



# STATE OF NEVADA

Department of Conservation & Natural Resources  
DIVISION OF ENVIRONMENTAL PROTECTION

Jim Gibbons, Governor

Allen Biaggi, Director

Leo M. Drozdoff, P.E., Administrator

January 5, 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:  
*Revised Phase B Site Investigation Work Plan Text, Tables, and Figures, Tronox LLC*  
*Facility Henderson, Nevada*  
Dated December 19, 2008

Dear Ms. Crowley,

The NDEP has received and reviewed TRX's Revised Phase B Site Investigation Work Plan (Rev Phase B WP) identified above and provides comments in Attachment A. A revised set of tables and figures should be submitted **by January 19, 2009** based on the comments provided in Attachment A. TRX should additionally provide an annotated response-to-comments letter as part of 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

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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WA 98110

**Attachment A**

1. Table 2, Area I (highlighted version), NDEP has the following comments stated for the administrative record only. TRX does not need to take any action on the following comments:
  - a. This table indicates that Hexavalent Chromium and TPH DRO/ORO analyses will be conducted at CAS – Kelso, WA where all of the other sampling tables indicated that these two analyses will be conducted at CAS – Rochester, NY. NDEP will assume that the Field Team Version of this table is correct and these analyses will be conducted at CAS – Rochester, NY. Please advise NDEP if this is not correct and submit corrected Field Team Versions as necessary.
  - b. RSAJ6, Location and Rationale column, TRX states that groundwater is anticipated at ~39 feet below ground surface (fbgs). TRX previously stated that the groundwater was anticipated at ~21 fbgs. Since the Field Team Version of Table 2, Area I agrees with the previously reported depth of 21 fbgs, NDEP will assume that this depth to groundwater is correct. Please advise NDEP if this is not correct and submit a corrected Field Team Version of this table.
  - c. RSAK8, TRX lists the capillary fringe sample depth as 27 fbgs. The sample depth should be 27 fbgs.
  - d. SA189, sampling depth 29 fbgs row, “P” should be removed and “Q” added to the Rationale for Removal column.
  - e. RSAL4, sampling depths 0.5, 10, and 28 fbgs, “P” should be removed and “Q” added to the Rationale for Removal column.
  - f. SA74, sampling depths 0.5, 10, and 29 fbgs, “E” should be removed and “D” added to the Rationale for Removal column.
  - g. RSAM2, sampling depths 0.5, 10, 20, and 35 fbgs, each depth should “F” and “L” only in the Rational for Removal column.
  - h. RSAN4, sampling depths 0.5 and 31 fbgs, “Q” should be added to the Rationale for Removal column.
  - i. Rational Code “Q” should state that OPP and OA analyses were removed from the boring sampling plan per TRX Errata submittal (December 19, 2008).
2. Table 2, Area I (Field Team Version), NDEP has the following comments. TRX should submit a revised Field Team Version of this table.
  - a. General comment, for the SPLP and geotechnical samples, TRX has repeated the coincident chemical analyses for each boring depth that notates SPLP and geotechnical sample collection. This is confusing and may result in the collection of unnecessary chemical analyses samples. TRX should remove the repetitive row that does not contain the SPLP and geotechnical sample notations as follows:
    - i. RSAI7, sampling depths 10 and 30 fbgs
    - ii. RSAJ3, sampling depths 10 and 29 fbgs
    - iii. RSAM3, sampling depths 10 and 30 fbgs
    - iv. SA56, sampling depths 10 and 37 fbgs
    - v. SA166, sampling depths 10 and 31 fbgs
    - vi. SA182, sampling depths 10 and 38 fbgs
  - b. RSAI7, remaining sampling depth 10 fbgs, OCPs analyses should note “Hold”.

