

## DEPARTMENT OF HEALTH SERVICES

2151 BERKELEY WAY  
BERKELEY, CA 94704

March 12, 1986

Alexander Dong, Head  
Environmental Operations Section  
Department of the Navy  
Western Division  
Naval Facilities Engineering Command  
P.O. Box 727  
San Bruno, Ca 94066

Mr. Dong,

The Department of Health Services has some concerns regarding the Verification Study Workplan for the assessment of hazardous wastes at Mare Island Naval Shipyard in Vallejo, California. The Department feels that the scope of the Verification Study should be expanded to include the following sites which the Study neglected to address:

(a) SITE 3 (Tank 772)

Tank 772 was constructed in 1942 as an earth-covered, reinforced-concrete, cylindrical tank, 138.5 feet in diameter and 20 feet high. In 1976, the tank was uncovered down to nine feet above the base. Three years later, "spider-web" cracks developed in the walls and subsequently fuel oil ran down the sides of the tank. The Initial Assessment Study (IAS) estimated that 1000 gallons of oil leaked into the ground.

Soil samples should be taken wherever "spider-web" cracks are found. The soil samples should be taken at the surface, at one foot, and at the two foot level. Please have the soil analyzed for base/neutral acid extractables.

(b) SITE 5 (900 AREA)

The 900 Area has been used for sandblasting since 1952. Spent abrasives typically contain paint, organotin, anti-corrosion material, metals and metallic oxides. Prior to 1970, spent abrasives were disposed of directly into Mare Island Strait. Spent abrasive can be seen under the water directly adjacent to the 900 Area, according to the IAS. A total of four shallow test borings on land and off-shore have been proposed.

Groundwater sampling, with analysis for priority pollutant metals and volatile organic compounds, should be included in the Verification program. The proximity of Mare Island Strait and the presence of spent abrasive in the Strait justifies investigation of the groundwater.

(c) SITE 6 (BUILDING 505)

The area south of Building 505 was used as a rubble fill area between 1978 and 1981. The fill consisted primarily of soil, but concrete, masonry, pipe and wood was found also. Mosquito abatement ditches, constructed on-site, contained past dredge spoils which were dark in color. The IAS also states that the pump station, which drains the ditches, occasionally exhibits an oil sheen.

Soil and groundwater samples should be taken to verify that hazardous constituents are not present. Please analyze for all priority pollutant metals, oil and grease, and PCB's in the soil samples. The groundwater samples should be analyzed for volatile organic compounds and base/neutral acid extractables.

(d) SITE 7 (BUILDING 629 BATTERY STORAGE)

A small area adjacent to Building 629 was used to store batteries awaiting recharging or disposal. Fifty square yards of lead oxide stains cover the soil.

Surface soil samples should be taken from the discolored sections of the soil and should be analyzed for priority pollutant metals.

(e) SITE 13 (MARE ISLAND STRAIT)

The sewage treatment facility was constructed in 1959. The industrial wastewater treatment plant became operational in 1972. Prior to the existence of these treatment facilities, Mare Island Strait received all wastewaters generated by the base without any treatment. Industrial wastewater typically includes acids, oil, solvents, grease, heavy metals, detergents, paints, caustics, and PCB's.

The Verification Study Workplan states that the routine dredging of Mare Island Strait by the Army Corps of Engineers and by Mare Island is sufficient to prevent the accumulation of hazardous constituents in the Strait. Sediment cores should be taken in Mare Island Strait to confirm that hazardous constituents have not actually accumulated in the Strait.

Apparently several areas surrounding the Industrial Waste Treatment Plant have been designated as a dredge spoils area. The dredge spoils from Mare Island Strait may contain hazardous constituents. The IAS neglected to identify the various dredge spoils areas as being potential sites of hazardous waste contamination. Please submit all documentation concerning the constituents of the dredge spoil materials, as well as information regarding how often Mare Island Strait is dredged and the amount of material which is removed.

The Department believes that the sites mentioned above require further attention and should be included in the Verification Study Workplan. Please submit a revised workplan for the Department's review and approval by April 20, 1986.

Sincerely,

A handwritten signature in cursive script, appearing to read "D. R. Hoenig", followed by a horizontal line and the word "for" written below it.

Dwight R. Hoenig, Chief  
North Coast California Section  
Toxic Substances Control Division