



# STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

Jim Gibbons, Governor

Allen Biaggi, Director

Leo M. Drozdoff, P.E., Administrator

October 20, 2009

Susan Crowley (Contractor)  
C/O Tronox LLC  
PO Box 55  
Henderson, NV 89009

Re: **Tronox LLC (TRX)**

**NDEP Facility ID #H-000539**

Nevada Division of Environmental Protection (NDEP) Response to:

*Data Validation Summary Report (Appendix D of Annual Remedial Performance Report for Chromium and Perchlorate, Tronox LLC, Henderson, Nevada, July 2008 – June 2009)*

Dated August 5, 2009

Dear Ms. Crowley,

The NDEP has received and reviewed TRX's above-identified Data Validation Summary Report (DVSR) in the and provides comments in Attachment A. A revised DVSR should be submitted based on the comments found in Attachment A. Please advise the NDEP by **November 2, 2009** regarding the schedule for this resubmittal. TRX should additionally provide an annotated response-to-comments letter as an appendix to the revised submittal.

Please contact the undersigned with any questions at [sharbour@ndep.nv.gov](mailto:sharbour@ndep.nv.gov) or (702) 486-2850 extension 240.

Sincerely,

Shannon Harbour, P.E.  
Staff Engineer III  
Bureau of Corrective Actions  
Special Projects Branch  
NDEP-Las Vegas Office  
Fax: 702-486-5733



SH:bar:sh

CC: Jim Najima, NDEP, BCA, Carson City  
Brian Rakvica, NDEP, BCA, Las Vegas  
Keith Bailey, Environmental Answers LLC, 3229 Persimmon Creek Drive, Edmond, OK 73013  
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Dave Gratson, Neptune and Company, Inc., 1505 15<sup>th</sup> Street, Suite B, Los Alamos, NM 87544

**Attachment A**

1. General comment, electronic versions of Tables I and III would greatly facilitate assessment of the report. Please include excel files of the tables in future reports.
2. General comment, there are a number of discrepancies between the numbers provided in the Analytical Review text and the database. Investigate the differences and revise the appropriate section of the report or the database. These discrepancies are outlined below:
  - a. Section 2.0, 632 water samples analyzed for chromium and 631 in the database
  - b. Section 3.0, 978 water samples analyzed for TDS and 976 in the database
  - c. Section 3.0, 978 water samples analyzed for perchlorate and 974 in the database
  - d. Section 3.0, 6 water samples analyzed for nitrate/nitrite as nitrogen and 9 in the database
  - e. Section 3.0, 53 water samples analyzed for hexavalent chromium and 52 in the database
  - f. Section 3.0, 26 water samples analyzed for chlorate and 28 in the database
  - g. Section 3.0, 20 water samples analyzed for nitrate as nitrogen and 22 in the database by method SW-846 9056. There were also 15 more results analyzed by method EPA 300.
  - h. Section 3.0, Wet chemistry total records is 2079 compared to the database with 2076 records.
  - i. Section 3.2.1, 119 results qualified for holding time but only 117 in database
  - j. Section 5.4, the total number of records of 2711 is 2707 in the database.
3. General comment, Database, the database that was provided does not include the QC results. These are required for the data validation review but are not required for the EDD (Please see below). Provide the QC results either in a separate validation report database or as a separate table in the Access database as a part of the EDD.
4. General comment, EDD, the database provided does not meet the Electronic Data Deliverables requirements specified in the *Unified EDD Format* available at <http://ndep.nv.gov/bmi/technical.htm>. The following discrepancies are noted:
  - a. The following fields are missing from the Access database: hydro, litho, filtered\_flag.
  - b. The result\_type is TRG, which is not an acceptable entry. "Target" is TG if this is what was intended.
  - c. Reanalysis\_flag contains "QUAD" followed by a space and a number or just a number. Review the Detailed Description in the EDD guidance for appropriate values.
  - d. Detect\_flag should be a "T" or "F", not a "Y" or "N"
  - e. Validation\_flag should be a "T" or "F", not a "Y" or "N"
  - f. Final\_validation\_qualifiers should be "final\_validation\_qualifier" (without the "s")
  - g. Validation\_reason should be "final\_validation\_reason"
  - h. The sdg\_id field was blank; provide the sample delivery group identification for all samples.
5. Section 3.2.1, paragraph 2, the results estimated based on holding time are qualified J- and UJ (not J and UJ).
6. Sample PC-55\_08/11/08 for TDS, the reason codes should be "l, ld" and not "ll, ld"