NEVADA DIVISION OF
ENVIRONMENTAL
PROTECTION

STATE OF NEVADA
Department of Conservation & Natural Resources
Brian Sandoval, Governor
Leo M. Drozdoff, P.E., Director
David Emme, Administrator

December 6, 2016

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: October 31, 2016

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 perchlorate and chromium mass fluxes should be added to the remediation performance matrices in future annual and semiannual remediation performance reports across the cross-section lines of (This may require using other consultants' latest data):

   - WMW6.55S—COH2B—WMW5.5S—WmW4.9S—LNDMW1—WMW3.5S,
   - PC-68—PC-62—PC59—PC-60—PC-56—PC-58—MCF-18A—HM-2,
   - PC-103—PC-98R—MW-K5—PC-53—PC-2—PC-1—PC-4—HSW-2,
   - PC-152—PC-153—PC-132—PC-131—PC-130—PC-129—PC-128-PC-127—PC-126—PC-124,
   - Northern boundary of NERT property,
   - Eastern boundary of NERT property, and
   - M-123—M-128—M-32—M-33—M-148A.

   The vertical perchlorate and chromium mass flux for on-site, off-site to AWF and AWF to the Wash should be also added. These mass fluxes should be calculated or estimated with both analytic and numerical model methods if possible;

2. Section 4.1.2 Athens Road Well Field Area, second paragraph, page 22, "As discussed above, perchlorate concentrations in PC-98R have been gradually increasing since about 2009, possibly due to the transport of perchlorate into the alluvium from the underlying UMCf." This inference is not consistent with the conclusion made in the technical memorandum seep well field flow quantification (Ramboll Environ, September 9, 2016) in which the source water of SWF is dominantly shallow groundwater and water originating

at the COH Bird Viewing Ponds. NDEP wants more consistent and accurate assessment on the source water of the water extracted from the three existing well fields (IWF, AWF and SWF);

3. The trend analysis on the perchlorate and chromium concentration and the groundwater water table elevation should be more quantitative. Specifically, a statistical analysis on the change of the perchlorate and chromium concentration with time is required. The result from the statistical analysis should help to distinguish whether the change is seasonal, a reduction due to pump-treat, or a change in the source loading function. This analysis should avoid using the extraction wells because they are influenced by pumping. The wells chosen for the trend analysis should be representative and have long records and will be likely available in future.

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

Sincerely,

Dong

Weiquan Dong, P.E.
Bureau of Industrial Site Cleanup
NDEP-Las Vegas City Office

WD:cp

EC:

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