

June 30, 2014

Mr. Weiguan 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 April 22, 2014 Comments on the Data Validation Summary Report and Electronic Data Deliverables for the Semi-Annual Remedial Performance Report for Chromium and Perchlorate, July through December 2013, dated February 27, 2014

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 Semi-Annual Remedial Performance Report for Chromium and Perchlorate, July 2013 – December 2013. The comments were included as Attachment A in NDEP's letter to the Trust dated April 22, 2014. Our response to 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 9/20/2014)

au J. Del Allan J. DeLorme, PE

Principal

Attachments

BMI Compliance Coordinator, NDEP, BCA, Las Vegas

NDEP c/o Brian Giroux, McGinley and Associates, Reno

James D. Dotchin, NDEP ec: Greg Lovato, NDEP

Stephen Tyahla, USEPA

Nevada Environmental Response Trust Tanya O'Neill, Foley & Lardner LLP Rebecca Shircliff, Neptune and Company

Joe McGinley, McGinley and Associates Jeff Gibson, AMPAC

Mark Paris, BMI Lee Farris, Landwell Ranajit Sahu, BMI Joe Kelly, Montrose

Paul Sundberg, Montrose Curt Richards, Olin Davis Share, Olin

Chuck Elmendorf, Stauffer Nick Pogoncheff, Stauffer George Crouse, Syngenta David Hadzinsky, TIMET

Richard Truax, GEI Consultants Kirk Stowers, Broadbent & Associates Victoria Tyson, Tyson Contracting

Enoe Marcum, WAPA

## Attachment A

Nevada Environmental Response Trust "the Trust") Response to Nevada Division of Environmental Protection (NDEP) April 22, 2014 Comments on the Data Validation Summary Report and Electronic Data Deliverables for the Semi-Annual Remedial Performance Report for Chromium and Perchlorate July through December 2013, dated February 27, 2014

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

## **DVSR Comments**

 Section 2.1.1 and Attachment A (III). The DVSR text for instrument calibration indicates that all CCVs met the acceptance criteria; however, Attachment A (III) does not. Attachment A indicates there was a CCV issue with chromium and samples were qualified. Please verify this is correct and revise the DVSR and Attachment A to be in agreement.

**Response:** Due to the high CCV %R outside of the acceptance criteria, any chromium detections in the associated samples would be J+ qualified, however all of the associated chromium results were below detection limits, and therefore, are not qualified. Section 2.1.1 has been revised to provide this explanation.

2. Section 3 and Attachment B. Section 3 combines 12 different methods and their QA/QC into a single section. This makes it confusing as to what QC was checked for each method. If this format is to remain, each subsection of Section 3 should indicate which method/suite requires the QA/QC that were validated and discussed. In addition, the DVSR Section 3.1.2 discusses surrogate QC, but this is not mentioned in Attachment B.

**Response:** Each subsection of Section 3 has been revised to include a sentence detailing which analytical methods were reviewed for each QC item. In addition, attachment B has been revised to include a surrogate section for chlorate by 300.1.

3. Section 1 and Attachment B (I). The Representativeness discussion in Section 1 states, "In accordance with EPA guidance (USEPA 2004), sample results for analyses that were performed after the method holding time but less than two times the method holding time were qualified as estimated (J- or UJ) and sample results for analyses that were performed after two times the method holding time were qualified as rejected (R)." There are some pH results (e.g., SDGs 440-56361-1, 440-54862-1, 440-54975-1, 440-55076-1, 440-55218-1,440-55674-1, 440-55769-1, 440-55874-1, and 440-61402-1) that were analyzed beyond 2x the 48-hour holding time. The results for these samples were J qualified versus rejected. Due [to] the uniqueness of pH results, there is likely a reason why these results were not rejected. There is concern that a pH measured after 4+ days would not be representative of the initial

sample pH. This depends on the sample, how it was stored and if there was atmospheric exposure. The DVSR should discuss this and verify if the results should have been J qualified.

**Response:** The Representativeness discussion in Section 1 has been modified to indicate that specific pH results were qualified and not rejected, and are detailed in Attachment B (I). The following text has been added to Attachment B (I) explaining why the pH results were qualified and not rejected:

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.

4. Section 5.3 and Attachment B (I). Section 5.3 states, "Sample preservation, and sample integrity criteria were met." This is not the case for Attachment B (I) where TDS preservation issues were discussed. The DVSR and DV results in Attachment B should be in agreement.

**Response:** Section 5.3 has been revised to indicate that not all sample preservation criteria were met. The relevant sentences now read, "Sample integrity criteria were met. Sample preservation and holding times were within QC criteria with the exceptions noted in Section 3.2.1." No revisions are needed to Attachment B (I).

## **EDD Comments**

5. There were 33 records for perchlorate in the results table where the final\_validation\_qualifier was "R", indicating that the result was rejected. The EDD guidance requires that the detect\_flag\_fod and detect\_flag\_ra should also be an "R"; therefore, the detect\_flag\_fod and the detect\_flag\_ra fields need to be updated with an "R" for the rejected results. This can be corrected during the data import process instead of submitting a revised EDD for this update. Please note this for future EDDs.

**Response:** In future EDDs, the fields detect\_flag\_fod and detect\_flag\_ra will have "R" values for rejected results.

6. Location\_id H-28A in the samples table did not have a sample\_top\_depth or sample\_bottom\_depth and had a hydro entry of "NA". These fields are required in the EDD guidance. The all wells database does not have any additional information and shows that the well has been plugged and abandoned. Please verify that depth and hydro information is not available for H-28A for this sampling event.

**Response:** Stauffer was contacted for sample depth and hydro information for well H-28A. They replied that the information is not available. Sample depth and hydro

data for well H-28A will be included in future EDDs if the information is available from
Stauffer.