

2101 Webster Street
12th Floor
Oakland, CA 94612
(510) 663-4100 • FAX (510) 663-4141



July 30, 1999
Project 4850.01

Mr. Ernesto Galang
Engineering Field Activity, West
Naval Facilities Engineering Command
Bldg. 208, 2nd Floor
900 Commodore Drive
San Bruno, California 94066-2402

Subject: Additional Characterization of Total Petroleum Hydrocarbons at Site 12 – Old Bunker Area: Draft Fate and Transport Modeling of TPH Technical Memorandum and Draft Leachate Field Studies Technical Memorandum
Naval Station Treasure Island
San Francisco, California

Dear Mr. Galang:

This letter presents the results of a review of two documents pertaining to additional characterization of total petroleum hydrocarbons (TPH) at Site 12 – Old Bunker Area: *Draft Fate and Transport Modeling of TPH Technical Memorandum* (Draft TPH Modeling Memorandum) and *Draft Leachate Field Studies Technical Memorandum* (Draft Leachate Memorandum). These documents were prepared by Tetra Tech EM Inc. (TtEMI) on behalf of the Department of the Navy Engineering Field Activity West (the Navy). This review was performed by Geomatrix Consultants, Inc. (Geomatrix), on behalf of the City and County of San Francisco, Mayor's Office, Treasure Island Project (the City). Most of our comments pertaining to the Draft TPH Modeling Memorandum are included as part of our review of the *Draft Remedial Investigation Report for Site 12 Operable Unit*, which is being provided to the Navy under separate cover. Our additional comments on the Draft TPH Modeling Memorandum and the Draft Leachate Memorandum are as follows:

- The Draft TPH Modeling Memorandum does not provide sufficient explanation on how the dilution attenuation factors were calculated.
- Geomatrix agrees with the general conclusions of the Draft Leachate Memorandum based on the laboratory leachability analyses that total petroleum hydrocarbons (TPH) concentrations in soil at Site 12 do not appear to be a significant source of contamination to groundwater. However, we do not believe there are sufficient data to calculate leaching factors; therefore, applying these leaching factors to estimate the impact of TPH from soil to groundwater in other areas of Site 12 is not appropriate.



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If you have any questions regarding these comments, please call me at (510) 663-4100.

Sincerely yours,

GEOMATRIX CONSULTANTS, INC.

Carol L. Yamane, R.G.
Senior Hydrogeologist

CLY/pp

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cc: Martha Walters, SFRA

David Rist (DTSC)

David Leland (RWRCB)

James Ricks, Jr. (EPA)

Jim Sullivan (NAVY BEC)

Jerry Wickham (TEMI)

John Baur (IT Corp)

Paul Hehn

Pat Nelson

Nathan Brennan } RAB

Dale Smith

ARC Ecology

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