



# California Regional Water Quality Control Board

## San Francisco Bay Region



**Terry Tamminen**  
Secretary for  
Environmental  
Protection

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**Arnold Schwarzenegger**  
Governor

**N00221\_001216**  
**MARE ISLAND**  
**SSIC NO. 5090.3.A**

Date: March 17, 2004  
File No. 2129.2011 (GJR)

Commander  
Attn: Mr. Jerry Dunaway (Code 06CM.JD)  
Southwest Division, Naval Facilities Engineering Command  
1220 Pacific Highway  
San Diego, California 92132-5190

**SUBJECT:** Staff Comments on Draft Investigation Area F2 (IR04) Remedial Investigation,  
Former Mare Island Naval Shipyard, Vallejo, California (April 7, 2003)

Dear Mr. Dunaway:

Water Board staff have reviewed the above-referenced document and submit the following comments for your consideration.

### General Comments

1. The remedial investigation (RI) report makes a number of statements regarding the reuse of the Investigation Area (IA) F2 site. The Mare Island Reuse Plan specifies marina/residential reuse, while the RI report considers open space as the anticipated future use. The justification presented is that IA F2 is a munitions response program (MRP) site and is therefore unlikely to qualify for unrestricted reuse. Water Board staff has no objection to this statement provided the actual reuse of the property is considered in the final remedy and an appropriate land use control is emplaced to ensure appropriate future use of the site.
2. The RI report does not discuss the nature of the specific onshore MRP activities for IA F2 and does not describe any actual or planned responses for the offshore areas. Therefore, the RI report is not complete without discussion of the nature and extent of ordnance contamination and a risk assessment for munitions and explosives of concern (MEC).
3. Groundwater at IA F2 is shallow and contains demonstrated volatile organic compound (VOC) pollution. The RI report uses the Johnson and Ettinger model for assessment of the risk due to volatilization from contaminated soil and groundwater to indoor air. In

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cases of shallow groundwater, direct measurement of soil gas data are the preferred method of obtaining data for use in risk assessment. Screening levels for shallow soil gas data can be found in the Water Board staff report on environmental screening levels (ESLs).

4. High chromium concentrations were reported in IA F2 but no data are presented for hexavalent chromium, an emergent chemical discussed in previous correspondence from the Water Board to the Navy. This data gap needs to be addressed in future sampling rounds for both soil and groundwater in those areas where total chromium results exceed the comparison criteria.

### Specific Comments

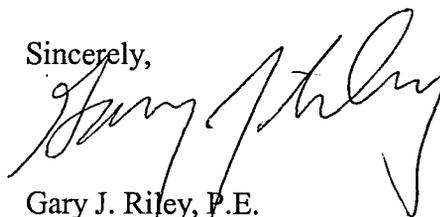
5. Page 1-43: The Water Board's risk-based screening levels staff report has been updated to reflect new environmental screening levels (ESLs). Future reports for IA F2 should use the updated reference and current ESLs.
6. Page 2-1: The site history discussion for Subarea 1 (Building 1300 Subarea) states that from 1949 to 1972, dip tank wastes were disposed to the storm sewer. Presumably, wastes from the paint spray areas were disposed in a similar fashion. The storm drain lines within and leading from Subarea 1 should be investigated as potential areas for a release and/or preferential pathway for migration of a release from dip tank and paint spray waste disposal.
7. Page 3-11: Section 3.0 concludes that a continuing source of VOC contamination may exist in soils at the VOC subarea. Further degradation of water quality by a sorbed soil source or non-aqueous phase liquid in soil or groundwater requires evaluation in a feasibility study (FS) in accordance with the State Water Board's anti-degradation policy (Resolution No. 68-16). Further policy on the application of Resolution No. 68-16 to cleanups may be found in Resolution No. 92-49 ("Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304"). The recommendations for the VOC Subarea in the RI report should be changed accordingly to carry this area forward to an FS.
8. Page 4-4: The discussion of the geology in the SBM (sandblast material) Subarea states it appears tidal action may have moved and redistributed the SBM in the tidal wetland habitat area after it was disposed of in Mare Island Strait. It is likely this redistribution is continuing due to tidal action, storm events, and marine traffic. This potential for an ongoing discharge to waters of the State needs to be evaluated in the FS in accordance with Water Board policies including (but not limited to) anti-degradation (see comment above for page 3-11). Water Board staff note that this area is proposed for further action on page 4-22 due to unacceptable risks to ecological receptors; however, the potential

redistribution of SBM also needs to be evaluated and the recommendations for this Subarea should be changed accordingly.

9. Page 5-1: Section 5.1.2 describes the history of Subarea 4 (Other Uplands Subarea) as a painting operations area from 1949 to 1992. Building 900 housed a large, water-curtain paint spray booth. Wastes generated by this and other paint spray booths reportedly included paints, chromate, red lead, epoxy, vinyls, thinners, and contaminated water. While in operation, the booths produced approximately 1,000 gallons per day of wastewater. Prior to 1978 these wastes were disposed of in the storm drain system. The storm drain lines within and leading from Subarea 4 should be investigated as potential areas for a release and/or preferential pathway for migration of a release.

If you have any further questions regarding this matter, please contact me at (510) 622-2462 or via email to [gjr@rb2.swrcb.ca.gov](mailto:gjr@rb2.swrcb.ca.gov).

Sincerely,



Gary J. Riley, P.E.  
Water Resource Control Engineer  
Remedial Project Manager

Distribution:

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