Gautier Oil Company, Inc. Gautier, Mississippi Region 4 MSD098596489

Site Exposure Potential

The Gautier Oil Company, Inc., site covers one hectare in Gautier, Mississippi (Figure 1). The site is an abandoned wood-preserving and oil recovery facility that operated for 104 years under various owners. The current owner is Seaboard Railroad, Inc. The site contains storage and process tanks, two sand filter beds, a lagoon, rusting drums, and piles of sludges. The reportedly unlined lagoon was constructed in 1972 to contain wastewater from the creosote wood-preserving process. At least 2,700 metric tons of liquid and sludges containing phenol, naphthalene, chloroform, and lead were deposited in the lagoon and in on-site sludge piles. Operations ceased in 1983 (EPA 1987).

On April 24, 1985, EPA issued an Administrative Order by Consent to Seaboard to remove contaminated soil, sludge, containers, and equipment from the site. Seaboard transported over 480 metric tons of materials to a regulated hazardous waste facility (EPA 1987).

The site is on the bank of the West Pascagoula River, 2.4 meters above mean sea level. The slope of the intervening terrain is 11.4 percent and the site is within the 100-year floodplain. Overflow from the lagoon discharges into the West Pascagoula River, 20 meters away, via an outfall pipe and a secondary lagoon. The river enters Pascagoula Bay on the Gulf of Mexico 0.5 km below the site (EPA 1987).

Possible contaminant migration pathways to the Pascagoula River are groundwater flow, surface water runoff, and direct discharge.

Site-Related Contamination

High concentrations of lead, chromium, chloroform, toluene, naphthalene, phenol, and pentachlorophenol were reportedly measured in soils, sludges, and sediments on-site, but no quantitative data were presented. PCBs were also found on-site at concentrations of less than 50 mg/kg (EPA 1987).

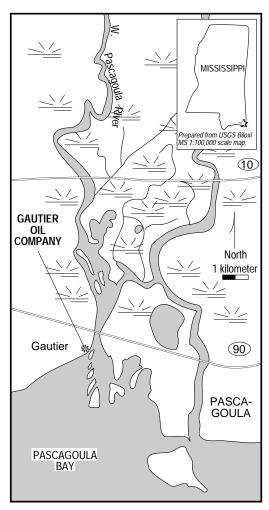


Figure 1. The Gautier Oil Company site in Gautier, Mississippi.

NOAA Trust Habitats and Species in Site Vicinity

The lower reaches of the West Pascagoula River are mid-salinity, estuarine habitats. The river is 1 km wide at the mouth and from 0.3 to 3 meters deep. The substrate consists of muddy sand. Saltwater wetlands are situated along the shoreline of the river less than 0.8 km from the site. Pascagoula Bay is a mid-salinity embayment of the Gulf of Mexico. The bay is generally shallow, except for dredged areas around the town of Pascagoula, with a substrate of muddy sand. The water quality in the river and bay is degraded due to sewage outfalls (USFWS 1982; Buchanan 1989).

NOAA trust resources, including seatrout, anchovy, and mullet, use the Pascagoula River and Pascagoula Bay near the site as spawning and nursery areas (Table 1). There is a large population of oysters in the lower reaches of the river and in the bay, and shrimp and

Table 1. Selected NOAA trust resource use of Pascagoula Bay and River (USFWS 1982).

	Spawning	Nursery	Adult	Migratory	Commercial	Recreational
Species	Area	Area	Area	Route	Fishery	Fishery
INVERTEBRATES						
blue crab	X	X			X	X
oyster	X	X	Χ			
shrimp		Χ			X	X
FISH						
Alabama shad				Χ		
Atlantic croaker		Χ			Χ	Χ
bay anchovy	Χ	Χ	X			
black drum	X	Χ			Χ	Χ
blue catfish					Χ	Χ
blue runner		X			Χ	Χ
bluefish		Χ			Χ	Χ
crevalle jack		Χ			Χ	Χ
Florida pompano		Χ			Χ	Χ
gulf kingfish		Χ			Χ	Χ
gulf menhaden		Χ			Χ	
red drum	X	Χ			Χ	Χ
sand seatrout		Χ			Χ	Χ
sea catfish	Χ	Χ			Χ	Χ
sheepshead		Χ			Χ	Χ
southern flounder		X			Χ	Χ
southern kingfish		Χ			Χ	Χ
spot		Χ			Χ	Χ
spotted seatrout	X	Χ			Χ	Χ
striped mullet	Χ	X			Χ	Χ
white mullet	Χ	Χ			X	X
MARINE MAMMALS						
Atlantic bottlenose dolph	nin X*	Χ	Χ			
*breeding area						

blue crab also use the area as nursery grounds. There are extensive commercial and recreational fisheries for various fish species in the Pascagoula River and Pascagoula Bay. Shellfishing has been prohibited in the river and restricted in the inner bay due to high levels of coliform bacteria (USFWS 1982; Buchanan 1989). Bottlenose dolphin use Pascagoula Bay and the Pascagoula River as breeding and nursery areas.

Response Category: Federal Enforcement Lead

Current Stage of Site Action: RI/FS Workplan

EPA Site Manager

Charles King 404-347-2643

NOAA Coastal Resource Coordinator

John Lindsay 404-347-5231

References

Buchanan, M., Bureau of Marine Resources, Department of Wildlife Conservation, Biloxi, Mississippi, personal communication, January 27, 1989.

EPA. 1987. National Priority List, Superfund Hazardous Waste Site Listed under CERCLA, Gautier Oil Company, Incorporated, Gautier, Mississippi. Atlanta: U.S. Environmental Protection Agency, Region 4.

USFWS. 1982. Gulf coast ecological inventory: Mobile. Washington, D.C.: U.S. Fish and Wildlife Service. 1:250,000 scale map.