



NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**

STATE OF NEVADA
Department of Conservation & Natural Resources

Steve Sisolak, Governor
Bradley Crowell, Director
Greg Lovato, Administrator

November 7, 2019

Jay A. Steinberg
Nevada Environmental Response Trust
35 East Wacker Drive, Suite 690
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: *Unit 4 and 5*
Buildings Investigation Source Area Characterization Report

Dated: August 29, 2019

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 01/07/2020** 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:

Jeffrey Kinder, Deputy Administrator NDEP
Frederick Perdomo, Deputy Administrator NDEP
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 Loffman, lepetomane
Brian Waggle, Hargis + Associates
Carol Nagai, MWDH2O
Carrie Hunt, 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
Gary Carter, Endeavour
George Crouse, Syngenta Crop Protection, Inc.
Greg Kodweis, SNWA
Harry Van Den Berg, AECOM
Jay Steinberg, Nevada Environmental Response Trust
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Joanne Otani
Joe Kelly, Montrose Chemical Corporation of CA
Joe Leedy, Clean Water Team
John Edgcomb, Edgcomb Law Group
John Pekala, Ramboll Environ
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Kelly McIntosh, GEI Consultants
Kirk Stowers, Broadbent & Associates
Kirsten Lockhart, Neptune & Company Inc.
Kim Kuwabara, Ramboll Environ
Kurt Fehling, The Fehling Group
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
Michael J. Bogle, Womble Carlyle Sandridge & Rice, LLP
Michael Long, Hargis +
Mickey Chaudhuri, Metropolitan Water District of Southern California
Nicholas Pogoncheff, PES Environmental, Inc.
Orestes Morfin, CAP
Paul Black, Neptune and Company, Inc.
Paul Hackenberry, Hackenberry Associates, LLC
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Steven Anderson, LVVWD
Tanya O'Neill, Foley & Lardner L
Todd Tietjen, SNWA

Attachment A

1. **Executive Summary, Contaminant Distribution in Soil, first paragraph, first sentence** – The text states that “perchlorate was observed...at concentrations that exceeded the Leaching-based Basic Comparison Level (LBCL) of 0.0155 milligrams per kilogram (mg/Kg) (NDEP, 2017). However, NDEP’s July 2017 BCL Table lists a DAF 1 LBCL of 0.0185 mg/kg and DAF 20 LBCL of 0.371 mg/kg for perchlorate. Please correct this discrepancy.
2. **Executive Summary, Contaminant Distribution in Groundwater, first paragraph, first sentence** – The text states that “perchlorate exceeded the groundwater Basic Comparison Level (BCL) of 0.015 milligrams per liter (mg/L).” However, NDEP’s July 2017 BCL Table lists 0.0234 mg/L as the BCL for perchlorate. Please correct this discrepancy.
3. **Section 3.2.8 Investigation-Derived Waste Management** – The second to last bullet point in this section does not identify the USEPA Method used for TCLP VOC analysis.
4. **Section 4.2 Soil Sampling Results, and Section 4.4 Groundwater Sampling Results** – The text in the first paragraph of each of these sections states that “for purposes of defining the COPCs that are present in this source area an exceedance frequency of 10% was selected.” What basis was used for the selection of the 10% threshold?
5. **Table 4 LBCL Exceedances, Section 4.2.1.1 Perchlorate in Soil, and Appendix F Analytical Summary Tables** – The DAF 1 and DAF 20 LBCLs for perchlorate in Table 4, Section 4.2.1.1, and Appendix F do not match the respective LBCLs in NDEP’s July 2017 BCL Table. Please correct this discrepancy, and update the LBCL Exceedances for perchlorate in Table 4 if those values are affected by this correction.
6. **Table 4 LBCL Exceedances, and Section 4.2.1.5 Nitrate in Soil** – For nitrate, the DAF 1 and DAF 20 LBCLs in Table 4, and the DAF 20 LBCL in Section 4.2.1.5 do not match the respective LBCLs in NDEP’s July 2017 BCL Table. Please correct this discrepancy, and update the LBCL Exceedances for nitrate in Table 4 if those values are affected by this correction.
7. **Table 4 LBCL Exceedances, Section 4.2.1.7 Iron in Soil, and Section 4.2.1.8 Manganese in Soil** – Table 4 lists LBCL values for Iron and Manganese, but Section 4.2.1.7 and 4.2.1.8 identify the same values as BCLs. Please clarify whether the values are BCLs or LBCLs, and ensure that the values being used match those in NDEP’s July 2017 BCL Table.
8. **Table 9 BCL Exceedances in Groundwater from Permanent Wells** – Table 9 lists 0.0015 mg/L as the BCL for perchlorate. However, NDEP’s July 2017 BCL Table lists 0.0234 mg/L as the BCL for perchlorate. Please correct this discrepancy, and update the BCL Exceedances for perchlorate in Table 9 if that value is affected by this correction.
9. **Table 11 BCL Exceedances in Groundwater from Temporary Wells** – Table 11 lists 0.015 mg/L as the BCL for perchlorate. However, NDEP’s July 2017 BCL Table lists 0.0234 mg/L as the BCL for perchlorate. Please correct this discrepancy, and update the BCL Exceedances for perchlorate in Table 11 if that value is affected by this correction.

10. **Section 4.4.3.1 Perchlorate in Groundwater, first sentence** – The text states that “Perchlorate exceeded the groundwater BCL of 0.015 (mg/L) throughout most of the Investigation Area.” However, NDEP’s July 2017 BCL Table lists 0.0234 mg/L as the BCL for perchlorate. Please correct this discrepancy.
11. **Section 4.5.2.2 Chlorate in Groundwater, first paragraph, last sentence** – Change text from “G-39 and G-40” to “H-39 and H-40.”
12. **Section 4.5.2.4 Hexavalent Chromium in Groundwater, first paragraph, first sentence** – Change text from “G-46 to G-50” to “H-46 to H-50.”
13. **Executive Summary Constituent of Concern Mass Estimates Table, Sections 4.5.1 and 4.5.2 COPC Plume Configuration in Soil/Groundwater, and Table 13 COPC Mass Estimates** – The mass estimate values (both Nominal and Statistical Range) presented for each analyte should be the same throughout the report; values for some analytes (i.e. TDS) are noticeably different between the identified Tables/Sections. Please double-check all values for each analyte, and make corrections where necessary to ensure consistency throughout the report.