



NEVADA DIVISION OF  
**ENVIRONMENTAL  
PROTECTION**

**STATE OF NEVADA**  
Department of Conservation & Natural Resources

Brian Sandoval, Governor  
Bradley Crowell, Director  
Greg Lovato, Administrator

June 5, 2017

Jay A. Steinberg  
Nevada Environmental Response Trust  
35 East Wacker Drive, Suite 1550  
Chicago, IL 60601

**Re: Tronox LLC (TRX) Facility  
Nevada Environmental Response Trust (Trust) Property  
NDEP Facility ID #H-000539**  
Nevada Division of Environmental Protection (NDEP) Response to: *Data Validation  
Summary Report and EDD for July through December 2016 Semi-Annual Remedial  
Performance Sampling, Nevada Environmental Response Trust (NERT), Henderson,  
Nevada*

Dated: April 28, 2017

Dear Mr. Steinberg,

The NDEP has received and reviewed the Trust's above-identified Deliverable and provides comments in Attachment A. A revised Deliverable should be submitted **by 08/01/2017** based on the comments found in Attachment A. The Trust should additionally provide an annotated response-to-comments letter as part of the revised Deliverable.

Please contact the undersigned with any questions at [wdong@ndep.nv.gov](mailto:wdong@ndep.nv.gov) or 702-486-2850 x252.

Sincerely,

Weiquan Dong, P.E.  
Bureau of Industrial Site Cleanup  
NDEP-Las Vegas City Office

WD:cp

EC:  
James Dotchin, NDEP BISC Las Vegas  
Carlton Parker, NDEP BISC Las Vegas  
Allan Delorme, Ramboll Environ  
Alison Fong, U.S. Environmental Protection Agency, Region 9  
Andrew Barnes, Geosyntec  
Andrew Steinberg, Nevada Environmental Response Trust  
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Betty Kuo Brinton, MWDH2O  
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Dave Share, Olin  
David Johnson, Central Arizona Water Conservation District  
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George Crouse, Syngenta Crop Protection, Inc.  
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Peggy Roefer, CRC  
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Rick Perdomo, AG Office  
Richard Pfarrer, TIMET  
Rick Kellogg, BRC  
Scott Bryan, Central Arizona Project  
Steve Clough, Nevada Environmental Response Trust  
Steven Anderson, LVVWD  
Tanya O'Neill, Foley & Lardner L  
Todd Tietjen, SNWA

## Attachment A

### **DVSR Review:**

1. **Section 1., Introduction:** The text states there were 982 samples. This number is confirmed by Table I; however, the EDD samples table has 738 records and the EDD results table has 729 samples. Please correct the text/Table I or EDD as necessary to correct this discrepancy.
2. **Section 1., method list:**
  - a. The text lists “nitrate/nitrite as nitrogen by calculation” but the EDD lists the analytical\_method as EPA 300.0 instead of calculation. Perhaps the parameter name can be appended with “calc” as is done for total inorganic nitrogen? Otherwise, once entered into the database, it will appear this was part of the 300.0 analysis.
  - b. Total organic carbon (TOC) is listed for method SM5310C, but the parameter reported for that method is “carbon.” Please correct the EDD to indicate the parameter is “Total Organic Carbon” and the parameter\_id is “TOC”.
  - c. In the list in the text, nitrate and nitrite are listed as having been reported “as nitrogen”. This is inconsistent with the EDD, which reports the analytes as nitrate and nitrite. Please verify the reporting basis for these two analytes and correct the text or EDD as necessary. If the text needs to be corrected, please correct all other occurrences of “nitrate as nitrogen” and “nitrite as nitrogen.”
  - d. Please include an explanation of why a field method (field pH) is being validated with laboratory data.
3. **Section 2., qualifier definitions:** Listing “None” in the table of qualifier definitions gives the impression that unqualified data will have the final\_validation\_qualifier field populated with “None”. Please consider removing this description from the table and including it in the text below the table.
4. **Section 2., precision and accuracy:** The text cites sample matrix as a reason for imprecise results. As matrix should equally affect each aliquot of a duplicate, this reason is not usually cited. Sample heterogeneity is more commonly cited as the source of imprecision.
5. **Section 2., trip blanks:** Should this sentence have the underlined word deleted? “A trip blank is a sample bottle filled in the laboratory with reagent-grade water and preserved to a pH less than 2 with hydrochloric acid or solid matrix.”
6. **Section 3.1.1, VOC calibration qualifications:** The text states some results were qualified as estimated nondetects (UJ) for continuing calibration verification %D outliers; however, four of the results were qualified as estimated detects (J+). Please note these qualifications.
7. **Section 5., metals sample counts:**
  - a. The text notes the number of chromium samples as 543; however, the EDD and Table I have 542. Please correct the text or EDD as necessary.
  - b. The total analyte count for metals in the text (913) does not match the EDD (596). Please correct the text or EDD as necessary. If the text is incorrect, Section 8.4 will also need to be corrected.
  - c. Please include the number of samples analyzed for sodium.

8. **Section 5.1.7, Stage 4 samples:** Please include text explaining why no sodium samples were validated at Stage 4 and how this may affect data quality.
9. **Section 5.2.2, blank results above the PQL:** Should the underlined words be added to the explanation of how blank results above the PQL are handled? “If a sample and blank contaminant value were greater than the PQL and the sample result was less than 10 times the blank contaminant value, the sample result was qualified as detected estimated (J+) at the concentration reported in the samples results.”
10. **Section 6., sample counts:**
  - a. Please list the number of chlorate samples collected and analyzed.
  - b. The total analyte count in the text (2,322) does not match the EDD (2,869, not counting surrogates or results qualified DNR). Please correct the text or EDD as necessary. If the text is incorrect, Section 8.4 will also require correction.
11. **Section 6.1.3, MS/MSD qualifications:** The text states two perchlorate results were qualified for MS/MSD outliers; however, the EDD has three perchlorate results qualified. Please correct the text or EDD as necessary.
12. **Section 6.1.7, Stage 4 validation:**
  - a. The text states one sample calculated for nitrate/nitrite [as N] and one sample calculated for total inorganic nitrogen were validated at Stage 4; however, the EDD has two samples validated at Stage 4 for each of these parameters.
  - b. The text states that one phenolic and one specific conductance sample were validated at Stage 4; however, none are designated as such in the EDD (Table I is consistent with the EDD). Please correct the text or EDD as necessary. If none were validated at Stage 4, please include an explanation of how this may affect data quality.
  - c. Include the number of pH samples validated at Stage 4 in the text.
13. **Section 6.1.7, samples qualified DNR:** Please include a short explanation the technical criteria used to qualify samples DNR (or refer Section 6.2.1)
14. **Section 6.2.1, holding times:** Please discuss the hexavalent chromium holding time and its acceptability. Four hexavalent chromium samples were qualified by the laboratory as having been analyzed beyond the holding time. Should these results have been qualified?
15. **Section 8.4, table:** The table in this section reports 2,257 total VOC results (Methods 8260 and 8260SIM); however, the EDD has 2,331 results for these two methods. Please correct the text or EDD as necessary.

#### **EDD Review**

1. There are seven location\_ids (ART-8A-121516, ART-8A-20161215, DUP6, DUP7, DUP-7, DUP8, DUP9) in the locations table that do not have northing or easting coordinates. All location\_ids that are not some type of blank should have northing and easting populated.
2. The five location\_ids DUP6, DUP7, DUP-7, DUP8, DUP9 in the locations table are not associated with any sample\_id\_field in the samples table. If they are not associated with any

samples, then location\_ids in the samples table should be verified or these location\_ids should be removed from the data set.