



November 9, 2022

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: *Data Validation
Summary Report and Electronic Data Deliverable for Phase 3 Remedial Investigation
Modification No. 10, Rev 1*

Dated: October 24, 2022

Dear Mr. Steinberg,

The NDEP has received and reviewed the Trust's above-identified Deliverable and provides comments below. A revised Deliverable should be submitted by **01/10/2023** based on the comments. The Trust should additionally provide an annotated response-to-comments letter as part of the revised Deliverable.

NDEP's comments: Several SDGs report a cooler temperature outside of acceptance limit with no explanation either in the SDG or DVSR for the exceedance. When reviewing the COCs there are a series of temperatures recorded that are within acceptance limit. Then there is a single entry of a cooler temperature that is outside the acceptance limit. The laboratory lists all the recorded temperatures in the Job Narrative. Looking at traceability, is there a sample inventory to know which samples were placed in each cooler? From information provided, there is no way to tell which samples were preserved properly and is totally dependent on the lab to identify samples that are received outside required cooler temperature acceptance criteria.

For SDG 550-168578-1, the following cooler temperatures were recorded; 0.9, 2.4, 3.3, 4.4, 5.0, 13.9 and 17.2 oC. The Job Narrative indicates that "All perchlorate containers were received at 13.9 C. The unpreserved containers for 314.0 was also received at 13.9 C for sample 3 thru 6, and 8 thru 10." There is no discussion in the DVSR regarding this outlier. Why weren't the samples in the cooler received at 17.2 C included in the Job Narrative as well?

NERT Response: The single high cooler temperature reading listed on the COC is the temperature recorded at the time of drop-off at the laboratory service center in Las Vegas,

not the temperature recorded at the time of receipt at the laboratory. When the samples are received at the service center, they have generally not had sufficient time to cool to below 6 degrees C. The samples are repacked with wet ice and shipped overnight to the laboratory, where the temperature of each cooler is measured. The laboratory's procedure is to list any individual bottles within coolers received above 6 degrees C in the case narrative and/or the login sample receipt checklist. Unless individual bottles are specifically noted by the laboratory, all sample bottles were received at the laboratory preserved on ice and at less than 6 degrees C. The analytical laboratory is revising their procedures so that the case narratives will not list temperatures measured at the service center in the future.

The case narrative for SDG-168578-1 should have stated "All chlorate containers were received at 13.9 C. The unpreserved containers for 314.0 was also received at 13.9 C for sample 3 thru 6, and 8 thru 10." This is consistent with the documentation on the COC. Temperature preservation is not required for perchlorate and chlorate by Methods 314.0 and 300.1; therefore, the temperature exceedance above 6 degrees C was not discussed in the DVSR, and no data were qualified. The temperature reading at 17.2 degrees C for this SDG is the reading recorded at the time of drop-off at the laboratory service center and not representative of the temperature of the samples when they were received at the laboratory. The service center measured temperature is not used to assess sample temperature preservation; therefore, it is not discussed in the case narrative as a receipt exception or discussed in the DVSR.

No changes have been made to the DVSR.

NDEP Response: The explanation for the elevated cooler temperature at the time of drop-off at the laboratory service center (17.2 degrees C), that the measured temperature at the service center is not representative of the sample temperature and not used to assess sample preservation, is adequate. The explanation of the elevated temperature received by the laboratory needs to be included in the DVSR. Since the laboratory case narrative does not provide sufficient clarity and the details noted are in error, the DVSR must be revised to provide this clarity. The laboratory reported all samples for the respective cooler as being outside acceptable temperature range without regard to sample fraction (TDS, chlorate, or perchlorate).

Please contact the undersigned with any questions at wdong@ndep.nv.gov or 702-668-3929.

Sincerely,

Dong Weiquan

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
Alan Pineda, NDEP BISC Las Vegas
Andrew Barnes, Geosyntec
Andrew Steinberg, Nevada Environmental Response Trust
Anna Springsteen, Neptune & Company Inc.
Betty Kuo Brinton, Metropolitan Water District of Southern California
Brian Waggle, Hargis + Associates
Brian Loffman, Nevada Environmental Response Trust
Brian Rakvica, Syngenta
Carol Nagai, Metropolitan Water District of Southern California
Chris Ritchie, Ramboll
Christine Klimek, City of Henderson
Chuck Elmendorf, Stauffer Management Company, LLC
Dan Pastor, P.E. TetraTech
Dan Petersen, Ramboll
Dane Grimshaw, Olin
Daniel Chan, SNWA
Darren Croteau, Terraphase Engineering, Inc.
Dave Share, Olin
Dave Johnson, LVVWD
Derek Amidon, TetraTech
Ebrahim Juma, Clean Water Team
Ed Modiano, de maximis, inc.
Eric Fordham, GeoPentech
Gary Carter, Endeavour
Jay A. Steinberg, Nevada Environmental Response Trust
Jeff Gibson, Endeavour
Jill Teraoka, Metropolitan Water District of Southern California
Joanne Otani, The Fehling Group
Joe Kelly, Montrose Chemical Corporation of CA
Joe Leedy, Clean Water Team
John Edgcomb, Edgcomb Law Group
John-Paul Rossi, Stauffer Management Company LLC
John Solvie, Clark County Water Quality
Karen Gastineau, Broadbent & Associates
Kathrine Callaway, Cap-AZ
Kelly McIntosh, GEI Consultants
Kirk Stowers, Broadbent & Associates
Kirsten Lockhart, Neptune & Company Inc.
Kim Kuwabara, Ramboll
Kurt Fehling, The Fehling Group
Laura Dye, CRC
Lee Farris, BRC
Marcia Scully, Metropolitan Water District of Southern California
Maria Lopez, Metropolitan Water District of Southern California
Mark Duffy, U.S. Environmental Protection Agency, Region 9
Mark Paris, Landwell
Mauricio Santos, Metropolitan Water District of Southern California
Melanie Hanks, Olin
Michael J. Bogle, Womble Carlyle Sandridge & Rice, LLP
Michael Long, Hargis +
Mickey Chaudhuri, Metropolitan Water District of Southern California
Nicholas Pogoncheff, PES Environmental, Inc.

Nicole Moutoux, U.S. Environmental Protection Agency, Region 9
Orestes Morfin, CA
Paul Black, Neptune & Company
Peter Jacobson, Syngenta
Ranajit Sahu, BRC
Rebecca Sugerman, U.S. Environmental Protection Agency, Region 9
Richard Pfarrer, TIMET
Rick Kellogg, BRC
R9LandSubmit@EPA.gov
Roy Thun, GHD
Steve Clough, Nevada Environmental Response Trust
Steven Anderson, LVVWD
Steve Armann, U.S. Environmental Protection Agency, Region 9
Tanya O'Neill, Foley & Lardner L
Todd Tietjen, SNWA
William Frier, U.S. Environmental Protection Agency, Region 9