



NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**

STATE OF NEVADA
Department of Conservation & Natural Resources
Brian Sandoval, Governor
Bradley Crowell, Director
Greg Lovato, Administrator

September 4, 2018

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 for the Vacuum Enhanced Recovery Treatability Study, Revision 0

Dated: July 12, 2018

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 11/05/2018** 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 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
Anna Springsteen, Neptune & Company Inc.
Betty Kuo Brinton, MWDH2O
Brenda Pohlmann, City of Henderson
Brian Waggle, Hargis + Associates

Carol Nagai, MWDH2O
Chinny Esakkiperumal, Olin Corporation
Chris Ritchie, Ramboll Environ
Chuck Elmendorf, Stauffer Management Company, LLC
Dan Pastor, P.E. TetraTech
Dave Share, Olin
Dave Johnson, LVVWD
David Parker, Central Arizona Water Conservation District
Derek Amidon, Tetrattech
Ebrahim Juma, Clean Water Team
Ed Modiano, de maximis, inc.
Eric Fordham, Geopentech
Frederick Perdomo, AG Office
Gary Carter, Endeavour
George Crouse, Syngenta Crop Protection, Inc.
Harry Van Den Berg, AECOM
Jay Steinberg, Nevada Environmental Response Trust
Jeff Gibson, Endeavour
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Joe Kelly, Montrose Chemical Corporation of CA
Joe Leedy, Clean Water Team
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John Pekala, Ramboll Environ
Kelly McIntosh, GEI Consultants
Kevin Fisher, LV Valley Water District
Kirk Stowers, Broadbent & Associates
Kirsten Lockhart, Neptune & Company Inc.
Kim Kuwabara, Ramboll Environ
Kurt Fehling, The Fehling Group
Kyle Gadley, Geosyntec
Kyle.Hansen, Tetrattech
Lee Farris, BRC
Marcia Scully, Metropolitan Water District of Southern California
Maria Lopez, Water District of Southern California
Mark Duffy, U.S. Environmental Protection Agency, Region 9
Mark Paris, Landwell
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Todd Tietjen, SNWA

Attachment A

DVSR Review:

1. **Section 2.1, last paragraph:** Possible causes of poor precision would not normally include matrix interference, as matrix interference would be expected to have the same effect on duplicate and parent (or MS and MSD) samples. Sample heterogeneity can cause poor precision. Please revise this text accordingly.
2. **Section 2.3, next to last paragraph:** To clarify, consider revising this sentence to include the words in **bold**: Contaminants found in both the environmental sample and the blank sample are assumed to be laboratory artifacts if both values are less than the PQL or if a sample result and blank contaminant value are greater than the PQL and the sample result is less than 10 times the blank contaminant value.”
3. **Sections 3.1.4, 3.2.1, 3.2.2:** Please include the number of results qualified in these sections.
4. **Sections 3.2.2 and 3.2.6:** The text notes that in cases where dilutions cause low recoveries, no qualifications are applied. Please note the dilution factor at which compounds/surrogates are considered to be diluted out.
5. **Section 3.3.1, holding time bias:** Please add bias to the holding time qualification for chloroform in sample VER-01D-35.0-20171020.
6. **Section 3.5:** In order to show that rejecting 69 results did not adversely affect the VOC completeness, please present the completeness by method.
7. **Section 1, Table 2, Validation Stage:** Current NDEP guidance allows surface water and groundwater samples to be validated to Stage 2A. The decrease in validation effort was not extended to air samples; however, 13 sample analyzed by TO15 were validated to Stage 2A. Please revise the TO15 validation for these samples to Stage 2B and validate sufficient additional samples to Stage 4 so the 10% criterion is met.

EDD Review

1. The results table had two records where the detect_flag_fod="D", but the result_reported was less than the sample_quantitation_limit (SQL). Sample VER-01D-C-08-AIR for styrene has a result of 0.47 ug/m³ compared to an SQL of 0.48 ug/m³. Sample VER-01D-C-12-AIR for carbon disulfide has a result of 0.83 ug/m³ compared to an SQL of 0.85 ug/m³. Both records have a final_validation_qualifier of "J" and a reason code of "sp", which is defined as ">SQL and <PQL". Please correct each record so the information is consistent within the record.
2. The validation_flag field in the results table has entries of "Y" and should be updated to "T" (true) to be consistent with the current EDD Guidance document.