- c. RSAK8, sampling depth 27 fbgs should be changed to 26 fbgs for consistency of the capillary fringe sampling.
3. Table 2, Area II (highlighted version): NDEP has the following comments stated for the administrative record only. TRX does not need to take any action on the following comments:
  - a. SA66, sampling depth 28 fbgs, OCPs and PCBs (EPA 8082) columns should indicate sample collection at this depth.
  - b. SA126, sampling depth 18 fbgs, TPH-ORO/DRO column should indicate sample collection at this depth.
  - c. SA31, sampling depths 0.5 and 32 fbgs, PCBs (EPA 8082) column should indicate sample collection at these depths.
4. Table 2, Area II (Field Team Version), NDEP has the following comments. TRX should submit a revised Field Team Version of this table.
  - a. General comment, for the SPLP and geotechnical samples, TRX has repeated the coincident chemical analyses for each boring depth that notates SPLP and geotechnical sample collection. This is confusing and may result in the collection of unnecessary chemical analyses samples. TRX should remove the repetitive row that does not contain the SPLP and geotechnical sample notations as follows:
    - i. RSAL6, sampling depths 0.5 and 28 fbgs
    - ii. SA128, sampling depths 10 and 29 fbgs
    - iii. SA64, sampling depths 10 and 21 fbgs
    - iv. SA102, sampling depths 10 and 30 fbgs
    - v. SA30, sampling depth 9 fbgs
    - vi. SA30, sampling depth 35 fbgs should remove all sampling collection indicators ("X") in all of the chemical analyses columns.
  - b. SA66, sampling depth 28 fbgs, OCPs and PCBs (EPA 8082) columns should indicate sample collection at this depth.
  - c. SA126, all sampling depths, Metals column should indicate with footnote 15 on sampling notation ("X") that platinum analysis should be added to these samples.
  - d. SA126, sampling depth 18 fbgs, TPH-ORO/DRO column should indicate sample collection at this depth.
  - e. SA31, sampling depths 0.5 and 32 fbgs, PCBs (EPA 8082) column should indicate sample collection at these depths.
  - f. Notes section should include "15. Platinum analysis added to this sample."
5. Table 2, Area III (highlighted version): NDEP has the following comments stated for the administrative record only. TRX does not need to take any action on the following comments:
  - a. SA108, sampling depth 0.0 fbgs, Asbestos column should not indicate sample collection. Also "Y" should be added to the Rational for Removal column for this depth.
  - b. SA142, sampling depth 0.0 fbgs, Asbestos column should not indicate sample collection. Also "Y" should be added to the Rational for Removal column for this depth.
  - c. SA132, NDEP has the following comments:
    - i. Sampling depths 0.0, 0.5, and 34 fbgs, PCBs (EPA 8082) and PCBs (EPA 1668A) columns should indicate sample collection at this depth.
    - ii. Sampling depths 0.5, 10, 20, and 34 fbgs, SVOCs column should indicate sample collection at these depths.

