



June 28, 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: *In-Situ Chromium
Treatability Study Work Plan*

Dated: May 25, 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. One concern identified is the potential for operation/maintenance challenges of either the abiotic or biotic methods. Well scaling is a risk for the calcium polysulfide/abiotic approach, and well biofouling is a risk for the carbohydrate/biotic approach. While the work plan identifies these challenges, it does not address ways that these potential O&M issues can be managed in a full-scale in-situ chromium treatment program. The work plan should, to the extent feasible, evaluate these operational challenges during the 6-month field study.
2. The layout of the downgradient monitoring wells from the two injection wells should be modified to consider hydraulic dispersion. The further location from the injection wells should have wider row of the monitoring wells;
3. The emulsified oil substrate (EOS®), blackstrap molasses, and industrial sugar wastewater were selected to be tested in the bench-scale biodegradation tests and the calcium polysulfide was proposed to be tested in the bench-scale abiotic test but one biological carbon substrate will be selected for further evaluation in the field test based on the overall effectiveness and feasibility (cost, hexavalent chromium reduction, limited scale/sludge formation). There is no plan for field test on abiotic test with the calcium polysulfide. If the calcium polysulfide will be used for the AP-5 downward and upward IRM flushing, it makes more sense to test it at smaller scale like this in-situ chromium treatability study site first;
4. Please add Arsenic to the analytical parameters of Table 3 (Biological Performance Monitoring Sampling Protocol).

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:

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