

December 18, 2013

Mr. Weiquan Dong, PE Bureau of Corrective Actions, Special Projects Branch Nevada Division of Environmental Protection 2030 E. Flamingo Rd., Suite 230 Las Vegas, Nevada 89119

## Re: NERT Response to NDEP October 7, 2013 Comments on the Data Validation Summary Report and Electronic Data Deliverables for the Annual Remedial Performance Report for Chromium and Perchlorate, January 2013 to June 2013, dated August 19, 2013

Dear Mr. Dong:

On behalf of the Nevada Environmental Response Trust (the Trust), ENVIRON International Corporation (ENVIRON) has prepared an annotated response to the Nevada Division of Environmental Protection (NDEP) comments on the Data Validation Summary Report (DVSR) and Electronic Data Deliverable (EDD) included as part of the Annual Remedial Performance Report for Chromium and Perchlorate, January 2013 – June 2013. The comments were included as Attachment A in NDEP's letter to the Trust dated October 7, 2013.

Please contact John Pekala at (602) 734-7710 if you have any comments or questions concerning this response to comments.

Sincerely,

John M. Pekala, PG

Senior Manager CEM #2347 (expires 9/20/2014)

Attachments

Allan J. DeLorme, PE Principal

- cc: BMI Compliance Coordinator, NDEP, BCA, Las Vegas Brian Rakvica, McGinley and Associates, Las Vegas NDEP c/o McGinley and Associates, Reno
- ec: James D. Dotchin, NDEP Greg Lovato, NDEP Stephen Tyahla, USEPA Rebecca Shircliff, Neptune and Company Nevada Environmental Response Trust Tanya O'Neill, Foley & Lardner LLP Jeff Gibson, AMPAC Curt Richards, Olin Jay Gear, Olin Davis Share, Olin Chuck Elmendorf, Stauffer Nick Pogoncheff, Stauffer
- George Crouse, Syngenta David Hadzinsky, TIMET Kirk Stowers, Broadbent & Associates Richard Truax, GEI Consultants Victoria Tyson, Tyson Contracting Enoe Marcum, WAPA Ranajit Sahu, BMI Joe Kelly, Montrose Paul Sundberg, Montrose Mark Paris, BMI Lee Farris, Landwell

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## Attachment A

Nevada Environmental Response Trust ("NERT" or "the Trust") Response to Nevada Division of Environmental Protection (NDEP) October 7, 2013 Comments on the Data Validation Summary Report and Electronic Data Deliverables for the Annual Remedial Performance Report for Chromium and Perchlorate January 2013 to June 2013, dated August 19, 2013

The NDEP Comments (numbered and italicized) and Response to Comments (RTCs) from ENVIRON on behalf of the Trust are presented below:

## **DVSR Comments**

 General, Level of Data Validation. Section 1.0 and the EDD indicate that 90% of the data was validated to level Stage 2A, which excludes data validation due to instrument-related QC (e.g., calibration, interference checks, etc.). The April 13, 2009 Data Validation Guidance issued by NDEP requires that all data collected at the BMI Complex and Common Areas should be validated at least to Stage 2B. The remaining 90% of data (less the Stage 4, validation), needs to be validated to Stage 2B.

**Response:** In an email to the Trust, dated November 25, 2013, NDEP agreed that starting with the forthcoming Semi-Annual Remedial Performance Report, covering the period from July to December 2013, the Trust will validate to at least Stage 2B, but that this requirement need not be instituted retroactively (i.e., prior to July 2013). The data submitted with this Response have not been revalidated to Stage 2B in accordance with this agreement; however, starting with the data collected in July 2013, the Trust will validate approximately 10% of data to Stage 4, and the remaining 90% data will be validated to Stage 2B.

2. Section 1.0, Percent Validation. Indicate the total number of samples and break this up into the two levels of validation to clearly show how the 90/10 percentages were attained.

**Response:** The text has been revised to indicate the number of samples validated at each level, as well as the total number of samples. Specifically, the text of the fifth paragraph on Page 1 of the DVSR now reads: Consistent with the NDEP requirements, approximately ninety percent of the analytical data (520 of the 576 samples) were validated according to Stage 2A data validation procedures and ten percent of the analytical data (59 of the 576 samples) were validated according to Stage 4 data validation procedures.

3. Section 1.0 and General, Blank Guidance. The DVSR does not reference the 2012 NDEP Guidance for Blank Contamination. The DVSR needs to indicate the guidance(s) followed for handling blank contamination issues. **Response:** A reference to NDEP's Revised Guidance on Qualifying Data due to Blank Contamination for the BMI Complex and Common Areas, dated January 5, 2012 has been added to Section 1.0 Introduction, and to Section 7.0 References.

4. Section 1.0 and General, Sensitivity, the DVSR needs to discuss sensitivity in terms of MDL, SQL or PQL and indicate how they apply to the samples and data quality.

**Response:** A description of sensitivity has been added to the Precision and Accuracy of Environmental Data text, within the first paragraph on Page 6 of the DVSR. Also, each section discussing QC data for an analytical method now has a subsection reviewing instrument sensitivity. See Section 2.5 for chromium, Section 3.5 for wet chemistry, and Section 5.5 for a summary of Precision, Accuracy, Representativeness, Comparability, Completeness (PARCC) criteria.

5. Sections 2 and 3, Acceptance Limits. The acceptance limits/criteria need to be listed for each QC measure. Presently, only a couple of the QC measures have the acceptance criteria listed.

**Response:** Acceptance criteria are detailed in the Revised Phase B Quality Assurance Project Plan Tronox LLC Facility (QAPP), dated July 2009. The DVSR text has been updated to reference the QAPP where appropriate.

6. Section 3.2.2.2, Table III and Attachment B (Section IV), Blank PQLs. The PQLs need to be listed for the samples where blank contamination was found. This allows one to easily compare the level of blank contamination to the PQL.

**Response:** Sample result PQLs have been added to Table III for easy comparison with blank contamination. Attachment B is an auto-generated report and adding PQLs to it would require reprogramming the report. No changes have been made to Attachment B.

## **EDD Comments**

 There were 77 records where the result\_reported was NULL and the detect\_flag\_fod="U". According to the EDD guidance, "for non-radionuclide, nondetected results, the result\_reported should equal the SQL." The SQL should be entered in the result\_reported field for these records.

**Response:** The column *result\_reported* has been populated for all records.

2. There are 12 records where the sample\_top\_depth and sample\_bottom\_depth are NULL. These depths should be entered.

**Response:** The following 12 wells are non-Trust wells and have no available well screen information in the April 2013 All Wells Database, and the depth fields have been left blank for these samples: CLD-1R, H-11, H-28A, H-48, HM-2, HMW-13, HMW-14, HMW-15, HMW-16, MC-3, MC-6, MC-7.

3. In the results table, the field "minimal\_detectable\_activity" should be changed to "minimum\_detectable\_activity" to be consistent with the EDD guidance.

**Response:** The name of the field "minimum\_detectable\_activity" has been corrected in the results tables.

4. In the table cas\_id\_new, "Specific Conductance" was listed twice, each occurrence with a different cas\_id. We have used the cas\_id="CONDUCTIVITY" for all records where the parameter="Specific Conductance".

**Response:** In the table cas\_id\_new, the cas\_id "CONDUCTIVITY" has been kept and the alternate cas\_id for Specific Conductance has been removed. The results table has been reviewed and all Specific Conductance records correctly report "CONDUCTIVITY" for the parameter\_id.