

NOAA Hazardous Waste Site Report

White Chemical Company (II-46)
Bayonne, New Jersey
April 13, 1984

Location and Nature of Site:

This site is an active chemical manufacturing plant located on a 1.5-acre tract which borders the Platti Kill (Figure 1). The Platti Kill empties into the Kill Van Kull, a commercial shipping lane. About 3,000 55-gallon drums, some leaking, remain on site. White Chemical Company manufactures acid chlorides, alkyl bromides, PBB's, brominated flame retardants, and other specialty compounds. PBB's, carbon, and other chemical wastes were found in the surface waters adjoining this site by a U.S. Environmental Protection Agency (EPA) sampling team. There is also soil contamination. There is strong evidence that extensive chemical dumping on the site has occurred over the years the plant has been in operation.

Proximity of Chemical Hazard to Marine Resources:

The White Chemical Company site borders the Platti Kill, which empties into the Kill Van Kull. Chemical contamination of soil and surface water is confirmed by EPA and the New Jersey Department of Environmental Protection (DEP). Reports of product spillage outside of containment areas, breaches in the containment areas, no secondary containment, and leaking/deteriorating tanks suggest contamination of tidal waters of Kill Van Kull occurs on a recurring basis. Contamination levels cannot be established as there are no records of sampling and analysis results in EPA Region II files. Oil slicks and sheen have been observed at the outfall from this facility.

Marine Resources at Risk:

Kill Van Kull acts as a passageway for small runs of anadromous fish entering the Hackensack or Passaic Rivers in Newark Bay, and borders on New York Bay, which is a migratory route for anadromous fish runs up the Hudson River. The Passaic and the Hackensack River support small runs of several anadromous fish species, but are not primary spawning or nursery areas. The Hudson River is a very important spawning and nursery area (Table 1).

The Newark Bay area is very heavily developed and does not serve as primary spawning or nursery habitat for anadromous fish. Adult fish may enter this area during spawning runs in the Hackensack River, and some species are present year-round as adults or larvae (2).

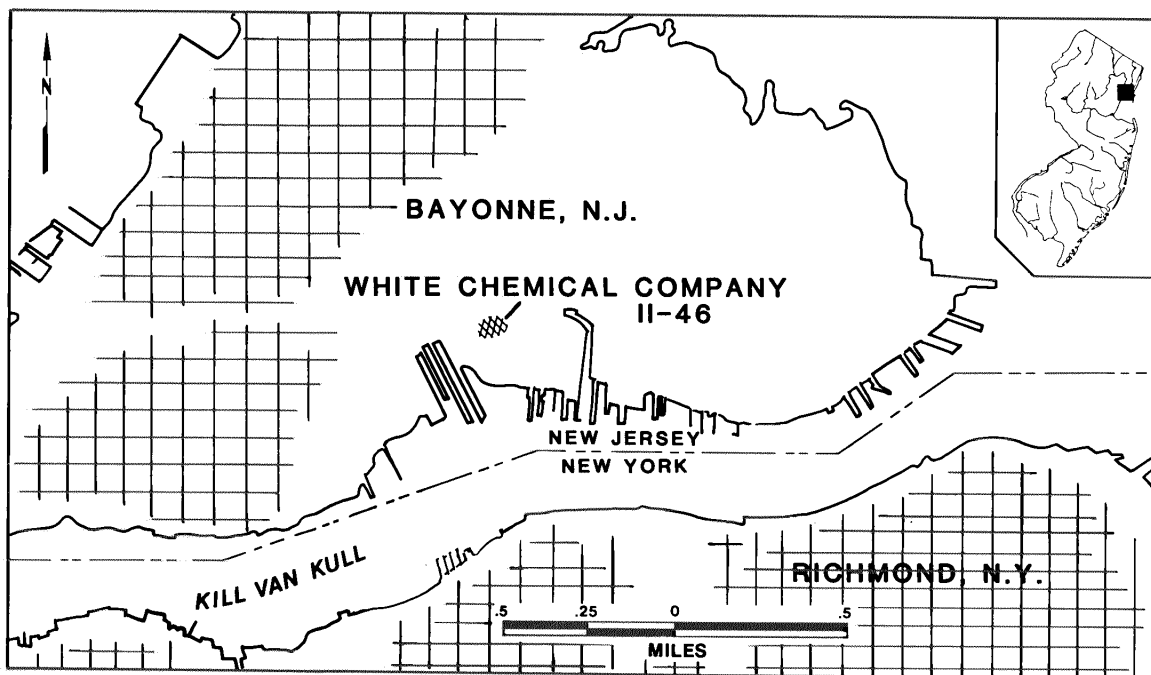


FIGURE 1. Site location.

There has been a long history of declining anadromous fish runs in New Jersey, dating back to the late 1800's. The Hackensack River has confirmed runs of herring, but shad spawning does not occur there now, nor do any confirmed runs of anadromous fish occur in the Passaic River (6). The Hudson River supports the second-most important striped bass spawning runs on the east coast of North America.

Table 1. Fishery Resources of the Passaic River, the Hackensack River, and Newark Bay (1-4)

Finfish Species	Adult Habitat	Spawning Area	Nursery Area	Comm. Fish.	Rec. Fish.	Migr. Route
<u>Anadromous</u>						
Alewife						x
Blueback herring						x
Tomcod			x			x
Striped bass			x			x
<u>Non-anadromous</u>						
White perch	x					
Flounder	x					
Bluefish	x		x			
Spot	x		x			
Northern kingfish	x					
<u>Shellfish</u>						
Blue crab	x		x		x	

There is an area in the southwest corner of Newark Bay that is used as an overwintering area for waterfowl and shorebirds, and there is a rookery for wading birds located on Shooters Island (2).

Summary of Site-Related Actions:

In June 1983, the New Jersey DEP and White Chemical Company entered into an agreement restricting the removal of materials and plant equipment to White's new Newark site, pending dioxin sampling conducted on June 9, 1983. Preliminary investigations showed no contamination at the 1 ppb level and White moved its equipment to Newark.

In 1979, the New Jersey DEP responded to a release of hazardous chemicals from the site. Further investigation of residual chemical contamination from that and other incidents is pending.

EPA has imposed regulatory actions on the company for violation of outfall discharges under the Clean Water Act.

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References:

1. Natinal Marine Fisheries Service, 1974. Anglers Guide to the United States 2. Atlantic Coast.
2. U.S. Fish and Wildlife Service, 1982. Assessment of Resources of Newark Bay.
3. U.S. Fish and Wildlife Service, 1980. Atlantic Coast Ecological Inventory.
4. Breder, C.M. and D.E. Rosen, 1966. Modes of Reproduction in Fishes. TFH Publications.
5. Research Planning Institute. Environmental Sensitivity Index - New Jersey. Unpublished.
6. Zich, H.E., 1977. The collection of existing information and field investigation of anadromous clupeid spawning in New Jersey. New Jersey Department of Environmental Protection Misc. Report No. 41.
7. U.S. Environmental Protection Agency, 1983. Site Data Report. March 17, 1983.
8. New Jersey Department of Environmental Protection, 1983. Site Descriptions Report. August 1983.