

## NOAA Hazardous Waste Site Report

Kin-Buc Landfill (II-54)  
Edison, New Jersey  
April 13, 1984

### Location and Nature of Site:

Kin-Buc Landfill is an inactive, 65-acre landfill located in a marshy wetlands area of Edmund Creek in Edison, New Jersey (Figure 1). Edmund Creek is a tributary of the Raritan River which is less than one mile from the site. The landfill was operational from 1971 to 1976. During that period, over 70,000,000 gallons of spent industrial chemicals and municipal liquid and solid wastes were disposed of at the site.

Oil contaminated with PCB's of over 5,000 ppm is accumulating in a natural depression known as "Pool C" adjacent to the landfill. High levels of many other toxic chemicals are present at the site, including trichloroethylene, dichlorobenzene, toluene, and benzene. Groundwater contamination has been documented, and high levels of volatile organics and other gaseous emissions have been measured off site.

### Proximity of Chemical Hazard to Marine Resources:

The Kin-Buc Landfill is bordered on the west and south by a curve of the Raritan River. A large landfill face is at least 90 feet above the river surface and slopes directly into the river.

The site has a history of chemical leachate entering Edmund Creek from Pool C. The most recent reporting of this release is in a U.S. Environmental Protection Agency (EPA) Pollution Report issued February 14, 1984. A release from Pool C and the Kin-Buc Landfill would travel to the tidally influenced Raritan River in the normal outflow of Edmund Creek. There is no record in EPA files of off-site and downstream sampling for contaminants, however, area topography indicates that the leachate from the landfill that is not intercepted would enter the Raritan River. The total effectiveness of the current leachate collection system is not known.

### Marine Resources at Risk:

The Raritan River and nearby estuaries support commercial and recreational fisheries, and are spawning and nursery areas for many marine organisms.

The southern shores of Raritan Bay and Sandy Hook Bay are important commercial and recreation harvesting areas for shellfish and finfish (Table 1). The Raritan River is a spawning area for alewife and

