NOAA Hazardous Waste Site Report

Chemical Control (II-85) Elizabeth, New Jersey April 13, 1984

Location and Nature of Site:

In 1979, the Chemical Control Company went into receivership, leaving approximately 65,000 drums of hazardous wastes, two buildings, and seven storage tanks containing chemicals and pesticides

(Figure 1). A massive fire in April 1980 accelerated a remedial cleanup action already begun by the New Jersey Department of Environmental Protection (DEP). In spite of the extensive cleanup performed on the site, and the monitoring systems now in place, 1,000 feet of sewers and catch basins remain contaminated. It is feared that further contamination of the Elizabeth River could occur due to flushing of the contaminated sediment from the sewers, and from releases by submerged drums in the river.

Proximity of Chemical Hazard to Marine Resources:

Chemical Control is now a fenced gravel area on a peninsula between the Elizabeth River and the Arthur Kill. A groundwater injection recovery system was used in 1980 to reduce the contamination in surface soils. The extent of contamination to the Elizabeth River prior to the accelerated cleanup effort in 1980 is unknown. The potential for discharge of chemicals into the Elizabeth River or Arthur Kill during planned actions to clean the sewers or remove drums still in the river will be minimized.

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 (see 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).

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

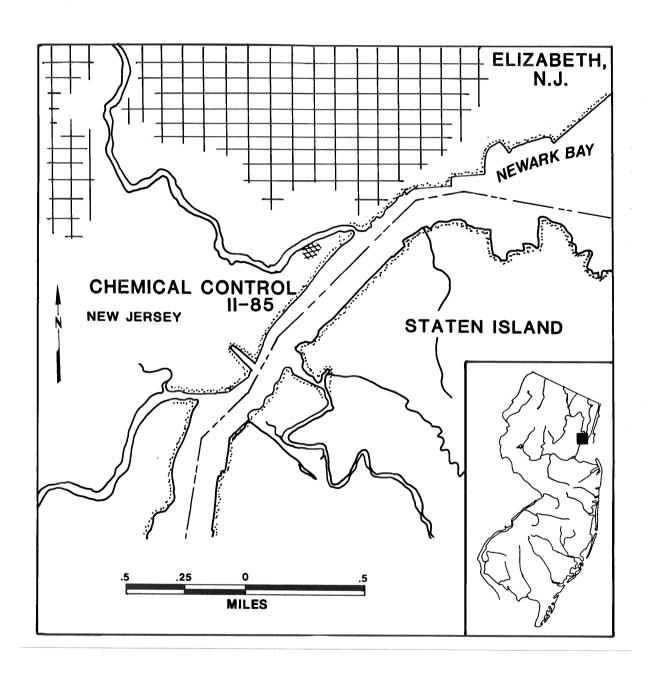


FIGURE 1. Site location.

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	Adu1t	Spawning	Nursery	Comm.	Rec.	Migr.
	Habitat	Area	Area	Fish.	Fish.	Route
						_
Anadromous						
Alewife						x
Blueback herring						x
Tomcod			x			x
Striped bass			x			x
Non-anadromous						
White perch	x					
Flounder	x					
Bluefish	x		x			
Spot	x		x			
Northern kingfish	x					
_						
Shellfish						
Blue crab	X		х		х	

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:

Enforcement actions regarding Chemical Control began before 1978 and escalated in 1979 when litigation put the company in receivership and cleanup activities began. Since the massive fire in April 1980, cleanup activities escalated and continued until November 1981. Actions to remove drums in the Elizabeth River and clean out the blocked sewer system are still pending.

NOAA Reviewer: Gary Ott, SSC - Northeast (212)668-7152

FTS 664-7152

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.

References, cont.

- 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, 1982. Site Data Report. September 16, 1982.