

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

**ADDENDUM NO. 2 TO
CLEANUP AND ABATEMENT ORDER NO. 88-89**

**SINGER COMPANY ELECTRONIC SYSTEMS DIVISION
BAE SYSTEMS INFORMATION AND ELECTRONIC SYSTEMS INTEGRATION, INC.**

FORMER BAE SYSTEMS AEROSPACE SAN MARCOS FACILITY

**1370 SAN MARCOS BOULEVARD, SAN MARCOS, CALIFORNIA
SAN DIEGO COUNTY**

The California Regional Water Quality Control Board, San Diego Region (hereinafter San Diego Water Board) finds that:

1. **CLEANUP AND ABATEMENT ORDER NO. 88-89.** Except as contradicted or superseded by the findings and directives set forth in this Addendum No. 2 to Cleanup and Abatement Order (CAO) No. 88-89, all of the previous findings and directives of the CAO and Addendum No. 1 remain in full force and effect.
2. **SCOPE.** Addendum No. 2 modifies the cleanup levels in soil for copper, lead, total chromium, and hexavalent chromium; and the cleanup level in groundwater for vinyl chloride. (see Directive 1)
3. **CALIFORNIA ENVIRONMENTAL QUALITY ACT.** This enforcement action is exempt from the provisions of the California Environmental Quality Act (CEQA) in accordance with Section 15321 (Enforcement Actions by Regulatory Agencies), Chapter 3, Title 14 of the California Code of Regulations.
4. **TECHNICAL REPORT.** The "*Technical Report for Addendum No. 2 to Cleanup and Abatement Order No. 88-89, Singer Company Electronic Systems Division, BAE Systems Information and Electronic Systems Integration, Inc., Former BAE Systems Aerospace San Marcos Facility, 1370 San Marcos Boulevard, San Marcos, California, San Diego County*" is hereby incorporated as a finding in support of this CAO as if fully set forth here verbatim.
5. **VINYL CHLORIDE RISK BASED CLEANUP LEVEL.** A vinyl chloride risk based cleanup level (RBCL) of 1,000 µg/L in groundwater is protective of site receptors.
6. **SOIL CLEANUP LEVELS.** The following soil cleanup levels, based on the more stringent of either the residential California Human Health Screening Levels (CHHSLs) or the Total Threshold Limit Concentrations (TTLCs), are protective of site receptors:

- copper of 2,500 mg/kg based on TTLCs;
- lead of 80 mg/kg based on residential CHHSLs,
- chromium of 2,500 mg/kg based on TTLCs; and
- hexavalent chromium of 17 mg/kg based on residential CHHSLs.

ORDER DIRECTIVES

IT IS HEREBY ORDERED that, pursuant to California Water Code sections 13267 and 13304, CAO No. 88-89 is amended as follows:

1. **CORRECTIVE ACTION.** The discharger shall take all corrective actions necessary to remediate the soil and groundwater at the site to the cleanup levels listed in Table 1.

Table 1 - Soil and Groundwater Revised Cleanup Levels

Constituent of Concern	Soil Cleanup Levels (mg/kg)	Groundwater Cleanup Levels (mg/L)
VOCs		
Benzene		0.165 ¹
Chloroform		1.15 ¹
1,1-Dichloroethane	20.0 ²	3.28 ¹
1,2-Dichloroethane		1.0 ¹
1,1-Dichloroethylene	6.0 ²	2.28 ¹
1,2-Dichloroethylene		8.06 ¹
1,4 Dioxane		3.78 ¹
Freon 113		0.413 ¹
Tetrachloroethylene	4.0 ²	0.020 ¹
Toluene	100.0 ²	1.269 ¹
1,1,1-Trichloroethane	200.0 ²	1.3 ¹
1,1,2-Trichloroethane		0.51 ¹
Trichloroethylene	5.0 ²	1.384 ¹
Vinyl Chloride		1,000 µg/L*
Metals		
Copper	2,500*	1,000 ²
Lead	80*	
Hexavalent Chromium	17*	0.050 ²

Constituent of Concern	Soil Cleanup Levels (mg/kg)	Groundwater Cleanup Levels (mg/L)
Trivalent (total) Chromium	2,500*	0.098 ²

*New Cleanup Level

¹ Addendum No. 1 to CAO 8-89 Cleanup levels

² Cleanup and Abatement Order No. 88-89 Cleanup levels

2. **REMEDIAL ACTION PLAN.** The discharger shall notify the San Diego Water Board by September 2, 2013 if a revised Remedial Action Plan (RAP) is necessary to address the cleanup levels in Directive 1. The corrective actions in the RAP shall be capable of achieving the cleanup levels in Directive 1 and, at a minimum, contain the following elements:
 - a. **Selected Remedial Alternatives.** A detailed description of all corrective actions selected to achieve the cleanup levels.
 - b. **Monitoring Program.** A monitoring program capable of demonstrating the effectiveness of the selected remedial alternatives and compliance with the alternative cleanup levels.
 - c. **Remediation Schedule.** A schedule detailing the sequence of events and time frame for each activity based on the shortest practicable time required to complete each activity.

3. **RAP IMPLEMENTATION.** Upon approval of the RAP by the San Diego Water Board, the discharger shall implement the RAP in accordance with the remediation schedule contained therein.

Ordered by:



David W. Gibson
Executive Officer