

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*

## DRAFT

### Response to Comments

#### Comment

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 Rationale 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).

#### Response

- 1a. *Comment noted. The field version of this table is correct.*
- 1b. *The 39 fbgs figure on the table was for boring RSAJ5, not RSAJ6. The estimated depth to groundwater for RSAJ5 should be 21 feet as noted on the field table.*
- 1c. *The table shows the groundwater depth at 28 fbgs and the sample at 27 fbgs. The sample depth will be revised to 26 fbgs.*
- 1d – i. *Tronox agrees with the NDEP revisions. Comment "Q" reads: "OPP and OA analyses were removed from the sampling plan for this boring per Tronox Errata submitted December 19, 2008."*

**Comment**

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.

**Response**

- 2a.i-vi *Tronox acknowledges that there are redundancies built into Table 2 with respect to the SPLP samples, however the information is listed for the benefit of sampling personnel. The redundancies serve a specific purpose: 1) By listing SPLP/Geotech samples on separate rows, we ensure that sufficient sample volume is collected and provided to the lab so that the lab can properly perform all of the requested analyses; and 2) to allow for ease of communication with the laboratory so that the lab can differentiate between those samples that require SPLP analyses from those samples that do not require SPLP analyses. Accordingly, Tronox proposes to leave the repetitive rows in the Table.*
- 2b. *Table 2 will be revised as indicated by NDEP.*
- 2c. *Table 2 will be revised as indicated by NDEP.*

**Comment**

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.

**Response**

- 3a. *Agreed. The Field Table 2 will be revised to show the changes indicated by NDEP.*

- 3b. *Agreed. The Field Table 2 will be revised to show the changes indicated by NDEP.*
- 3c. *Agreed. The Field Table 2 will be revised to show the changes indicated by NDEP.*

### **Comment**

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."

### **Response**

- 4a.i-vi. *Tronox acknowledges that there are redundancies built into Table 2 with respect to the SPLP samples, however the information is listed for the benefit of sampling personnel. The redundancies serve a specific purpose: 1) By listing SPLP/Geotech samples on separate rows, we ensure that sufficient sample volume is collected and provided to the lab so that the lab can properly perform all of the requested analyses; and 2) to allow for ease of communication with the laboratory so that the lab can differentiate between those samples that require SPLP analyses from those samples that do not require SPLP analyses. Accordingly, Tronox proposes to leave the repetitive rows in the Table.*
- 4b. *Table 2 will be revised as indicated by NDEP.*
- 4c. *Platinum is a standard constituent under the "Metals" category as noted in footnote #2 on this Table. (This is consistent with Table 1 [List of SRCs] in The Phase B Work Plan for Area II that was submitted to NDEP on June 2, 2008.) All soil samples that are designated for metals analysis will be analyzed for platinum. Adding the requested footnote could mislead readers and accordingly, Tronox proposes not adding the footnote.*
- 4d. *Table 2 will be revised as indicated by NDEP.*

- 4e. Table 2 will be revised as indicated by NDEP.  
 4f. Please see response to comment 4c.

### **Comment**

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.

### **Response**

- 5a. Agreed. The Field Table 2 will be revised to not collect a sample as indicated by NDEP.  
 5b. Agreed. The Field Table 2 will be revised to not collect a sample as indicated by NDEP.  
 5c.i Agreed. The Field Table 2 will be revised to collect samples as indicated by NDEP.  
 5c.ii Agreed. The Field Table 2 will be revised to collect samples as indicated by NDEP.

### **Comment**

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.”

### **Response**

- 6a.i-vi. *Tronox acknowledges that there are redundancies built into Table 2 with respect to the SPLP samples, however the information is listed for the benefit of sampling personnel. The redundancies serve a specific purpose: 1) By listing SPLP/Geotech samples on separate rows, we ensure that sufficient sample volume is collected and provided to the lab so that the lab can properly perform all of the requested analyses; and 2) to allow for ease of communication with the laboratory so that the lab can differentiate between those samples that require SPLP analyses from those samples that do not require SPLP analyses. Accordingly, Tronox proposes to leave the repetitive rows in the Table.*
- 6b. *The purpose of the analysis for PCBs in boring RSAN8 is to gather SPLP data from soils that are representative of Area III. Moreover, inclusion of PCBs as shown in Table 2 is consistent with the SPLP sampling plan as shown on page 4 of 5 of Table 2 – Area III (highlighted version). Tronox proposes to leave the PCB analyses in the Table..*
- 6c. *The purpose of the analyses for OCPs and PCBs in boring SA52 is to gather SPLP data from soils that are representative of Area III. Inclusion of OCPs and PCBs as shown in Table 2 is consistent with the SPLP sampling plan as shown on page 4 of 5 of Table 2 – Area III (highlighted version). Tronox proposes to leave the OCP and PCB analyses in the Table..*
- 6d.i *Agreed. Table 2 will be revised as indicated by NDEP.*
- 6d.ii *Adding footnote 15 could be confusing, since platinum is being analyzed in all soil samples tested for “Metals” as noted in footnote #2 on this Table. This is consistent with Table 1 (List of SRCs) in The Phase B Work Plan for Area III that was submitted to NDEP on June 2, 2008. Tronox proposes not to include footnote 15.*
- 6e.i *Agreed. Table 2 will be revised as indicated by NDEP.*
- 6e.ii *Agreed. Table 2 will be revised as indicated by NDEP.*
- 6e.iii *Please see response to comment 6d.ii.*
- 6f. *Agreed. Table 2 will be revised as indicated by NDEP.*
- 6g. *While changing the intermediate depth sample from 30 fbgs to 25 fbgs would be closer to the midpoint of the depth interval, it would not match the depth in the highlighted version*

