			X			X
Atlantic sturgeon				X		
blueback herring				X		
bluefish			X		X	X
flounder		X	X		X	X
striped bass			X	X	X	X
white perch				X	X	X
winter flounder	X	X	X		X	X

**Response Category:** Federal Fund Lead

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

**EPA Site Manager**

Brooks Mullen 212-264-6321

**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.

NCDH. 1982. Soil boring analytical data from the Mattiace Petrochemical Site, Glen Cove, New York. Long Island, New York: Nassau County Department of Health.

Research Planning Institute. 1985. Sensitivity of coastal environments and wildlife to spilled oil: Long Island. An atlas of coastal resources. Seattle: Ocean Assessments Division, NOAA.

USFWS. 1980. Atlantic coast ecological inventory: New York. Washington, D.C.: U.S. Fish and Wildlife Service. 1:250 000 scale map. 40072-A1-EI-250.

Woodward-Clyde Consultants. 1986. Phase II Investigations at the Mattiace Petrochemical Site, Glen Cove, New York. New York: U.S. Environmental Protection Agency, Region 2.