

**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

December 26, 2014

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, July 2013 – June 2014, Nevada Environmental Response Trust Site, Henderson, Nevada*

Dated: October 31, 2014

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 on Attachment A – Phase II Model Refinement noted for the Administrative Record:

1. The water budget in the model is quite different from the conceptual water budget. It is critical to discuss why such large difference exists and how the water budget will be improved in the RI/FS model;
2. Some comments made in the Phase I model are still not addressed. For example, the precipitation recharge using 2.55% of the PRISM precipitation is still in the Phase II model;
3. More details on the model input data are required. Each boundary fluxes should have a table or calculation. For example, several boundary fluxes were derived based on the Darcy flux equation. The sources of each input parameter data of the Darcy equation and the uncertainty range should be discussed in the report;
4. The model has AMPAC pumping rate of 231 gpm that doesn't match the second quarter AMPAC pumping rate of 2012. The AMPAC pumping rate for second quarter of the 2012 report is 111.9 gpm;
5. The Phase II report described the pumping rate in the Phase I was too high and was adjusted by solver. The pumping rate for the model is most accurate number in the model inputs. It should not be allowed to be changed if the right pumping inputs are first used;
6. The HFB package was used in the model to represent the slurry wall but the model report doesn't have any discussion about it. The "HFB" appears only once in one of the maps. The description how the slurry wall was implemented in model and how the parameter of the conductance for the HFB was assigned are required. The slurry wall is very important

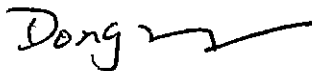


features stopping the perchlorate and chromium migration downgradient from the source areas, so it is required to implement correctly. The TIMET slurry wall should also be correctly implemented in the RI/FS model, because the RI/FS model will be a transient groundwater flow and contaminant transport model;

7. The model calibration should not only depend on the groundwater hydraulic heads. The boundary fluxes, aquifer test data and tracer test data should also be considered. How the aquifer test data from the 2013 Optimization was used in the Phase II model and what improvements are made with using those aquifer test data should be discussed.
8. The uncertainty analysis on the model results should also be included;
9. The NDEP suggests that the northern model boundary be extended north about 2000 ft and the eastern boundary be extended to the Lake Las Vegas to include the fault zones around the Three Kids weir.

Please contact the undersigned with any questions at [wdong@ndep.nv.gov](mailto:wdong@ndep.nv.gov) or 702-486-2850 x252.

Sincerely,



Weiquan Dong, P.E.  
Special Projects Branch  
Bureau of Corrective Actions  
NDEP-Las Vegas City Office

WD:jd

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