

STATE OF NEVADA
Department of Conservation & Natural Resources
DIVISION OF ENVIRONMENTAL PROTECTION

Brian Sandoval, Governor
Leo M. Drozdoff, P.E., Director
Colleen Cripps, Ph.D., Administrator

August 31, 2012

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:
Interim Soil Removal Action Completion Report, Nevada Environmental Response Trust
Site, Henderson, Nevada, August 2010 – November 2011
Dated: January 2012

Dear Mr. Steinberg,

The NDEP has received and reviewed the Trust's above-identified Deliverable and provides comments in Attachment A. A revised Deliverable or errata should be submitted **by September 28, 2012** 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 sharbour@ndep.nv.gov or 775-687-9332.

Sincerely,



Shannon Harbour, P.E.
Supervisor, Special Projects Branch
Bureau of Corrective Actions
NDEP-Carson City Office

SH:sh

EC: Greg Lovato, Bureau of Corrective Actions, NDEP
Carolyn Tanner, AG's Office
Cassandra Joseph, AG's Office
Brenda Pohlmann, City of Henderson
Stephen Tyahla, U.S. Environmental Protection Agency, Region 9
Charles K. Hauser, Esq., Southern Nevada Water Authority
Ron Zegers, Southern Nevada Water Authority
Peggy Roefer, Southern Nevada Water Authority
Marcia Scully, Metropolitan Water District of Southern California
Mickey Chaudhuri, Metropolitan Water District of Southern California
John R. McNeill, Central Arizona Water Conservation District



Andrew Steinberg, Nevada Environmental Response Trust
Tanya O'Neill, Foley & Lardner LLP
Allan Delorme, ENVIRON
Mark Travers, ENVIRON
Matt Paque, Tronox
Ranajit Sahu, BRC
Rick Kellogg, BRC
Lee Farris, BRC
Mark Paris, Landwell
Craig Wilkinson, TIMET
Kevin Lombardozi, TIMET
Kirk Stowers, Broadbent & Associates
Victoria Tyson, Tyson Contracting
Brian Spiller, Stauffer Management Company, LLC
Chuck Elmendorf, Stauffer Management Company, LLC
Adam Baas, Edgcomb Law Group
George Crouse, Syngenta Crop Protection, Inc.
Ed Modiano, de maximis, inc.
Lynne Preslo, GeoEco
Andrew Barnes, Geosyntec
Nicholas Pogoncheff, PES Environmental, Inc.
Brian Waggle, Hargis + Associates
Michael Long, Hargis + Associates
Joe Kelly, Montrose Chemical Corporation of CA
Jeff Gibson, AMPAC
Ebrahim Juma , Clean Water Team
Joe Leedy, Clean Water Team
Kathryn Hoffmann, Clean Water Team
Brian Rakvica, McGinley & Associates
Ashley Katri, McGinley & Associates
Kurt Fehling, McGinley & Associates
Paul Black, Neptune and Company, Inc.
Paul Hackenberry, Hackenberry Associates, LLC
Joanne Otani
Teri Copeland

