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Pete Wilson
Governor

File No. 2119.1057(JN)
August 28, 1998

Mr. Larry Douchand
BRAC Environmental Coordinator
Navy Engineering Facility Activity
900 Commodore Drive
San Bruno, CA 94066

Subject: Naval Fuel Depot Point Molate Phase II Remedial Investigation Draft Final Field Work Plan, July 18, 1998

Dear Mr. Larry Douchand:

Staff at the Regional Water Quality Control Board (RWQCB) have reviewed the above mentioned Remedial Investigation (RI) Draft Final Field Work Plan. Below are our comments generated from this review.

General Comments:

1. Placement of the Bedrock Monitoring Wells, Staff request more specific geologic or chemical rationale for the placement of each of the bedrock monitoring wells proposed at Point Molate. We understand that the site has much outcropping and subcropping bedrock, and limited groundwater reservoirs, due to the hilly nature of the site, and would like an overall conceptual model for how the specific bedrock locations assist us in filling our outlined data gaps. It appears that the bedrock wells were placed randomly at each of the four Installation Restoration (IR) sites. The reader has the plates with the soil and groundwater data summaries to assist in reviewing the placement of the proposed soil borings and monitoring wells, but nothing specific for the bedrock points.

2. Plate 5, IR Site 1 Waste Disposal Area and IR Site 4 South Shoreline Proposed Investigation Locations,

- The focus of the proposed sampling to determine nature and extent of contamination at the Waste Disposal Area appears to be biased toward characterizing the perimeter of the landfill. This may very well not provide the most accurate representation of the contamination, depth of fill, and nature of material underneath the landfill. We suggest that the Navy propose three or four of the trenches, soil borings, or monitoring wells down the middle of the landfill to provide a more representative sampling strategy for use in presumptive removal scoping. The interior may well be where we detect the most highly contaminated material. Staff feel sampling in the interior or center of the Waste Disposal Area will provide the depth of any potential contamination in this area, as well as any necessary geotechnical information.

- RWQCB staff propose a few changes to the placement of the monitoring wells and piezometers at this area. We request better groundwater coverage around well, MW 02-06. This is one well that still contains fuel products as of the April 1998 monitoring data. During this event the Navy detected up to 2,770 micrograms per liter (ug/l) diesel, and 13 ug/l Acenaphthene in MW 02-06. The Navy needs to better define the extent of any potential petroleum plume in this area.

3. Proposed Investigation Locations, IR Sites 3 and 4 Treatment Ponds, and Drum Lot No. 1 Areas

- Staff request the Navy better define the lateral and vertical extent of the Methyl-t-butyl Ether (MTBE) detections in groundwater at points MW 11-19, MW 11-21, and PZ 11-78, through sampling in the Remedial Investigation. The July 31, 1998 Semiannual Groundwater Sampling Event No. 2, Data Summary for Point Molate shows 18 micrograms per liter (ug/l) detected at MW 11-19, and 84 ug/l detected at MW 11-21. Staff request the Navy to determine the source of these positive detections of MTBE in the Drum Lot No. 1 Shoreline in this upcoming RI effort.
- We feel the Navy would be better off placing one or two of the wells proposed in the interior of Drum Lot No. 1, MW 4-1 through MW 4-5, north up closer to MW 11-19, rather than inland from MW 11-56. The Navy has detected more TPH and Semi-Volatile Organic Compounds over historic groundwater monitoring periods at MW 11-19. Staff look at Plate 13 of the Draft Final RI Workplan as proof of this, Drum Lot No. 1 Previous Groundwater Sampling Results and Contoured Total BTEX from Oct./Nov 1997.

4. Section 3.3.5, IR Site 3 Data Quality Objectives Process, The text in this section needs to describe in better accuracy the nature of the environmental problem at site 3. The Navy has not told the reader of the residual fuel product thicknesses and extent of impact throughout the ponds site, nor described in any detail the flows and contaminant levels that pass out the Oily Recovery System (ORS) out to San Francisco Bay. This site contaminant information is necessary to understand the full conceptual model at site 3; all constituents that may pose a threat to human health or the environment, and need to be addressed in either removal actions or through the RI/FS process.

