



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

March 29, 1996

Robert D. O'Brien  
Director of Radiological Control  
Mare Island Naval Shipyard  
Vallejo, California 94592-5100

Re: Mare Island Naval Shipyard Final Release Report, General Radioactive Material (G-RAM) Radiological Survey Plan, Volumes 1 and 2, dated 3/28/96, and with change pages received 3/29/96.

Dear Mr. O'Brien:

The U.S. Environmental Protection Agency (EPA) has reviewed the subject documents. The subject documents describe the plans and final results for surveys and any necessary remediation for 106 G-RAM sites at Mare Island Naval Shipyard. Our review of the Survey Plan consisted of reviewing changes made to this document from the previously agreed to plan dated July 7, 1995. Our review of the Final Report primarily consisted of reviewing it for consistency with the Survey Plan and for consistency with previously reviewed and agreed to site specific release reports.

During the past week we received for the first time the completed groundwater report section for the Final Report. Our review of this documentation is continuing and is expected to be completed by the end of next week. We also yesterday received additional Cs-137 data for the building 629 yard. We are continuing to evaluate this data and will contact the Navy soon to discuss resolution of this outstanding concern. This remains the only release report, other than the groundwater report, which we have not yet concurred on from the Final Report. Lastly, we have one other comment on the Final Report. In Section A, page 1, a discussion is provided on Ra-226 concentrations in water samples collected at Dry Dock #2. Please verify the Ra-226 concentrations in this discussion as well as the Th-234 concentration reported. The higher Ra-226 concentration is reported for the sample that did not include sediment, instead of for the sample with sediment as would have been expected. Please also identify the specific sump location where the sample was collected.

In addition to these reviews, we have also conducted jointly with the State of California various quality assurance oversight activities to assess the quality of the G-RAM radiological

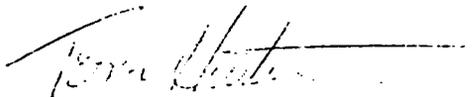
survey work and to determine its consistency with the agreed to plans and procedures. These joint State and EPA oversight activities included inspections of the radiological counting laboratory at Mare Island, reviews of laboratory and backup documentation for the survey work, periodic observations of survey and remediation field work, reanalysis by EPA's National Air and Radiation Environmental Laboratory of selected solid samples collected by the Navy, and independent field instrument surveys.

The findings from the above oversight activities identified one concern affecting the Final Report. Specifically, an overestimation error for Th-234 was identified. This concern has been addressed in the Final Report to our satisfaction. Otherwise, the oversight activities have to date demonstrated data quality and integrity consistent with the standards and procedures established by the G-RAM Survey Plan and supporting documents and have not uncovered any problems which would alter the conclusions contained in the Final Report.

We would also like to complement the Navy and the Mare Island personnel involved with this program on the tremendous effort and dedication demonstrated in completing this enormous task. The G-RAM program and cleanup levels established by it posed unique and very difficult challenges that the Navy had to meet. We also greatly appreciate your cooperation in working with us in addressing our concerns in the Final Report.

If you have any questions regarding this letter, please call me at 415/744-2407.

Sincerely,



Tom Huetteman  
Remedial Project Manager

cc: Dick Logar, EFA-West  
Juris Sinats, EFA-West  
Penny Leinwanderer, DHS  
Vince Christian, RWQCB