

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

February 6, 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: Annual Remedial Performance Report for Chromium and Perchlorate

Dated: December 8, 2017

Dear Mr. Steinberg,

The NDEP has received and reviewed the Trust's above-identified Deliverable and finds that the document is acceptable with the following comments noted for the Administrative Record:

- Table 10—Perchlorate Plume Mass Estimates show that the perchlorate mass of UMCf for the area from AWF to Wash is zero, but the site characterization for the SWF in-situ bioremediation treatability study shows that the perchlorate exists in deeper zones compared previous findings. Additionally, Figure 5 (Vertical Mass Flux Estimates) shows that the vertical perchlorate mass flux in this area is 28 lbs./d. Therefore, the information about the perchlorate mass distribution for the area from AWF to Wash is inconsistent. NDEP expects that these issues are addressed in next annual remedial performance report or the mass estimation report.
- 2. Figure 4 (Horizontal Mass Flux Estimates) shows that the perchlorate and chromium mass fluxes crossing different transects from onsite to wash. Because the groundwater flow direction is from south where the perchlorate and chromium sources are located to north where the contaminated groundwater is discharging and three well extraction well fields have been operated since early 2000, the perchlorate and chromium mass fluxes are expected to be decreasing toward the wash. However, the complexity of the groundwater flow and the perchlorate and chromium migration may not follow the expectation. NDEP expects these mass fluxes are refined in future annual remedial performance reports, the Mass Calculation Work Plan and Phase 6 or next groundwater flow and transport model.

Please contact the undersigned with any questions at wdong@ndep.nv.gov or 702-486-2850 x252.

Sincerely,

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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, Tetratech Ebrahim Juma, Clean Water Team Ed Modiano, de maximis, inc. Eric Fordham, Geopentech Gary Carter, Endeavour George Crouse, Syngenta Crop Protection, Inc. Harry Van Den Berg, AECOM Jay Steinberg, Nevada Environmental Response Trust Jeff Gibson, Endeavour Jill Teraoka, MWDH2O Joanne Otani Joe Kelly, Montrose Chemical Corporation of CA Joe Leedy, Clean Water Team John Edgcomb, Edgcomb Law Group 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, Tetratech 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 + Associates Micheline Fairbank, AG Office 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 Patti Meeks, Neptune & Company Inc. Peggy Roefer, CRC Ranajit Sahu, BRC **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