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Homeland Security

United States  
Coast Guard



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June 23, 2006

Thomas L. Macchiarella  
BRAC Environmental Coordinator  
Department of the Navy  
Base Realignment and Closure  
Program Management Office West  
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Dear Mr. Macchiarella:

Thank you for providing copies of the April 2006 *Draft Soil Remedial Investigation Report, IR Site 31, Marina Village Housing, Alameda Point, Alameda California* to the Coast Guard for review and comment. The subject report will hereinafter be referred to as "the Report". Because Coast Guard personnel currently occupy this housing, and Coast Guard is considering possible acquisition of the property, certain findings and conclusions in the Report are of concern to the Coast Guard as described below.

1. Contamination in Fill Material. As noted in the Report, the Navy imported four feet of fill prior to construction of the Marina Village Housing for site grading, leveling, and foundation support, and apparently for covering contaminated soil (pp. 1-8/5-1, etc.). As stated in the Report, this fill had concentrations of iron, lead, vanadium and arsenic that exceeded EPA or California modified residential soil preliminary remediation goals (PRG) from 0-4 feet below ground surface (bgs), and that arsenic exceeded EPA's industrial soil PRG (pp. 4-8/4-17,18,19/5-2,3, etc.). Also, it was noted in the Report that concentrations of metals are generally higher in the new fill material, i.e., between 0-4 feet bgs, than in the older fill that is between 4-7 feet bgs (p. vii/4-10). Furthermore, 15 of the 17 metals contained in the fill material had concentrations exceeding Alameda Point background concentrations (pp. 4-10,14,16/7-2, etc.). The Navy position expressed in the Report is despite the fact that these metals exceed background at Alameda Point, they are not an issue because they do not exceed naturally occurring background concentrations at the borrow area in the Oakland Hills from which they reportedly were obtained (pp. vii/x/2-5/4-15, etc.). According to the Report, the arsenic in this soil accounts for approximately 90 percent of the potential cancer risk at the site (pp. 6-7/7-4).

It was repeatedly claimed in the Report that the concentrations of these metals were not caused by Navy activity at the site (pp. vii/4-10/7-2,3,5, etc.). This overlooks the fact that importing the fill with these concentrations of metals to Alameda Point was itself Navy activity, and raises questions of Navy responsibility to have: tested the soil prior to importing it; made a determination as to whether or not the soil needed to be treated or remediated; and, decided if another borrow site should have been used for a source of fill. Nevertheless, the conclusion in the Report is that without evidence of a Navy release having caused these high concentrations of metals that are consistent with background concentrations of local sources of fill material, they are not a basis for evaluating action alternatives in remedial decisions per Navy and EPA policy (p.xi). In short, we are not convinced that the concentration of metals present in the soil at Marina Village is not the Navy's responsibility.

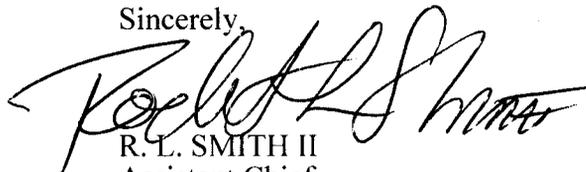
2. Health Risks from Contamination. In the Report it is repeatedly claimed that exposure to contaminants, e.g., polynuclear aromatic hydrocarbons (PAH), is not a high risk because military personnel who occupy this housing would live in it for about six years out of a standard assumption of 30 years of exposure (pp. 6-11,15, etc.). Although length of exposure certainly will increase risk, and PAHs at IR Site 31 are generally at a depth of four or more feet, there was epidemiological evidence reported from a civilian site that it is possible for a carcinogenic PAH (cPAH) to attach itself to a human body cell the first time a person is exposed to a site. On the other hand, another person might be exposed to the same site over a long period of time without having this occur. This raises questions of potential risk for current and future occupants at Marina Village Housing regardless of length of occupancy. Either the existing or replacement housing may in the future be occupied by civilians who would live there longer than assumed occupancy durations for military personnel.

Section 8 "References" does not include the City of Alameda Institutional Controls Ordinance 2824, although it was cited in the Report where it was claimed that exposure to PAH health risks will be managed by this ordinance (pp. x/xi/2-4/7-5,6). It is recommended that a copy of this ordinance be included in the appendices of the Report, and that the Report explain how the ordinance would manage PAH risks relative to site specific data at Marina Village Housing. The Report generally doesn't identify which of the numerous PAHs found at the site are cPAHs, and it is recommend that they all be identified in the final report as is benzo(a)pyrene (pp. 6-7/7-4).

3. Groundwater Sampling. Although the purposes of groundwater sampling are outlined in Table 3-5, and sampling methodology is covered in sections 3.2.2 and 3.3.2, the Report should more clearly explain the basis for selection of the 11 groundwater sampling locations in the first water bearing zone (FWBZ). A matrix format might be used to explain selection criteria to demonstrate why the locations selected were the best for providing useful data, e.g., hydro-geological factors. One round of sampling is generally insufficient, by contrast with the quarterly sampling performed in the groundwater plume which is the typical frequency. It would seem to be advisable to perform sampling in the FWBZ at least a second time to show possible differences between the rainy and dry seasons in order to verify data comparability that would demonstrate whether or not soils at IR Site 31 are a source of contaminants to the groundwater plume underlying it.

Based on the foregoing, the Coast Guard is not convinced of the validity of the Navy's recommendation that "...no further evaluations are needed..." (p.iii). The Coast Guard will await the opinions of the cognizant regulatory agencies, and other interested parties, especially concerning possible need for further remedial action of soils at Marina Village Housing. It is the intention of the Coast Guard to thoroughly review the final report, together with other applicable documents, including those published by the Navy, in order to make appropriate decisions about future Coast Guard occupancy or acquisition of Marina Village Housing. If you have any questions regarding this letter, my point of contact is Ms. Carol Meyer whose phone number is (510) 637-5535 and e-mail address is [Carol.L.Meyer@uscg.mil](mailto:Carol.L.Meyer@uscg.mil).

Sincerely,



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Assistant Chief  
Civil Engineering Division  
By direction of the Commander

16475  
June 23, 2006

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