

NOAA Hazardous Waste Site Report

Ventron/Velsicol (II-9)
Bergen County, New Jersey
April 13, 1984

Location and Nature of Site:

Ventron/Velsicol was a chemical processing operation from pre-1953 until it closed in 1974. This site is on 19 acres bordering Berry's Creek and the Hackensack Meadowlands in Woodbridge, NJ. (Figure 1). The region is densely populated and industrialized. Extensive heavy metal contamination, estimated at over 160 tons on-site, is leaving the site through groundwater, surface water, and air routes, threatening extensive wetlands and a residential area. High levels of mercury, zinc, lead, nickel, and arsenic are the in soil, groundwater and surface waters on and around the site. Identical contaminants have been detected at lower levels upgradient and higher levels downgradient.

Proximity of Chemical Hazard to Marine Resources:

Ventron/Velsicol is within the Eight Day Swamp in the Hackensack Meadowlands. Leachate from the site would enter Berry's Creek, a tributary of the Hackensack River. Mercury and other heavy metal contamination is reported in both groundwater and surface waters. The extent of contamination of surface water can only be estimated as no known samples of surface water discharges have been taken. However, mercury and other metals are a constant source of contamination for the entire tidal wetlands area due to past instances of dumping.

Marine Resources at Risk:

Berry's Creek drains approximately 800 acres of marshland in the Hackensack Meadowlands. The Hackensack River supports small runs of several anadromous fish species, but is not a primary spawning or nursery area (Table 1).

The Hackensack River/Newark Bay area is very developed and does not serve as a primary spawning or nursery habitat for any 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 confirmed runs of herring, but shad spawning does not occur there now (6).

This site is situated adjacent to a tidal marsh area at the headwaters of Berry's Creek where heron and ibis nest. This area of the Hackensack Meadowlands is also reported to be a recreational area for outdoor activities including fishing and crabbing.

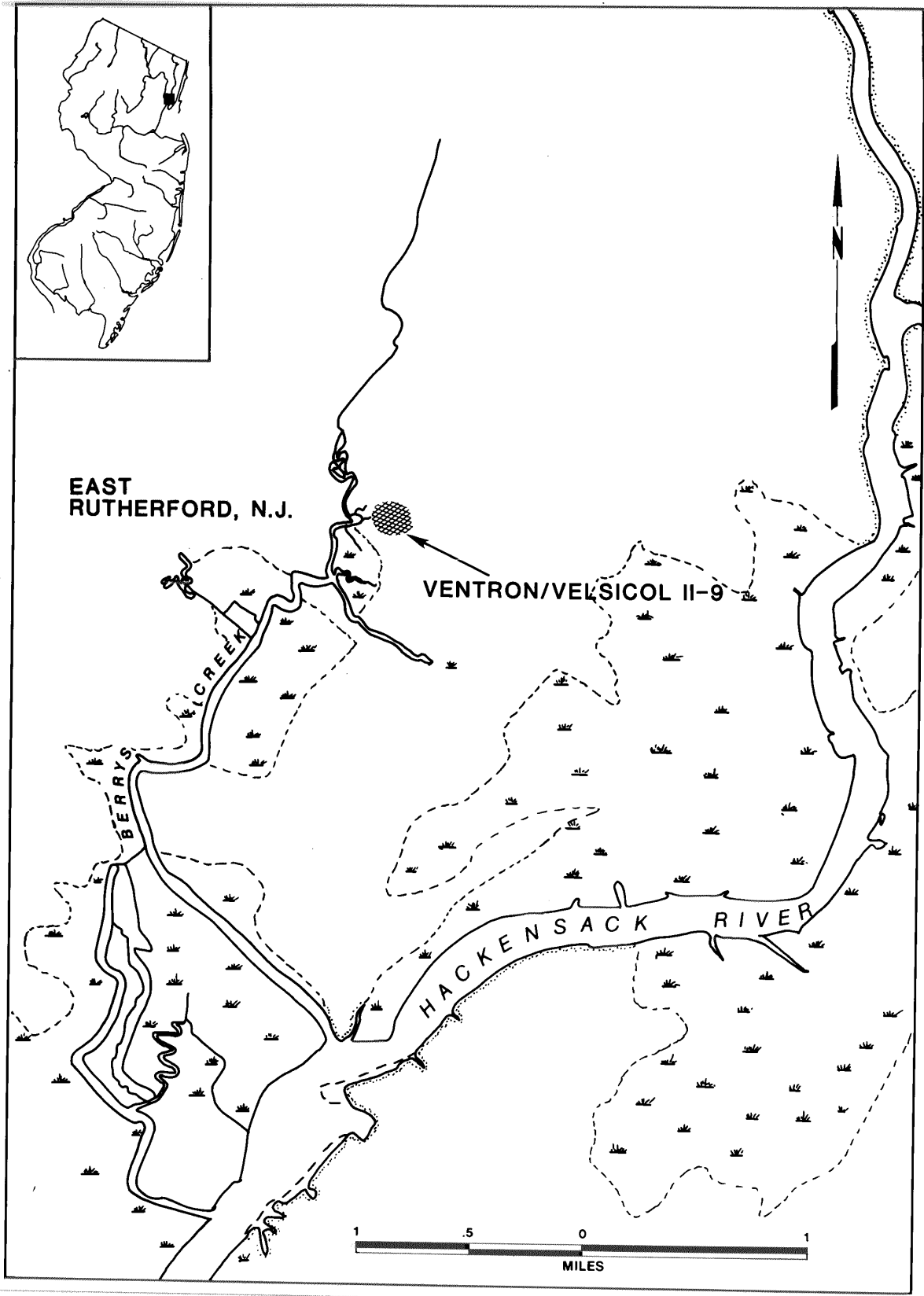


FIGURE 1. Site location.

Table 1. Fishery Resources of 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	

Summary of Site-Related Actions:

In 1980, the State of New Jersey filed a successful court action against the owners for mercury dumping and proposed cleanup costs at the site. The case is on appeal before the Supreme Court of New Jersey. The U.S. Environmental Protection Agency and the New Jersey Department of Environmental Protection have several remedial actions currently under consideration. The costs are expected to be at least \$4 million. EPA files do not indicate whether or not any environmental cleanup has been initiated.

NOAA Reviewer: Gary Ott, SSC - U.S. Coast Guard District III
(212)668-7152
FTS 664-7152

References:

1. National Marine Fisheries Service, 1974. Anglers Guide to the United State. 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.

References, cont.

5. Research Planning Institute. Environmental Sensitivity Index - New Jersey.
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. June 20, 1983.