

January 30, 2015

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 December 26, 2014 Comments on the Data Validation Summary Report and Electronic Data Deliverable for the Annual Remedial Performance Report for Chromium and Perchlorate, July 2013 – June 2014, dated October 31, 2014**

Dear Mr. Dong:

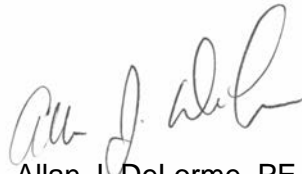
On behalf of the Nevada Environmental Response Trust (Trust), ENVIRON International Corporation (ENVIRON) has prepared an annotated response to the Nevada Division of Environmental Protection (NDEP) comments on the Data Validation Summary Report (DVSR) and Electronic Data Deliverable (EDD) included as part of the Annual Remedial Performance Report for Chromium and Perchlorate, July 2013 – June 2014. The comments were included as Attachment A in NDEP's letter to the Trust dated December 26, 2014. Our responses to NDEP comments are provided in Attachment A to this letter.

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

Sincerely,



John M. Pekala, PG  
Senior Manager  
CEM #2347 (expires 9/20/2016)



Allan J. DeLorme, PE  
Principal

#### Attachments

cc: BMI Compliance Coordinator, NDEP, BCA, Las Vegas  
NDEP c/o Broadbent and Associates, Las Vegas

ec: James D. Dotchin, NDEP  
Greg Lovato, NDEP  
Kirk Stowers, Broadbent & Associates  
Rebecca Shircliff, Neptune and Company  
Alison Fong, USEPA  
Katherine Baylor, USEPA  
Nevada Environmental Response Trust  
Steve Clough, NERT  
Tanya O'Neill, Foley & Lardner LLP  
Frank Johns, Tetra Tech  
Derik Amidon, Tetra Tech  
Jeff Gibson, AMPAC  
Mark Paris, BMI

Ranajit Sahu, BMI  
Kurt Fehling, The Fehling Group  
Lee Farris, Landwell  
Joe Kelly, Montrose  
Paul Sundberg, Montrose  
Curt Richards, Olin  
David Share, Olin  
Chuck Elmendorf, Stauffer  
Nick Pogoncheff, Stauffer  
George Crouse, Syngenta  
Richard Pfarrer, TIMET  
Enoe Marcum, WAPA

## Attachment A

### Nevada Environmental Response Trust (Trust) Response to Nevada Division of Environmental Protection (NDEP) December 26, 2014 Comments on the Data Validation Summary Report and Electronic Data Deliverable for the Annual Remedial Performance Report for Chromium and Perchlorate July 2013 – June 2014, dated December 26, 2014

The NDEP comments (numbered and italicized) and our response to comments on behalf of the Trust are presented below:

#### DVSR Comments

- 1. Attachments A and B, Sample Result Verification. Sections XI and IX of Attachments A and B, respectively, discuss issues related to dissolved versus total hexavalent chromium; however, it does not discuss how the issue was handled. Please provide an explanation as to how the issues were handled and why (i.e., reason for qualifications or no qualifications).*

**Response** Sections XI and IX of Attachments A and B, respectively, discuss samples for which hexavalent chromium results were greater than the total chromium results. Consistent with NDEP guidance and using professional judgment, the data validator reviewed the results for the associated samples and determined that there was no technical reason to qualify the data. For the two samples having the largest disparity between total chromium and hexavalent chromium, the data validator had the laboratory verify the results, and no errors were found in reporting. Furthermore, the data validator reviewed historical data, and while a dilution error could be deduced for these two samples, since samples had been disposed there was no plausible way to confirm an error; therefore, the data validator determined that there was no technical reason to qualify the results from these two samples.

- 2. Sections 2.1.7 and 3.1.7, Attachments A (XII) and B (X), Rejected Data. Sections XII and X of Attachments A and B, respectively, indicate that results were rejected when there was more than one result for a single sample. It is not recommended that data be rejected unless there is a QC issue that requires this action. Also note that rejection of data due to duplicate analysis can confuse the interpretation of completeness. When handling duplicate data points, it is recommended that the “unused” data be denoted with a specific code or qualifier (e.g., X) that would not be confused with a quality-related issue. Additionally, there needs to be clarification about the data (e.g., duplicated data or data from independent analyses) and a discussion as to how the retained data points are chosen so as not to bias the overall results.*

**Response:** The “unused” data now have the qualifier “DNR” (Do Not Report) and are no longer reported as rejected. Chromium and perchlorate were analyzed twice for a field blank. All four results are non-detects and the data validator has concluded that selecting one set versus the other will not bias the data.

3. *Sections 2.2.2 and 3.2.2, Blank Contamination. For metals and wet chemistry, it would be useful if the associated attachments had tables that allowed one to directly compare the sample result to the blank result and the associated PQL/SQL. The way the tables are currently organized does not allow for direct comparison of these values.*

**Response:** Included electronically with this response is an Excel file containing sample results and PQLs of samples listed in Attachments A (IV) and B (IV). These sample results are associated with one or more blanks that have a detection of the listed analyte. The results in the Excel file can be compared to the blanks information in the Attachments. PQLs are also included in Table III in response to a previous NDEP comment.

4. *Section 3.2.1 and Attachment B (I), Holding Times. Please revise the second sentence of the first paragraph in Section 3.2.1. It indicates that all samples met their holding time when they did not. Additionally, Section I of Attachment B indicates that non-detect results were rejected when the holding time was exceeded by greater than two times. It is not made clear if any samples were actually rejected for this issue. Section 5.4 indicates that no results were rejected; however, it should be made clear if any results were rejected specific to holding time issues where rejection is a possibility.*

**Response:** The second sentence of the first paragraph in Section 3.2.1 lists holding time criteria for only those analytes for which hold times were met. For example: Orthophosphate as phosphorus, orthophosphate as phosphate, and nitrite as nitrogen met the 48-hour holding time criteria for all groundwater samples. The second paragraph lists the analytes that had results exceeding holding time criteria. i.e. hexavalent chromium, nitrate as nitrogen, and pH.

No results were rejected due to holding time issues. Section I of Attachment B states “Although the holding time for some pH analyses was exceeded by more than two times the holding time, using professional judgment the associated sample results were qualified as estimated (J/UJ) because the sample condition and integrity was maintained during collection, transport, and storage.” The following text has been added to Section 1 of Attachment B: “Although the holding time for nitrate as nitrogen and dissolved hexavalent chromium analyses was exceeded by more than two times the holding time, no data were rejected as the affected results were detect and qualified as estimated (J-).”

Section 5.4 correctly states that no results were rejected and has not been changed.

## EDD Comments

1. *There were 408 records in the results table that had a prep\_date and prep\_time, but the preparation\_method was blank. Please provide a preparation method if it is available.*

**Response:** Of the 408 records having a prep\_date but without a preparation\_method, 402 were analyzed using method EPA 200.7 following use of preparation method EPA 200.2. For these records, the preparation\_method field in the EDD has been populated with EPA 200.2.

Four records analyzed using method EPA 420.1 and two records analyzed using EPA 350.1 do not have an associated preparation method. Therefore, the prep\_date and prep\_time fields have been made blank and the preparation\_method has been left blank for these six records.

2. *There were 10 records for phosphate in the results table that have a PQL reported, but the SQL is blank. Please provide the SQL for these records if it is available.*

**Response:** The phosphate results are calculated values and therefore do not have a measured SQL. The SQL for these results has been populated with the calculated SQL.