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MEMORANDUM

TO: Lisa Hanusiak, Remedial Project Manager
Site Cleanup Section 3, SFD-7-3

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)
Quality Assurance (QA) Program, MTS-3

FROM: Doug Lindelof, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00105123

DATE: April 11, 2008

SUBJECT: Tier 1A Review of Hexavalent Chromium Analytical Data for the Alhambra Site; Case: None Provided; SDGs: 07H284, 07H310, 07K199, 07K217, and 07K263.

EMAX Laboratories, Inc. (EMAX) analyzed 24 groundwater samples for hexavalent chromium by EPA Method 218.6.

A forms-only evaluation of the data packages was performed to identify any key analytical issues/deficiencies affecting data quality. This evaluation approach is employed when in-depth data review is not required as indicated by the data user. For areas of concern see lettered and additional comments.

The evaluation includes: a review of the data package for completeness, a review of the chain of custody (COC) forms (against laboratory reported information, for signatures, for sample condition upon laboratory receipt and for sample preservation), a review of holding times, a review of quality control (QC) summaries, a review of blanks for contamination, a random check of reported results against raw data, and a random check of raw data for interference problems or system control problems (e.g. baseline anomalies, baseline drifts, etc.).

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *Methods For The Determination Of Metals In Environmental Samples*, EPA-600/4-91-010, June 1991; and
- *USEPA Method 218.6, Determination of Dissolved Hexavalent Chromium in Drinking Water, Groundwater, and Industrial Wastewater Effluents by Ion Chromatography*, Revision 3.3, May 1994.

The following issues listed by SDG should be noted:

SDG: 07H284

A. The equipment blank MY3ET5 result, 0.187 µg/L, for hexavalent chromium is above the method detection limit (MDL) but below the laboratory reporting limit (RL) and should be estimated and flagged "J".

SDG: 07K199

A. Hexavalent chromium was detected in the field duplicate sample MY3QN7 at a concentration of 3.86 µg/L; however, hexavalent chromium was not detected in the associated field duplicate sample MY3QN8. An RPD is not calculated. The effect on data quality is not known.

Additional Comments:

1. The Chain of Custody (COC) record form for SDGs 07H310 and 07K263 did not specify a sample to be used for laboratory QC. Since no matrix specific laboratory QC was performed for these SDGs, precision and accuracy could not be evaluated. The effect on data quality is not known.

A Table 1A was not requested.

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.