



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

May 22, 1997

Mr. Winton Baker
Naval Facilities Engineering Command
EFA West, Code 1833
900 Commodore Way
San Bruno, CA. 94066-5006

Re: *Draft Final Phase I Ecological Risk Assessment Field Sampling and Analysis Plan, Onshore Areas*, dated April 21, 1997

Dear Mr. Baker,

The U.S. Environmental Protection Agency (EPA) has received the subject document and submits the following attached comments. The document was reviewed by Clarence Callahan of our Technical Support Section. If you have any questions, please call him at 415-744-2314 or me at 415-744-2385.

Sincerely,

A handwritten signature in blue ink that reads "Michael D. Gill".

Michael D. Gill
Remedial Project Manager
Federal Facilities Cleanup Office

Attachment: EPA Memorandum from Technical Support Section of May 21, 1997

cc: Vince Christian (RWQCB)
Chip Gribble (DTSC)
Kelly Ryan (PRC) (email)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9
75 Hawthorne Street
San Francisco CA 94105-3901
May 21, 1997

MEMORANDUM

SUBJECT: Draft Final Phase I Ecological Risk Assessment Field
Sampling and Analysis Plan Onshore Areas

FROM: Clarence A. Callahan, Ph.D., Biologist
BTAG Coordinator
Technical Support Team (SFD8B)

A handwritten signature in black ink, appearing to read "C. Callahan".

TO: Michael Gill, Remedial Project Manager
Bonnie Arthur, Remedial Project Manager
Navy Section (SFD82)

Summary Comments. The plan is a general document for a description of what is planned, however, I believe that it does contain the information needed to continue the project. The big picture is very well done, the specifics are a little less defined. The techniques for the proposed work should be adequate and the results will confirm my general feeling that the work will be adequate. Some of the information should be further clarified e.g., chemical screening values.

Specific Comments.

p8, Sites recommended for further ecological sampling.

1. IR10 and IR13 are assumed to be in the human health track for assessment because the area was industrial and the land use is planned for residential. These plans suggest that the PCB spill areas will be removed and confirmation samples should be taken to show that the site would not be a significant source for the surrounding wetlands.
2. p9, IR04 is the "green sand" area that has a draft plan already out for removal (see "Engineering Evaluation/Cost Analysis Installation Restoration Site 04 Abrasive Blast Brit disposal Area, November 8, 1995."). Is this the reference on p9 shown as "CTO 144?" What is the status of this plan? This is really an industrial

site as it now appears suggesting that the location is limited habitat and that removal of the green sand is planned. Rather than perform any big effort on the area, it should be cleaned up and confirmation samples taken to insure that it is clean.

3. p9, IR16 subsite 715 should be limited to confirmation samples after removal to insure that the site is not a source for nearby wetlands.

4. p10, IR23 is another site that should be cleaned up and sampled to confirm that benchmarks have been reached. It appears that this site is planned for residential, therefore human health standards should prevail.

p10, Sites recommended for no further ecological sampling.

5. p10, IR08, a removal site should have confirmation samples only.

6. p10, IR14, EPA agrees that no further ecological sampling is warranted.

p10, West Side Area RMZ.

p10, IR01 is the historical landfill area for MI. The MI Final Reuse Plan shows the IR01 area to be in recreation/open space zone and residential and commercial zones. Will this area be capped as a landfill?

p11, IR02, another disposal area that suggests capping?

p11, IR06, the former IWTP surface impoundment, now covered, is not expected to have a complete pathway.

p12, IR16, subsite B1/B2 and B3/B5 are lead sites that perhaps should be cleaned up and then sampled for confirmation that the benchmarks have been met.

p12, IR24. Will this material be left in place? What is the destiny of this site?

p13, Dredge Spoil Ponds. Figure 8 does not show the changes suggested for sampling locations. I would suggest that some of the berm samples be moved into the interior of the ponds to better characterize the interior regions without adding any other samples. This is justified because of the importance for identifying the interior portions that will be wet during part of the annual cycle and exposed to site

receptors, rather than the berms that will not be submerged nor with much exposure to site receptors.

p13, Identification of decision. Although, some are obvious, I would like to see these questions matched with the criteria/screening levels listed on p14.

p14, Decision rule. This material suggests the development of definitive exposure-response relationships that can be used to define the spatial relationships and distribution of significant impact levels across the various habitats, is this correct? This is one of the most crucial steps for developing the critical concentrations for clean-up levels.

Assessment Goals.

Both *Hyalella azteca* and *Daphnia magna* were used to evaluate the potential toxicity of contaminants and salinity (Ingersoll, C.G., F.J. Dwyer, S.A. Burch, M.K. Nelson, D., R. Buckler and J.B. Hunn. 1992. *The use of freshwater and saltwater animals to distinguish between the toxic effects of salinity and contaminants in irrigation drain water. Environ. Toxicol. and Chem. Vol. 11, pp503-511.*). This paper may provide some guidance for species appropriate to varying amounts of salinity.

p22, Dredge Spoil Ponds. I'm not convinced that the standard approach to risk assessment for these areas is appropriate. For both of the ponds, the material was placed there because it could not pass the dredge disposal test at that time, so we should expect some significant contaminant levels. For the active ponds, we should expect that more dredge spoils will be placed in them, thus there will be more hits if bioassays are performed. Over the long run, these will be continually used and exposure cannot be controlled with new material being introduced. For the inactive ponds, a more comprehensive testing regimen (compared to the active ponds) should be planned including sediment testing (acute and bioaccumulation) and plant bioaccumulation. If the ponds are to remain as open space the risk assessment is more critical because of the exposure that can be controlled as opposed to the active ponds.

p23, Western tidal Marsh. These areas should be evaluated as any other tidal marsh, however, some consideration should be made for the potential location of material "deposited" in these wetlands. Are aerial photos available to examine the past history of these sites?

P44, Chemical screening values. Cover and Non-cover values cannot be directly used for risk assessment purposes, however, if the literature (and data) that were used to derive these values are relevant to the Mare Island process, then these data and literature should be used. These values (Cover and Non-cover) may have been derived from the NOAA ER-L and ER-M values, but they don't look like them, I would be cautious about their use in this situation.

cc: James M. Polisini, Ph.D., BTAG Member
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