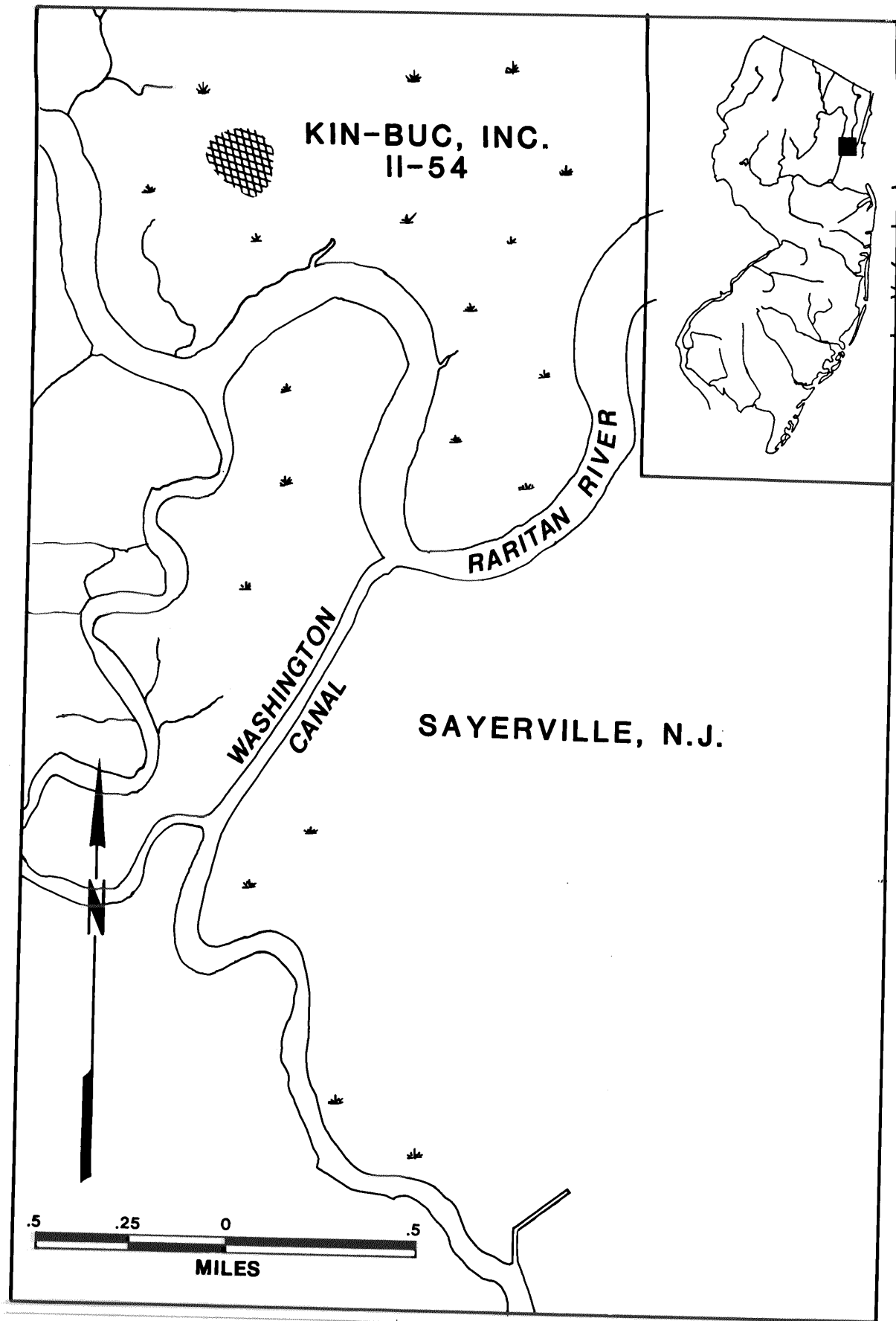


FIGURE 1. Site location.

blueback herring, and at one time was also a striped bass and American shad spawning area (6). The Raritan Bay area is a nursery area for many fish and shellfish.

Table 1. Fishery Resources of the Tidal Regions of the Raritan River (1-4)

Finfish Species	Adult Habitat	Spawning Area	Nursery Area	Comm. Fish.	Rec. Fish.	Migr. Route
<u>Anadromous</u>						
Alewife		x	x	x	x	
Blueback herring		x	x	x	x	x
American shad						x
Striped bass				x	x	
<u>Non-anadromous</u>						
White perch		x	x	x	x	x
Weakfish					x	
Bluefish					x	
Bay anchovy		x	x			
<u>Shellfish</u>						
Eastern oyster	x	x	x	x	x	x
Hard clam	x	x	x	x	x	x
Blue crab	x	x	x	x	x	x

Tidal wetlands are present throughout the lower parts of the Raritan River and in some areas of the southern shore of Raritan Bay. The great blue heron and osprey nest at Gateway National Recreation Area.

Summary of Site-Related Actions:

EPA retained Camp, Dresser and McKee as consultants for a final remedial action work plan due in 1983. Peabody Clean Industry and the East Coast Pollution Control Company are stabilizing Pool C; Kin-Buc, Inc. is presently collecting the oily leachate with a filter box, sorbent boom, and filter fence system and is stockpiling the recovered materials in drums on-site. Monitoring of groundwater and fresh water wells continues at the site.

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References:

1. National Marine Fisheries Service, 1974. Anglers Guide to the United States 2. Atlantic Coast.
2. U.S. Fish and Wildlife Service, 1980. Atlantic Coast Ecological Inventory.

3. Berg, D.L. and J.S. Levinton, 1984. The biology of the Hudson-Raritan estuary, with emphasis on fishes. Deptment of Ecological Evolution, State University of New York.
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 File. April 10, 1983
8. New Jersey Department of Environmental Protection, 1983. Hazardous Waste Site Report. August 1983.