



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

July 10, 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: *Unit 4 Source Area In-Situ Bioremediation Bench-Scale Treatability Study Work Plan Modification No. 1*

Dated: June 28, 2018

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:

- 1. The flow-through column testing was proposed to assess performance under dynamic flow conditions (simulating different residence times) and evaluate potential for clogging due to precipitation or biofouling in order to determine design parameters for the field test in the Galleria Road ZVI-enhanced bioremediation treatability study work plan (Ramboll, 2017). The perchlorate and chromium concentration of the groundwater at the Galleria Road ZVI study site is much lower compared it at the Unit 4 source area, so the potential for clogging due to precipitation of biofouling at the Unit 4 source area is much higher. NDEP suggests that similar flow through column testing for the proposed ZVI study at the Unit 4 source area is carried out;
- 2. There are multiple daughter products from different stages of chloroform biodegradation. Besides the proposed dichloromethane, NDEP suggests monitoring the mass flux of other daughter products that signify the biodegradation of chloroform during the bench-scale kinetics study of chloroform.

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, Tetratech

Ebrahim Juma, Clean Water Team

Ed Modiano, de maximis, inc.

Eric Fordham, Geopentech

Gary Carter, Endeavour

George Crouse, Syngenta Crop Protection, Inc.

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Kirsten Lockhart, Neptune & Company Inc.

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Kurt Fehling, The Fehling Group

Kyle Gadley, Geosyntec

Kyle. Hansen, Tetratech

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Marcia Scully, Metropolitan Water District of Southern California

Maria Lopez, Water District of Southern California

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Mark Paris, Landwell

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