



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

March 11, 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:
Data Validation Summary Report, Additional Pre-Confirmation Sampling Tronox LLC
Facility, Henderson, Nevada
Dated: January 28, 2011

Dear Mr. Steinberg,

The NDEP has received and reviewed the Trust's above-identified Deliverable and provides comments in Attachment A. A revised Deliverable should be submitted **by April 7, 2011** based on the comments found in Attachment A. TRX should additionally provide an annotated response-to-comments letter as part of the revised Deliverable.

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

Sincerely,

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

SH:sh

EC: Jim Najima, Bureau of Corrective Actions, NDEP
Greg Lovato, Bureau of Corrective Actions, NDEP
William Knight, Bureau of Corrective Actions, NDEP
Brenda Pohlmann, City of Henderson
Stephen Tyahla, U.S. Environmental Protection Agency, Region 9
Andrew Steinberg, Nevada Environmental Response Trust
Allan Delorme, ENVIRON



Mark Travers, ENVIRON
Mike Skromyda, Tronox LLC
Matt Paque, Tronox LLC
Deni Chambers, Northgate Environmental
Brian Rakvica, McGinley and Associates
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Barry Conaty, Holland & Hart LLP
Ranajit Sahu, BRC
Rick Kellogg, BRC
Lee Farris, BRC
Mark Paris, Landwell
Craig Wilkinson, TIMET
Kirk Stowers, Broadbent & Associates
Victoria Tyson, Tyson Contracting
George Crouse, Syngenta Crop Protection, Inc.
Nick Pogoncheff, PES Environmental
Lee Erickson, Stauffer Management Company
Michael Bellotti, Olin Corporation
Curt Richards, Olin Corporation
Paul Sundberg, Montrose Chemical Corporation
Joe Kelly, Montrose Chemical Corporation of CA
Jeff Gibson, AMPAC
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Joe Leedy, Clean Water Team
Kathryn Hoffmann, Clean Water Team
Paul Black, Neptune and Company, Inc.
Dave Gratson, Neptune and Company, Inc.
Warren Houghteling, Neptune and Company, Inc. (DVSRs)
Mike Balshi, Neptune and Company, Inc.

CC: Lee Farris, BRC, 875 W. Warm Springs Road, Henderson, NV 89011
Lee Erickson, Stauffer Management Company

Attachment A

1. Inconsistencies between DVSR components, NDEP has noted several inconsistencies between the EDD, DVSR, and the reports and tables associated with the DVSR. NDEP has noted several of these inconsistencies but the Trust should note that the following may not fully encompass all discrepancies in the Deliverable. The Trust should be investigate and correct these inconsistencies and discrepancies as appropriate.
 - a. The EDD was compared to each of the tables in Section 3. There were some discrepancies between the numbers of records in the table compared to the EDD. For example, Table 3-11, Professional Judgment, has 1273 records, while there are only 1254 in the EDD. Tables 3-2 (144 vs 152), 3-4 (605 vs 587), 3-6 (103 vs 101), 3-7 (723 vs 722), 3-8 (1520 vs 1544), and 3-9 (482 vs 448).
 - b. Sample information (e.g., results, qualifiers, QC information) from selected laboratory reports and samples is consistent with the EDD for TA West Sacramento, TA Denver, EMSL, and EMS laboratories with one exception. Report "J2699-1 Std_Tal_L4_Package_Mini Final Report.pdf" from TA Denver was for SVOA analysis for sample SSAK7-03-1BPC. The only result in the EDD was for percent moisture and the EDD result of 8.1% does not match the lab report result of 5.7%. Please review all associated reports for any additional discrepancies.
2. The following are specific instances of inconsistency. Please revise as necessary:
 - a. Sample SSAP3-01-1BPC, SDG=280-2448-1, LDC=23162E, the EDD does have results for As and % moisture for this sample. However, Table 1-3 only shows analysis for Mg (on pg 2); this is highlighted as a Stage 4 validation and the As shows as Stage 2B in the EDD. In the data validation report file "23162.pdf", this sample is found on p.296 under LDC 23162E4.
 - b. Sample SA206-8.00BPC, SDG=280-4859-3 , LDC=23751A, the EDD has a slightly different sample ID: SA206-8BPC. Table 1-3 shows analysis for As DV file "23751.pdf" (p.1) found under LDC=23751A4.
 - c. Sample SSAN6-05-4-01-BPC, SDG=G0J270514, LDC=24524G, the EDD does contain data for this sample. Table 1-3 (p. 204) shows dioxin analysis for this sample. However, no validation report was located for this LDC (with file name 24524).
 - d. Sample SSA03-04-0BPC, SDG=280-6535-1, LDC=24047, the EDD does NOT contain data for this sample. Table 1-3 (p. 85) shows SVOA analysis. However, no validation report was located for this LDC (with file name 24047).
3. The following comments pertain to the EDD Database. Please revise as necessary.
 - a. Sample_id field values in Results Table do not exist in Samples Table. For example, SB03-24BPC in Results Table does not exist in Samples Table.
 - b. Location_id field values in Samples Table do not exist in Locations Table. For example, SSAM6-05 in Samples Table is not present in Locations Table.
 - c. Percent_moisture field is missing from Results Table.
 - d. There are 1706 records where prep_date and prep_time is NULL. (See attached electronic file.) This is acceptable for the GENERAL suites but perchlorate and chloride should have this information.
 - e. There are 25697 records where non_detects are fully censored (have no value). Non-detects should contain the SQL in the result_reported field.

- f. There are 623 records where detect_flag_fod is T but final_validation_qualifier is non-detect –“U”. (See attached electronic file.)
- g. There are 33 records where result_reported <= SQL but the final_validation_reason_codes is NULL. (See attached electronic file.) In several cases the SQL is greater than the PQL, which is inconsistent with the definitions.
- h. There are 3744 records where the result_reported < SQL and detect_flag_fod=T. (See attached electronic file.) In many instances the SQL is greater than the PQL, which is inconsistent with the definitions.
- i. There are 79 records where validation_stage is NULL in Results Table but validation_flag < F. (See attached electronic file.) These are all percent moisture results, hence the validation flag should be equal to “F.”
- j. There are 5 records where final_validation_qualifier is NULL but final_validation_reason_codes not NULL. (See attached electronic file.) These all contain final_validation_reason_codes = “N” which is not defined in the validation_reason table.
- k. There are 25309 records where final_validation_reason_codes is NULL but final_validation_qualifier is not NULL . In general, all qualified data (those data with a qualifier in the final_validation_qualifier field) should contain a reason code.