STATE OF CALIFORNIA — ENVIRONMENTAL PROTECTION AGENCY

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 2
HEINZ AVE., SUITE 200
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N60028_000428
TREASURE ISLAND
SSIC NO. 5090.3.A

August 11, 1995

Commanding Officer
Western Division
Attn: Mr. Ernesto Galang, Code 1813
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California 94066-0720

Dear Mr. Galang:

COMMENTS ON THE PHASE IIA REMEDIAL INVESTIGATION AQUIFER TESTING, SUMMARY OF RESULTS, NAVAL STATION TREASURE ISLAND, SAN FRANCISCO, CALIFORNIA (MARCH 7, 1995)

The Department of Toxic Substances Control (Department) and San Francisco Bay Regional Water Quality Control Board (Regional Board) have reviewed the subject document. The Department and Regional Board recommend incorporating as an additional objective of this report determination of potential beneficial use of the groundwater as a drinking water source.

Specific comments are enclosed. If you have any questions regarding this letter, please contact me at (510) 540-3818.

Sincerely,

Mary Rose Cassa

Mary Rose Cassa, R.G.
Engineering Geologist
Office of Military Facilities

Enclosure

cc: Mr. Michael Bessette
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Ms. Rachel Simons [H-9-2]
U. S. EPA, Region 9
75 Hawthorne Street
San Francisco, California 94105-3901

Admin Record (3 copies)

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Prepared By: Michael M. Bessette **Phone No.:** (510) 2861028
Date: July 28, 1995 **File No.:** 2169.6013 (MMB)
Subject: **Phase IIA Remedial Investigation Aquifer Testing Summary of Results, March 7, 1995.**

General Comments:

- An additional objective of this report could be help determine the potential beneficial use of the groundwater as a drinking water source. Pursuant to State Board Resolution No. 88-63, all surface and ground waters of the state are designated as drinking water except where the TDS is greater than 3,000 ppm, the well yield is less that 200 gpd from a single well, the water is a geothermal resource or in a waste water conveyance facility, or the water cannot reasonably be treated for domestic use using either best management practices or best economically achievable treatment practices. Redesignation of groundwater at Naval Station Treasure Island as a non-drinking water source could be based on low well yield and high TDS levels if present in the groundwater. Consider aggregating the data collected from this investigation and from the quarterly reports to evaluate the well yields and TDS for determination of the groundwater beneficial uses. Additional data collection for the determination of the saltwater/freshwater interface and aquifer pump testing to evaluate well yield would be required.
- Please incorporate existing geological cross sections of both Treasure Island and Yerba Island and consider an appropriate conceptual model for groundwater flow.
- Please include well construction details for the investigated wells. This information is necessary to determine the amount of groundwater in terms of borehole volumes displaced by the slug.
- The final discussion on the questionable validity of hydraulic conductivities based on slug test data is very appreciated and appears to support the need for aquifer pump test data.

Specific Comments:

Page 5, Sec. 2.5, par. 2: Please provide supporting information regarding the geotechnical and environmental investigation at YBI. How many borings were performed and to what depth?

Page 9, Sec. 3.3: Please explain the effects of having the top of the screened interval below the water table.

Page 9, Sec. 3.3: Please verify the following parameters used in the model; r_c, r_w, L/r_w, R_e and b. For a 4-inch well casing r_c should equal 2 inches or 0.167 feet, and r_w for a 12-inch auger should equal 6-inches or 0.500-feet. How were R_e and b determined? Perhaps a table with all parameters for each well would facilitate full comprehension.

Table 2: Please consider presenting Hydraulic Conductivity in units of meters/second.