

NOAA Hazardous Waste Site Report

Pearl City Landfill (IX-30)

Pearl Harbor, Hawaii

April 13, 1984

Location and Nature of Site:

The Pearl City Landfill is a 67-acre, inactive U.S. Navy disposal site. The site began as an open dump, and was then operated as a landfill from 1965 to 1976. The landfill is located on Pearl City Peninsula, immediately adjacent to Waiawa Stream and Middle Loch in Pearl Harbor (Figure 1). There is a sewage treatment plant on the southern border of the site, and Pearl Harbor National Wildlife Refuge to the north.

The landfill received domestic refuse, digested sewage sludge, hazardous wastes, security-classified wastes, and possibly, illegal wastes. No complete documentation of material disposed of at the site is presently available.

Proximity of Chemical Hazard to Marine Resources:

Pearl Harbor is a coastal plain estuary whose three major lochs (West, Middle, East) are drowned stream valleys which join to form the harbor entrance (1). Pearl City Landfill is less than 500 feet from Middle Loch, in the north central section of the harbor. The general area of the landfill is bordered north and south by streams. The lower reaches of these streams are influenced by salt water. Each of the Lochs receives a significant freshwater input (50-100 mgd) from a total of eight streams and five large springs. The streams carry a very high sediment burden from upland residential and agricultural areas. The estuary has had long-term pollution problems from domestic sewage, floating oil and heavy metals (2). Pesticide contamination from upland areas should also be suspected.

Marine Resources at Risk:

The poor water quality of Middle Loch has not discouraged legal and illegal fishing. Pearl Harbor is in fact the second most heavily fished area on Oahu. The Lochs of the harbor serve as a nursery ground for larval and juvenile stages of both fish and invertebrates. Pole and net fishing are the predominant fishing activities in Middle Loch, with catches of papio, goatfish, surgonfish, mullet, milkfish and aholehole most common (2).

The North American oyster is found both intertidally and subtidally in the Loch, but the harvest is limited as a result of coliform contamination. Waiawa Stream is used for fish and shellfish propagation.

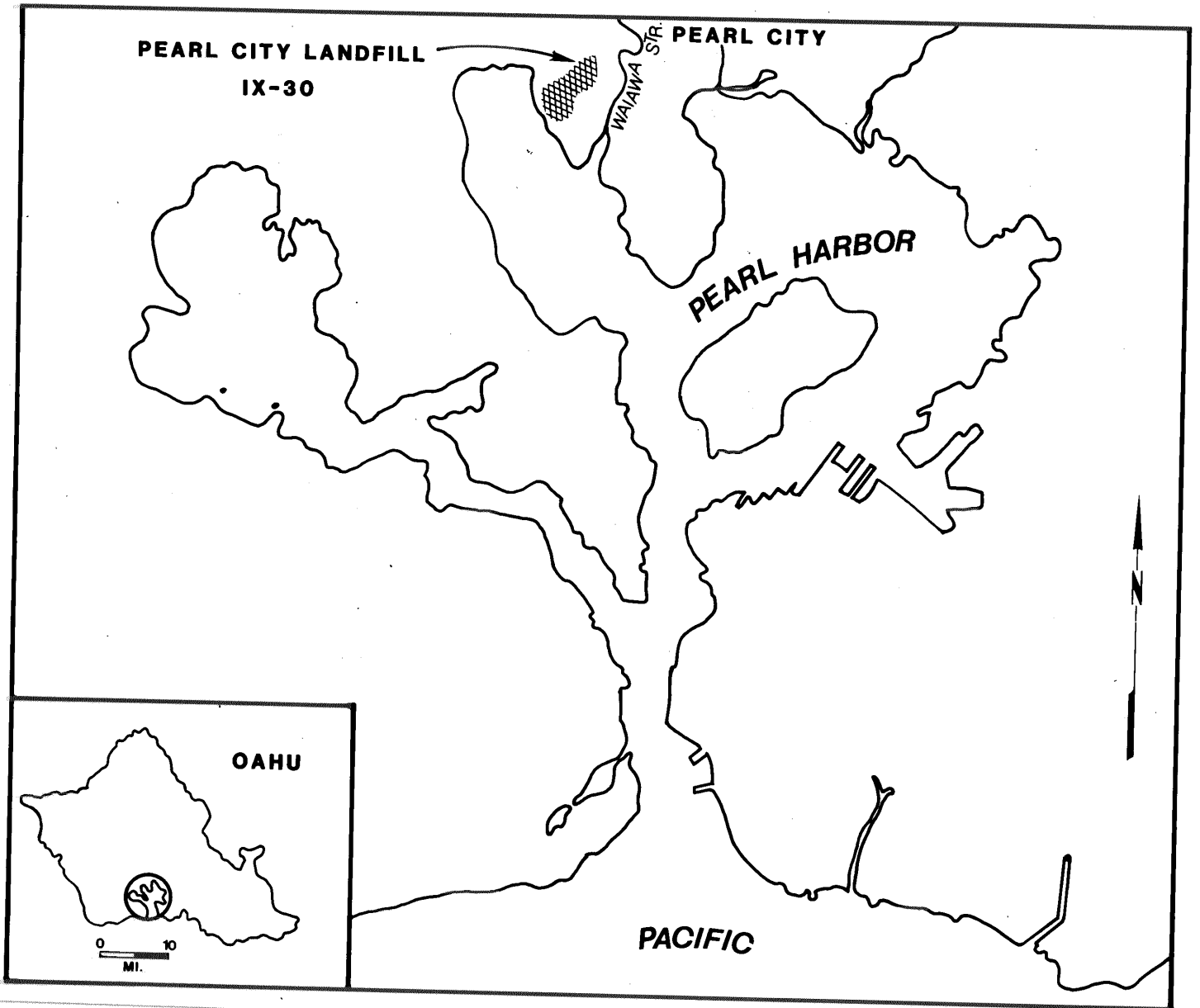


FIGURE 1. Site location.

The Waiawa Unit of the Pearl Harbor National Wildlife Refuge is immediately adjacent, to the north, of the landfill. This hypersaline tidal wetland provides important habitat to the endangered Hawaii stilt. Half of the statewide population of this bird is distributed around Pearl Harbor (2).

Summary of Site-Related Actions:

Two major questions remain unanswered about this site. First, what materials, in what quantities, were dumped at the site? Second, if contamination moves off-site can it be differentiated from existing pollution in the harbor?

EPA has completed a preliminary investigation of the site. Samples taken from the surrounding area have not shown any off-site movement of contamination. EPA does not presently plan any further action. The Department of Defense, which is responsible for the site, is conducting its own investigations (3).

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References:

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2. U.S. Army Corps of Engineers, 1979. Oahu Coral Reef Inventory, Part B-Sectional Map Descriptions. July 1979.
3. Naval Engineering and Environmental Support Activity, Initial Assessment Study of Pearl Harbor Naval Base, Oahu, HI. NEESA 13-002. Port Huemue, CA 93043.