

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

July 6, 2011

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: NDEP-NERT Meeting Summary (submitted Tables and Figures) Dated May 24, 2011

ENVIRON E-mail RE: NERT Site RZ-E Cross-Sections Dated June 10, 2011

and

ENVIRON E-mail RE: Follow-up from NERT Site Visit

Dated: June 28, 2011

Dear Mr. Steinberg,

The NDEP has received and reviewed the Trust's above-identified submittals and provides the following comments to the recommendations made in the ENVIRON June 28, 2011 e-mail:

- 1. RZ-E Central Area (Polygons 8A through 11): ENVIRON recommends excavating a ridge created by the polygon excavation in this area as a confirmation sample exhibited contaminant concentrations greater than their respective BCLs. ENVIRON proposes to collect a confirmation sample at the base of the removal activity in approximately the same lateral location. The confirmation sample will be analyzed for dioxins/furans TEQ, perchlorate, hexachlorobenzene, and organochlorine pesticides. NDEP approves the proposed approach for this area.
- 2. RZ-E Central Area and RZ-C North Central Area: Sampling in this area predominately exhibited elevated contaminant concentrations for perchlorate only. Excavation was conducted to the sampling depth with a perchlorate concentration less than 795 mg/kg or 10 feet below ground surface (fbgs), whichever resulted in the shallower excavation design depth. The final grading plan for this area is a retention basin with smooth contours. Due to the excavation to design depth, the current ground surface contains high and low elevation spots. ENVIRON recommends the smoothing of these high and low spots to conform to the final grading plan. Based on NERT's draft long-term schedule



- dated June 23, 2011 that includes pilot testing for on-Site vadose zone contamination of perchlorate, NDEP approves the grading of the soils with elevated perchlorate concentrations as proposed by ENVIRON.
- 3. <u>RZ-D East Side Southwest of RZ-D-24</u>: Based on the results of the confirmation sample collected within the visually impacted soil in this area being less than BCLs, ENVIRON recommends the cessation of excavation in this area. NDEP approves the cessation of excavation in this area.
- 4. RZ-D East Side Northeast Corner of RZ-D-25: Based on discussions between NDEP and ENVIRON during a June 21, 2011 Site visit, ENVIRON is proposing an additional sample be collected within the grey layer of visually impacted material/soil. However, based on the extremely elevated concentration of dioxins/furans TEQ exhibited in the sample collected from the black layer of visually impacted material/soil, NDEP is requiring the continued excavation of the black visually impacted material/soil followed by confirmation sampling. Please note that if the sample from the grey visually impacted material/soil is less that BCLs, then the overburden above the black visually impacted material/soil may be segregated and used for backfill/grading material. Additionally, this area should be designated as an excavation control area (ECA).
- 5. <u>RZ-D East Side Western Side of RZ-D-25A</u>: ENVIRON collected a sample within the visually impacted material/soil discovered in the sidewall of this excavation polygon. Contaminate concentrations reported were below BCLs; therefore, NDEP approves the cessation of excavation in this area.
- 6. RZ-D East Side Southern Side of RZ-D-25A: ENVIRON reported that additional excavation of the visually impacted material/soil is prevented by On-Site Well Field extraction well I-AC. A sample was collected from the visually impacted material/soil that will remain in place. NDEP requests that ENVIRON report the results from the collected sample. If contaminate concentrations are greater than the respective BCL, then ENVIRON should designate an ECA for the area and NDEP will review the ECA as part of the Site Management Plan.
- 7. <u>RZ-D Northwest Corner</u>: Based on the variable sampling results from GW-11, WC-East, and WC-West Pond's berms, the entirety of the berms should be capped to prevent erosion of contaminated soils onto remediated soils, surface runoff over contaminated soils onto remediated soils, suspension of contaminated soils as an inhalation pathway, and deposition of suspended contaminated soils onto remediated soils. Please provide a brief summary work plan for the capping of the berms that includes design specifications for review by NDEP. Additionally, please include an inspection schedule for the cap as part of the Site Management Plan for the facility.
- 8. <u>RZ-C South (and potentially other areas)</u>: ENVIRON proposes that visually impacted soil observed at depths greater than 10 fbgs (original grade) should remain in place with a minimum of one foot of clean fill placed over any visually impacted soil. ENVIRON states that all site soils greater than 10 fbgs will be an ECA; however, the current grading plan does not require at least 10 feet of fill in excavated areas with visually impacted

soils. Without contaminant concentrations data for each specific area of visually impacted material/soil, NDEP cannot make a decision on whether additional excavation or cessation of excavation is appropriate. Please conduct sampling on all visually contaminated soils that are being proposed to be left in place. The results of this sampling with recommendations for continued excavation or cessation of excavation with or without an ECA designation should be submitted to NDEP for review.

Please contact the undersigned with any questions at sharbour@ndep.nv.gov or 775-687-9332.

Sincerely,

Shannon Harbour, P.E. Staff Engineer III Bureau of Corrective Actions Special Projects Branch NDEP-Carson City Office Fax: 775-687-8335

SH:gl:sh

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