Attachment A

1. General comment, NDEP has noted that the term “dioxins” is used throughout this Deliverable. This class of chemicals should be more accurately labeled as “dioxins/furans”. Please revise the Deliverable accordingly.
2. Section 1.5, RZ-A Risk Assessment, page 4, 1st sentence, please revise to state that the *Human Health Risk Assessment for Remediation Zone A* “did not result in unacceptable risks...” rather than “should not result...”
3. Section 2.1.1, Remediation Program Design, page 5, NDEP provides the following comments:
 - a. 1st paragraph, the Trust should note and discuss that radionuclides were sampled during the Phase A/Phase B Investigations.
 - b. 2nd paragraph, please note in the text that the sampling results are available in Appendix J.
4. Section 2.2, Excavation Control Areas, 1st bullet, page 8, please add the phrase “at the time of soil removal” after “technically infeasible or cost prohibitive”.
5. Section 2.5.4, Perimeter Asbestos Monitoring, page 16, please provide referenced monitoring data.
6. Section 2.5.5, Particulate Air Sampling, page 16, please summarize the air monitoring results in addition to providing these results in an appendix to the revised Deliverable.
7. Section 2.9.2, Waste Streams, Characterization, and Profiling, page 21, please discuss how dioxins/furans were profiled for disposal.
8. Table 3, Summary of Polygon Excavations, please add the following columns to this Table: Elevated COPCs Remaining and Discolored Soil Observed.
9. Table 5a – 5d, general comments, please revise this Table to address the following:
 - a. Title of Table should indicate that it also includes impacted soils left in place.
 - b. Add column or otherwise indicate what Figure shows the each listed Excavation Area.
 - c. Verify that the Excavation Control Area (ECA) designations are consistent with the April 2012 Site Management Plan.
 - d. Provide a footnote reference to the April 2012 Site Management Plan for the Excavation Control Area Defined column.
 - e. Separate different discolored soils, samples, or locations with either separate rows within each Excavation Area row or a carriage return between items for clarity.
 - f. For consistency with Table 1, Soil Remedial Goals (SRGs), please replace all references to “BCLs” with “SRGs”.
 - g. In the Confirmation Samples and Excavation Extent Samples columns, please bold type or otherwise emphasize results above the SRGs that document impacts left in place.
 - h. All samples listed in the Characterization Samples, Confirmation Soil Samples, and Excavation Extent Samples columns should include the location of the sample (e.g. northern side wall, etc.)
 - i. Figures 8a – 8h should show all location reference points used in the Table (e.g. diesel tank island and pipelines, etc.).
10. Table 5a, in addition to the general Table 5a-5d comments listed above, please address the following for this Table:
 - a. RZ-B-13, What Remained In Place column: Figure 8b shows that discolored soil remaining in place and confirmation sample SSAQ6-02 is reported with concentrations of

- arsenic and benzo(a)pyrene greater than their respective SRGs; however, the What Remained in Place column indicates "None". Please revise for consistency and provide a brief explanation as to why the soil was determined to be inaccessible.
- b. RZ-B-13, Additional Excavation Performed column, please update with additional information from LVP as noted.
11. Table 5b, in addition to the general Table 5a-5d comments listed above, please address the following for this Table:
 - a. RZ-C-1A Area, Initial Observations column, 1st row: a "thin (~6") thick brown/black layer" is referenced. It appears that the word "thick" should be inside the parentheses. NDEP has noted this error throughout this Table but will not repeat the comment for each instance. Please revise for clarity.
 - b. RZ-C-1A Area, Initial Observations column, 2nd row: please indicate where this discolored soil is generally located within the designated area.
 - c. Area East of RZ-C-05A and West of RZ-C-09B, Confirmation Samples column: please remove the text at the end of the sample results as it appears to be an internal note.
 - d. RZ-C-09A area, What Remained in Place column: Figure 8d shows discolored soil remaining in place; however, "None" is listed in the What Remained in Place column.
 - e. Eastern Side of RZ-C-18, Excavation Performed, What Remained in Place, and Additional Excavation columns: provide updated information from Northgate as noted.
 - f. Eastern Side of RZ-C-18, Excavation Extent Samples column: provide name of sample discussed.
 - g. RX-C-10/10A Area, Characterization Samples column, 2nd row: please clarify notation.
 - h. Southern Portion of RX-C-17, What Remained in Place column, provide a brief explanation to why the discolored soil was inaccessible or was otherwise left in place as indicated by Figure 8d.
 - i. Southeastern Portion of RZ-C, Near Diesel Fuel Tank, Fuel Pipelines, and Gas Line, Initial Observations column, 1st and 3rd rows: clarify "(?)" designation or update with any missing information.
 - j. Southeastern Portion of RZ-C, Near Diesel Fuel Tank, Fuel Pipelines, and Gas Line, 2nd row: populate all columns missing information.
 - k. Southeastern Portion of RZ-C, Near Diesel Fuel Tank, Fuel Pipelines, and Gas Line, last row: this table entry is very confusing and not well organized. Please revise for clarity.
 - l. RZ-C-45 Stockpile Management Area: sample DS-C45-3 is shown in Figure 8c but not discussed in this Table. Please add results for DS-C45-3.
 12. Table 5c, in addition to the general Table 5a-5d comments listed above, please address the following for this Table:
 - a. Discolored Soil East of Berm in Northwest Corner of RZ-D, Initial Observations column: please provide a footnote for the "***" designation. NDEP has noted this designation in several locations in this Table but will not repeat the comment for each specific instance.
 - b. Discolored Soil East of Berm in Northwest Corner of RZ-D, Additional Excavation column: unclear where the area of additional excavation is located. Please provide a reference point (such as a sample location) to better locate the additional excavation area.
 - c. Discolored Soil West of Berm in Northwest Corner of RZ-D, 4th row, Excavation Performed column: please update with additional information from Northgate as noted.
 - d. RZ-D-13/14, What Remained in Place column: NERT states that the observed thin gray layer "most likely extends south to the Beta Ditch and east to RZ-D-11B; however,

