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California Regional Water Quality Control Board

San Francisco Bay Region

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MOFFETT FIELD
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Gray Davis
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Subject: Comments on Draft Northern Channel Data Gaps Investigation Field Work Plan Moffett
Federal Airfield (dated August 21, 2001; received August 28, 2001)

Dear Ms. Muckerman and Ms. Patterson:

Regional Water Quality Control Board staff has reviewed the subject document and comments are attached.

Please call me at (510) 622-2390 or Adriana Constantinescu at (510) 622-2353, if clarification or further discussion of any of these comments is needed.

Sincerely,

Dennis Mishek, Sr WRCE
Section Leader, DOD/DOE

cc: Alana Lee, USEPA
Carmen White, USEPA
Jacques Graber, CIWMB
Sandy Olliges, NASA
James McClure, RAB Representative
Kevin Woodhouse, City of Mt. View
James Boarer, MEW Co. Representative
Hilary Waites, TechLaw, Inc.
Teri Peterson, Cargill

**San Francisco Bay Regional Water Quality Control Board Staff
Comments on**

**Northern Channel Data Gaps Investigation Field Work Plan Draft
Moffett Federal Airfield, CA
Dated August 21, 2001**

1. The agencies, Navy, and property owner of the Northern Channel (Cargill) should meet to discuss the various steps of the DQO process (Appendix A), before the Workplan is revised. The Statement of the Problem (Step 1, Table 3) is vague and incomplete, and subsequent steps are, therefore, problematic. For example, Step 1 does not address the driving environmental concern for one of the COPECs of the channel, PCBs. This concern is protection of human health when fish are consumed. It appears that the proposed fish tissue studies are intended only to address impacts on fish-eating birds. San Francisco Bay is listed on the Clean Water Act, Section 303(d) as an impaired water body due to excessive concentrations of PCB's in fish tissue that require fish advisories. The impairment assessment supporting the 303(d) listing is, essentially, a risk assessment that concludes that "ambient" San Francisco Bay levels of PCB pose an unacceptable risk. The PCB concentrations in the Northern Channel at Moffett are far greater than "ambient" SF Bay concentrations. The Navy should include protection of human health in the problem statement, and develop volume estimates to support removal of PCB mass to the extent technically and economically feasible with a goal of achieving levels less than San Francisco Bay "ambient."
2. The Water Board's June 20, 2001 letter to Ms. Muckerman stated our position with respect to additional ecological risk assessment work at Site 27. The Regional Water Quality Control Board does not agree that additional ecological risk assessment work is needed, or will be useful, in making clean-up decisions at Site 27, because the Remedial Action Objectives for the Site will be driven primarily by considerations of known human health risks (from fish consumption), ambient levels, and technical feasibility, rather than ecological risk. Our agreement to the modified FFA, which extended the deadline for submitting a Feasibility Study by approximately 2 ½ years, was based on the condition that additional ecological risk assessment work will be performed concurrently with soil/sediment characterization work and will not add further time to the schedule. An expedited approach is needed to minimize ongoing adverse impacts on natural resources, and restore beneficial uses of the Northern Channel as quickly as possible.
3. The Water Board supports the Navy's efforts to define the lateral and vertical extend of the soil/sediment contamination in the channel, ditches and berm, so that more accurate volume estimates for contaminated media can be made. The data quality objectives for this Workplan should ensure that decision-makers will be able to obtain volume estimates for several alternative clean-up scenarios: 1)

removing all sediments, including clay layer, exceeding San Francisco Bay “ambient” PCB concentrations (5.9 to 14.8 ppm, depending on grain size); 2) removing all contaminated sediments exceeding SF Bay “ambient”, but leaving contaminated clay layer in place; 3) removal of sediments exceeding South Bay stormwater drainage “ambient” PCB concentrations (approximately 200 ppm), 4) removal of sediment to ecological screening values, such as the ER-L and ER-M’s for protection of benthic invertebrates (23 ppm and 180 ppm, respectively). 5) removal of sediment to a level that protects piscivorous birds (as presented in the SWEA). This range of volume estimates should provide enough information to evaluate clean-up alternatives, based on CERCLA’s nine criteria.

4. The Workplan should be revised to eliminate the one half foot depth as a decision rule for focusing remedial activities (Appendix A, Table 3, Step 5, Decision Rule 2b). This clean-up alternative would necessitate dredging restrictions as part of the remedy, which is unreasonable since it precludes maintenance dredging. In addition, this alternative would preclude wetland restoration efforts, which are a reasonable future use, since Cargill may sell the property to the U.S. Fish & Wildlife Service. Regional Water Quality Control Board policy with respect to wetland restoration (“Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines (May 2000)”) requires at least three feet of clean wetland cover material, and our experience at Hamilton Army Base is that three feet may not always be sufficient in areas of potential scour.
5. The Site Conceptual Model for Site 27 (Figure 5) should include routes of exposure for all potential receptors defined by the Beneficial Uses of the Northern Channel and its tributaries. Existing and potential beneficial uses at Site 27 include freshwater/estuarine habitat, wildlife habitat, sportfishing, and contact and non-contact recreation (Chapter 2, SF Bay Basin Plan). Narrative and numeric water quality objectives for protecting beneficial uses are established by the Basin Plan (Chapter 3) and by the California Toxics Rule, promulgated by EPA in May, 2000. Currently, the model does not include human consumers of fish, infaunal invertebrates (food for wildlife receptors) or wildlife receptors such as raccoons, muskrat, and rodents.
6. The data quality objectives are, in some cases, inadequate to support clean-up decisions that will protect beneficial uses. As an example, the fifth problem statement of Step 1 indicates that surface water samples will be taken to evaluate possible sources of contamination. However, the proposed Reporting Limits for water (Table 5-1) are, in some case, orders of magnitude higher than standards used to determine whether waters are impaired (e.g., for cadmium the Reporting Limit is 1 mg/L; the water quality standard is 9.3 ug/L).
7. The Navy has proposed to collect Acid Volatile Sulfide/Simultaneously Extracted Metals (AVS/SEM) data for sediment. Yet, these data are only useful in determining the bioavailability of certain metals to infaunal invertebrates. Given that the Navy has not listed infaunal invertebrates as potential receptors, please explain how the AVS/SEM data would be used.

8. The Navy's assessment of habitat quality ("poor" or "moderate") is unsupported. Also, it is not clear how this evaluation is relevant to the problems being addressed by this Workplan. Please explain the relevance of this evaluation.
9. Regional Water Board staff has reviewed the general and specific comments provided by the U.S. EPA. We concur with those comments.