6. Table 2, Area III (Field Team Version), NDEP has the following comments. TRX should submit a revised Field Team Version of this table.
  - a. General comment, for the SPLP and geotechnical samples, TRX has repeated the coincident chemical analyses for each boring depth that notates SPLP and geotechnical sample collection. This is confusing and may result in the collection of unnecessary chemical analyses samples. TRX should remove the repetitive row that does not contain the SPLP and geotechnical sample notations as follows:
    - i. RSAN8, sampling depth 10 fbgs
    - ii. RSAN8, sampling depth 33 fbgs should remove all sampling collection indicators ("X") in all of the chemical analyses columns.
    - iii. SA52, sampling depths 19# and 33# fbgs
    - iv. RSAQ8, sampling depth 10 fbgs
    - v. RSAQ8, sampling depth 31 fbgs should remove all sampling collection indicators ("X") in all of the chemical analyses columns.
    - vi. SA34, sampling depths 10 and 34 fbgs.
  - b. RSAN8, PCBs (EPA 8082) column should not indicate sample collection for this boring.
  - c. SA52, OCPs and PCBs (EPA 8082) columns should not indicate sample collection for this boring.
  - d. SA108, NDEP has the following comments:
    - i. Sampling depth 0.0 fbgs, Asbestos column should not indicate sample collection.
    - ii. All sampling depths, Metals column should indicate with footnote 15 on sampling notation ("X") that platinum analysis should be added to these samples.
  - e. SA142, Sample Depth column, NDEP has the following comments:
    - i. Sampling depths 20 and 20 (dup) should contain the "#" footnote.
    - ii. Sampling depth 34 should contain the "##" footnote.
    - iii. All sampling depths, Metals column should indicate with footnote 15 on sampling notation ("X") that platinum analysis should be added to these samples.
  - f. SA143, sampling depth 0.0 fbgs, Asbestos column should not indicate sample collection.
  - g. SA140, sampling depth 30 fbgs should be changed to 25 fbgs for consistency.
  - h. RSAQ8, PCBs (EPA 8082) column should not indicate sample collection for this boring.
  - i. SA132, NDEP has the following comments:
    - i. Sampling depths 0.0, 0.5, and 34 fbgs, PCBs (EPA 8082) and PCBs (EPA 1668A) columns should indicate sample collection at this depth.
    - ii. Sampling depths 0.5, 10, 20, and 34 fbgs, SVOCs column should indicate sample collection at these depths.
  - j. RSAR8, sampling depth 34 fbgs, PCBs (EPA 8082) column should indicate sample collection at this depth for both the capillary fringe sample and the Matrix Spike/MS Duplicate sample.
  - k. SA34, PCBs (EPA 8082) column should not indicate sample collection for this boring.
  - l. Notes section should include "15. Platinum analysis added to this sample."
7. Table 2, Area IV (highlighted version): NDEP has the following comments stated for the administrative record only. TRX does not need to take any action on the following comments:
  - a. SA214, grid location for this boring is Q-5 not Q-4 as indicated in this table.
  - b. SA28, sampling depth 40 fbgs, OCPs column, replace "X" with "R" to indicate that OCPs analysis has been removed from this boring.

8. Table 2, Area IV (Field Team Version), NDEP has the following comments. TRX should submit a revised Field Team Version of this table.
  - a. General comment, for the SPLP and geotechnical samples, TRX has repeated the coincident chemical analyses for each boring depth that notates SPLP and geotechnical sample collection. This is confusing and may result in the collection of unnecessary chemical analyses samples. TRX should remove the repetitive row that does not contain the SPLP and geotechnical sample notations as follows:
    - i. RSAQ4, sampling depth 10 and 32 fbgs
    - ii. SA148, sampling depth 10 fbgs
    - iii. SA148, sampling depth 35 fbgs should remove all sampling collection indicators ("X") in all of the chemical analyses columns.
    - iv. RSAR2, sampling depth 0.5 fbgs
    - v. RSAR3, sampling depth 35 fbgs should remove all sampling collection indicators ("X") in all of the chemical analyses columns.
    - vi. RSAU4, sampling depth 20 fbgs should remove all sampling collection indicators ("X") in all of the chemical analyses columns
    - vii. RSAU4, sampling depth 50 fbgs should remove all sampling collection indicators ("X") in all of the chemical analyses columns.
    - viii. RSAU5, sampling depth 0.5 fbgs
    - ix. RSAU5, sampling depth 50 fbgs should remove all sampling collection indicators ("X") in all of the chemical analyses columns.
  - b. SA214, grid location is Q-5 not Q-4 as indicated in this table. Please revise.
  - c. RSAQ4, PCBs (EPA 8082), OPPs, and OAs columns should not indicate sample collection for this boring.
  - d. SA148, PCBs (EPA 8082), OPPs, and OAs columns should not indicate sample collection for this boring.
  - e. RSAR3, PCBs (EPA 8082), OPPs, and OAs columns should not indicate sample collection for this boring.
  - f. RSAU4, PCBs (EPA 8082), OPPs, and OAs columns should not indicate sample collection for this boring.
  - g. RSAU5, PCBs (EPA 8082), OPPs, and OAs columns should not indicate sample collection for this boring.
9. Figure 4, the NDEP has the following comments. TRX should submit a revised Figure 4.
  - a. SA77 should indicate that soil samples will be analyzed for PCB Aroclors (red circle).
  - b. SA192 should indicate that soil samples will be analyzed for PCB Aroclors and congeners (blue circle).
  - c. RSAR3 should indicate that soil samples will not be analyzed for PCBs (black circle).