- of the Table and could cause confusion. Tronox proposes to leave the 30 fbgs sample depth since it meets the criteria of not exceeding 20 feet between vertical samples. .
- 6h. The purpose of the analyses for PCBs in boring RSAQ8 is to gather SPLP data from soils that are representative of Area III. Inclusion of PCBs as shown in Table 2 is consistent with the SPLP sampling plan as shown on page 4 of 5 of Table 2 – Area III (highlighted version). Tronox proposes to leave the PCB analyses in the Table.
- 6i.i Agreed. Table 2 will be revised as indicated by NDEP.
- 6i.ii Agreed. Table 2 will be revised as indicated by NDEP.
- 6j. Agreed. Table 2 will be revised as indicated by NDEP.
- 6k. The purpose of the analyses for PCBs in boring SA34 is to gather SPLP data from soils that are representative of Area III. Inclusion of PCBs as shown in Table 2 is consistent with the SPLP sampling plan as shown on page 4 of 5 of Table 2 – Area III (highlighted version). Tronox proposes to leave the PCB analyses in the Table.
- 6l. Please see response to comment 6d.ii.

### **Comment**

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:
- SA214, grid location for this boring is Q-5 not Q-4 as indicated in this table.
  - SA28, sampling depth 40 fbgs, OCPs column, replace "X" with "R" to indicate that OCPs analysis has been removed from this boring.

### **Response**

- 7a. Agreed. The Field Table 2 will be revised as indicated by NDEP.
- 7b. Agreed. The Field Table 2 will be revised to show no OCP sample as indicated by NDEP.

### **Comment**

8. Table 2, Area IV (Field Team Version), NDEP has the following comments. TRX should submit a revised Field Team Version of this table.
- 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:
    - RSAQ4, sampling depth 10 and 32 fbgs
    - SA148, sampling depth 10 fbgs
    - SA148, sampling depth 35 fbgs should remove all sampling collection indicators ("X") in all of the chemical analyses columns.
    - RSAR2, sampling depth 0.5 fbgs
    - RSAR3, sampling depth 35 fbgs should remove all sampling collection indicators ("X") in all of the chemical analyses columns.
    - RSAU4, sampling depth 20 fbgs should remove all sampling collection indicators ("X") in all of the chemical analyses columns
    - 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.

### **Response**

- 8a.i-ix *Tronox acknowledges that there are redundancies built into Table 2 with respect to the SPLP samples, however the information is listed for the benefit of sampling personnel. The redundancies serve a specific purpose: 1) By listing SPLP/Geotech samples on separate rows, we ensure that sufficient sample volume is collected and provided to the lab so that the lab can properly perform all of the requested analyses; and 2) to allow for ease of communication with the laboratory so that the lab can differentiate between those samples that require SPLP analyses from those samples that do not require SPLP analyses. Accordingly, Tronox proposes to leave the repetitive rows in the Table.*
- 8b. *Agreed. Table 2 – Area IV (Field Version) will be revised to list boring SA214 in grid Q-5.*
- 8c. *The purposes of the analyses for PCBs, OPPs, and OAs in boring RSAQ4 are to gather SPLP data from soils that are representative of this region of Area IV. Moreover, inclusion of PCBs, OPPs, and OAs as shown is consistent with the SPLP sampling plan as shown on page 6 of 6 of Table 2 – Area IV (highlighted version). Accordingly, Tronox proposes that the PCB, OPP, and OA analyses will remain in the Table.*
- 8d. *OPPs and OAs will be removed from SA148 for samples collected at depths of 0.5 and 45 feet as requested by NDEP. As with comment 8c, analyses of soil for PCBs, OPPs, and OAs for samples taken at 10 and 35 feet are to gather SPLP data from soils in Area IV and this is consistent with the SPLP sampling plan as shown on page 6 of 6 of Table 2 – Area IV (highlighted version). Tronox proposes to leave the analyses in the Table.*
- 8e. *The purpose of the analyses for PCBs, OPPs, and OAs in boring RSAR3 are to gather SPLP data from soils that are representative of this region of Area IV. Inclusion of PCBs, OPPs, and OAs as shown is consistent with the SPLP sampling plan as shown on page 6-6 of Table 2 – Area IV (highlighted version). Accordingly, Tronox proposes that the PCB, OPP, and OA analyses will remain in the Table.*
- 8f. *The purpose of the analyses for PCBs, OPPs, and OAs in boring RSAU4 are to gather SPLP data from soils that are representative of Area IV. Inclusion of PCBs, OPPs, and OAs as shown is consistent with the SPLP sampling plan as shown on page 6-6 of Table 2 – Area IV (highlighted version). Accordingly, Tronox proposes that the PCB, OPP, and OA analyses will remain in the Table.*
- 8g. *The purpose of the analyses for PCBs, OPPs, and OAs in boring RSAU5 are to gather SPLP data from soils that are representative of Area IV. Inclusion of PCBs, OPPs, and OAs as shown is consistent with the SPLP sampling plan as shown on page 6-6 of Table*

2 – Area IV (highlighted version). Accordingly, Tronox proposes that the PCB, OPP, and OA analyses will remain in the Table.

**Comment**

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).

***Response***

- 9a. *Agreed. Figure 4 will be revised as indicated by NDEP.*
- 9b. *Agreed. Figure 4 will be revised as indicated by NDEP.*
- 9c. *As noted in the response to comment 8e, Tronox proposes to analyze samples from boring RSAR3 for PCBs using both methods 8082 and 1668A, Accordingly, the designation on Figure 4 is correct (blue circle).*