5. Section 5.0, Background Soil Geochemical Study, Staff request that the Navy not pursue the background soil geochemical study to argue that Polycyclic Aromatic Hydrocarbons (PAHs) are naturally occurring in the San Francisco Bay Area and at NFD Point Molate. There are several reasons why we request that the Navy not pursue this approach and potentially screen out a constituent of concern, PAHs. First, we know that PAHs are not naturally occurring in shallow soils in the environment. Unlike metals, they are only produced by man, through automobile exhaust, petroleum refining, chemical production, etc. Secondly, there has been very little data presented supporting the Navy's argument that activities at Chevron or automobile traffic from

the Richmond-San Rafael Bridge are depositing PAHs via airborne transport onto Point Molate shallow soils. Thirdly, we have detected many PAHs sitewide and identified PAHs as a constituent of concern due to petroleum leaks from Point Molate. We are not comfortable with the Navy screening out any of these potential constituents of concern (COC). Instead, RWQCB staff request that the Navy determine the full nature and extent of PAHs at Point Molate, and evaluate the potential risk to human and ecological receptors due to their presence at the site. This work will be done during the Remedial Investigation. It is after this full risk evaluation, that the BRAC Cleanup Team can use risk management tools to make decisions regarding potential COCs like PAHs.

Specific Comments:

1. Section 3.1.2, Chemistry Summary - Soil, Site 1, The Waste Disposal Area, Installation Restoration Site 1, conceptual model needs to mention here the depth of impacted soil. The reader needs to know this information to understand the extent of the problem at this site, and the basis for proposing a presumptive remedy. It is obvious that the estimated nature and extent of the waste plays a major roll in the Navy's pushing for presumptive remedy over the more conventional CERCLA path, (Remedial Investigation, Feasibility Study, then Record of Decision, and Remedial Design/Remedial Action) here at site 1.

2. Section 3.1.5, IR Site 1 Data Quality Objectives Process, Step 1: State the Problem, The Navy needs to define the problem at the Waste Disposal Area in this section. This is fundamental segment of the Data Quality Objectives Process, outlined on page 3-5. We need to understand the nature and extent of contamination, the access issues, the geology specific to site 1, etc. The reader needs to see in writing what the problem is for the Navy at this specific site.

3. Table 3-2, Data Gaps for IR Site 1, We request groundwater sampling upgradient from the Waste Disposal Area to help evaluate the fifth data gap: the differentiation of impact from Waste Disposal Area from regional sources. The upgradient groundwater will provide a benchmark or reference value for the contamination present at the beginning of the landfill ravine, where the flow starts. These values could be compared to downgradient groundwater values to determine whether the landfill constituents are having any adverse effect on the regional flow regime for the ravine.

4. Section 3.4.5, IR Site 4 Data Quality Objectives Process, page 3-23, The decision statement 3 is comprised of two decisions. The first decision, whether the extent of hydrocarbons in groundwater at Drum Lot No. 1 are adequately characterized?, is separate from the second decision, do the fuel constituents present that may be migrating to the Bay pose a risk to aquatic receptors? The report needs to make it clear that the first question of decision statement 3, whether the extent of hydrocarbons in groundwater at Drum Lot No. 1 are adequately

characterized?, can be addressed by the placement of some wells in the interior of Drum Lot 1, as proposed later in the report.

5. Section 6.1, Waste Disposal Area, Perimeter Trenching, How will the Navy adequately determine the boundaries of the landfill through trenching without soil and/or groundwater chemical analyses at all the perimeter trench locations? The entire flat area of the ravine where the landfill sits may be composed of the same geologic material, and it may not be possible to determine where the landfill stops and native soil begins through solely logging the soils. Please elaborate here for the reader.

This concludes our comments on the Draft Final Remedial Investigation Work Plan for Point Molate. If you have any questions on these comments please contact me at (510) 622-2400.

Sincerely,

James Nusrala
Project Manager

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