- discolored soil remaining in place is not shown in these areas on Figures 8a, 8e, 9a, or 9c. Please revise these Figures to show the suspected limits of these discolored soils.
- e. RZ-D-24, What Remained in Place column: the first row in in the Excavation Control column for this excavation area states that “snow fencing will be draped over the remaining material”; however, the What Remained in Place column indicates that no material was left in place. Additionally Figure 8e does not show any discolored soil remaining in place. Please revise as necessary.
 - f. RZ-D-24, Confirmation Samples column: please list the analyses conducted on the listed samples.
 - g. RZ-D-25A Debris, What Remained in Place column: please clarify whether the “small amount of construction debris” was left in place at the eastern property line after the additional excavation had been completed.
 - h. RZ-D-25A Debris, Confirmation Sample column: the results are reported twice for this excavation area.
 - i. RZ-D-24/25/25A, 1st row (May 2011), Confirmation Samples and Excavation Extent Samples columns: these results are reported twice for this excavation area.
 - j. RZ-D-24/25/25A, 2nd row (July 2011), Excavation Extent Samples column: the results are reported twice for this excavation area.
 - k. RZ-D-24/25/25A, Additional Excavation column: please revise to clarify that discolored layers continued past the eastern property boundary.
13. Table 5d, in addition to the general Table 5a-5d comments listed above, please address the following for this Table:
- a. Subsurface Tank Structures in RZ-E-14A area, Characterization Samples column: please list the analyses conducted on the listed samples.
 - b. South of RZ-E-14C: the designation of samples in the Characterization Samples, Confirmation Samples, and Excavation Extent Samples columns is repetitious. Please only list the results for sample DS-E14C-1 in the Confirmation Samples column for this excavation area.
 - c. Beta Ditch Sidewalls near Veolia Tanks, Confirmation Soil Samples column: please list the analyses conducted on the listed sample.
 - d. RZ-E-13/14/14B Area, Excavation Extent Samples: according to Figure 8h, analyses and results for samples EE-E14B-1, EE-E14B-2 (Dup) and EE-E14-1 should be listed for this excavation area.
 - e. Southern Sidewall of RZ-E-16, Characterization Samples column: please list the analyses conducted on the listed sample.
14. Appendix I, DVSR Reports, NDEP notes that comments were issued to NERT separately for this Appendix.
15. Table 7, this Table should be updated to be consistent with the April 2012 Site Management Plan.
16. Figure 3, either RZ-A should be shown on this Figure or the title of the Figure should be revised to indicate that only the remediation zones that were excavated are shown.
17. Figures 8d and 9c, according to Table 5b, the results of sample SSAO5-09 were greater than the SRGs for hexachlorobenzene, arsenic, and magnesium; however, Figures 8d and 9c do not show this impact. Please document this impact on all appropriate Figures.

18. Figure 8f, please annotate or otherwise emphasize on this Figure that the discolored soil remaining in place at the eastern property boundary continued to extend onto the adjacent property.
19. Figures 9a – 9e, please update these Figures as necessary to be consistent with the April 2012 Site Management Plan.