



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

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AEROJET-GENERAL SACRAMENTO
ENVIRONMENTAL OPERATIONS

Fax and Mail
April 13, 2006

Ms. Cindy Caulk
Program Coordinator
Aerojet General Corp.
P.O. Box 13222
Sacramento, CA 95813-6000

SUBJECT: Response to 20 January 2006 Agency Comments on the Final Perimeter Groundwater Operable Unit, Remedial Investigation/Feasibility Study

Dear Ms. Caulk:

The Environmental Protection Agency, Regional Water Quality Control Board and Department of Toxic Substances Control (collectively "Agencies") have reviewed Aerojet's document "Response to 20 January 2006 Agency Comments on the Final Perimeter Groundwater Operable Unit, Remedial Investigation/Feasibility Study (RI/FS)" submitted by ERM's letter of March 15, 2006. The Agencies' comments on Aerojet's response to the Agencies' comments are provided below. The Agencies request that Aerojet incorporate the requested changes in the pending May 8, 2006 RI/FS revision.

Agencies' Original Specific Comment 8. Larry Bradfish, EPA's Office of Regional Counsel, is currently in discussions with Larry Hobel, Aerojet's outside counsel, on this comment. It is the EPA's position that the RI/FS document should fully and accurately cover sources of contaminants of concern, which is a fundamental objective of the document. The document should not have to be amended by an addendum by the Agencies to correct inaccurate or incomplete information in the RI/FS document concerning source areas.

Agencies' Original Specific Comment 163.

1. Arsenic:

- A. The Agencies request that a consistent description of *limit of detection* (LOD) be used. In some instances, the LOD is called "detection limit", and in other cases it is called "reporting limit". The generic term detection limit is ambiguous. We recommend using **Method Detection Limit** (MDL) per 40 CFR 136, as appropriate, or **Reporting Limit** (RL), based on the statistical uncertainty associated with the analytical measurement. Reporting limit is assumed to be the laboratory reporting limit based on control chart data, and is synonymous with the commonly used descriptors, practical quantitation limit (PQL) and sample quantitation limit (SQL).

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- B. Provide the frequencies for non-detected arsenic data used in the background and PGOU data sets, as well as that used to generate the Arsenic to Aluminum Residual Plot. These values are not provided in the RI/FS tables.
- C. Evaluate and determine the statistical distribution of residuals in the Arsenic to Aluminum Residual Plot, and provide a table listing standard summary statistics (e.g., mean, median, and variance). Describe any skewness in the residual's distribution and any deviations from normality.

2. **Hexavalent Chromium:**

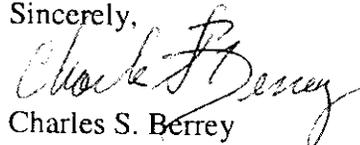
- A. The data collected from chromium analyses (hexavalent and total) in the case of the limited soils that are apart of Operable Unit 5 (OU5) appear adequate to support the assertion that hexavalent chromium concentrations do not contribute significantly to measured total chromium concentrations for this OU. The total chromium concentrations may be compared directly to the trivalent chromium action levels for OU5.
- B. Total chromium concentrations may not be compared directly to the trivalent chromium action levels for the Source Area OUs without additional study of chromium speciation. This study need to be developed following the DQO process.

Additional Comments: During various technical meetings, the Agencies have discussed the following points to be part of the revised RI/FS submission:

- 1. Institutional Controls (ICs) need to be addressed in compliance with EPA 540-F-00-005, OSWER 9355.0-74FS-P, dated September 2000 (e.g., prohibition on installation of drinking water wells near contamination needs a citation to the controlling regulation or ordinance, costs associated with ICs need to be provided and evaluated against the EPA's nine criteria).
- 2. The Agencies have requested that Aerojet evaluate all soil areas for unrestricted use. Where Aerojet is proposing an IC as an action, the cost for remediation to achieve unrestricted use needs to be compared to the cost of implementing the IC over the remedy period.

Should you have any questions on this correspondence, please contact me at (415) 972-3146, Alex MacDonald at 464-4625 or Ed Cargile at 255-3703.

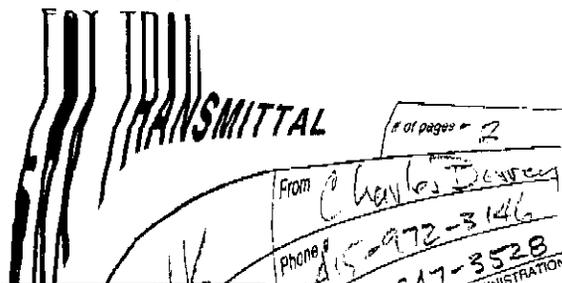
Sincerely,



Charles S. Berrey
Site Cleanup Section 2 (SFD-7-2)

cc:

Ed Cargile, CALEPA/DTSC
Alex MacDonald, CALEPA/RWQCB
Penny McDaniel, EPA
Greg Stuesse, WSI



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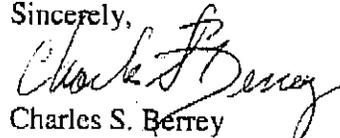
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