Summary of Available Data for LOUs 7, 8, 9, 13, and 14
Multiple Ponds in Central Area II Region

Tronox Facility – Henderson, Nevada

Name of LOUs:

LOU 7 – Old P-2 Pond and Associated Conveyance Facilities
LOU 8 – Old P-3 Pond and Associated Conveyance Facilities
LOU 9 – New P-2 Pond and Associated Piping
LOU 13 – Pond S-1
LOU 14 – Pond P-1 and Associated Conveyance Piping

Goal of Closure:

- Closure for future commercial/industrial use.

Site Investigation Area:

LOU 7 – Old P-2 Pond and Associated Conveyance Facilities

- Size: Originally approximately 12,000 square feet with a 350,000-gallon capacity. Between 1982 and 1984, the pond size was increased to approximately 13,000 square feet with a 675,000-gallon capacity [Ref. 6].
- Location: Central portion of the Site, approximately 250 feet north of Chemstar.
- Current Status/Features: The Old P-2 Pond is currently inactive, empty, and the liners have been removed.

LOU 8 – Old P-3 Pond and Associated Conveyance Facilities

- Size: Approximately 13,000 square feet [Ref. 6].
- Location: Central portion of the Site, approximately 250 feet north of Chemstar.
- Current Status/Features: The Old P-3 Pond is currently inactive, empty, and the liners have been removed.

LOU 9 – New P-2 Pond and Associated Piping

- Size: Approximately 10,000 square feet.
- Location: Central portion of the Site, approximately 350 feet north of Chemstar.
- Current Status/Features: The New P-2 Pond is currently inactive, empty, and the liners have been removed.

LOU 13 – Pond S-1

- Size: Approximately 47,500 square feet with a 2,000,000-gallon capacity [Ref. 6].
- Location: Central portion of the Site, approximately 60 feet south of the Steam Plant [Refs. 6 and 7].
- Current Status/Features: Pond S-1 is currently inactive, empty, and the liners have been removed.

Summary of Available Data for LOUs 7, 8, 9, 13, and 14
Multiple Ponds in Central Area II Region
Tronox Facility – Henderson, Nevada

Description:

LOU 14 – Pond P-1 and Associated Conveyance Piping

- Size: Approximately 26,000 square feet with a 700,000-gallon capacity [Refs. 6 and 7].
- Location: Central portion of the Site, approximately 200 feet south of the Steam Plant and immediately south of Pond S-1 [Ref. 6].
- Current Status/Features: Pond P-1 is currently inactive, empty, and the liners have been removed.

LOUs 7, 8, and 9 – Old P-2, Old P-3, and New P-2 Ponds

- The lined ponds received waste streams from sodium chlorate process: process washdown, excess volume from process vessels, process area storm water, caustic scrubber solution from ammonium perchlorate plant, and solution from cooling tower leaks [Ref. 6].
- The ponds were used to evaporate wastes to concentrate which were returned to the process stream for sodium chlorate recovery [Ref. 6].
- Waste stream constituents: hexavalent chromium, sodium chloride, sodium chlorate (with small amounts of sodium dichromate), and sodium perchlorate [Ref. 6].

LOU 7 – Old P-2 Pond and Associated Conveyance Facilities

- The Old P-2 Pond was originally constructed in the fall of 1972 with a single-lined PVC and chlorinated polyethylene (CPE) containment [Ref. 6].
- Prior to June 1980, the PVC/CPE liner was replaced with nylon-reinforced butyl rubber because the liner materials were incompatible with each other and leaks had developed [Ref. 6].
- Between June 1982 and August 1984, the Old P-2 Pond was relined with a double-liner system and the size of the pond was increased. A second top liner was installed between August 1984 and July 1985 because part of the double-liner system had failed [Ref. 6].
- The Old P-2 Pond was regulated by NDEP in conjunction with Kerr-McGee Chemical Corporation's NPDES permit (NV0000078) and did not receive hazardous waste [Ref. 6].
- The Old P-2 Pond was decommissioned in April 1990 [Ref. 6].

- The Old P-2 Pond liners and adjacent and underlying soil (volume not specified) were removed and disposed of at U.S. Ecology Inc., in Beatty, Nevada in the early 1990s as part of the clean closure process [Ref. 6].
- In 1991, dark stains were observed along the western wall (possibly from past use of the area for manganese tailings storage). In addition, white encrustments were observed scattered throughout the area, and light colored soils were noted at approximately four to five feet below grade [Ref. 6].

LOU 8 – Old P-3 Pond and Associated Conveyance Facilities

- The Old P-3 Pond was used from 1978 to 1986 [Ref 5].
- The pond was constructed with a single layer synthetic liner [Ref. 5].
- The Old P-3 Pond was regulated by NDEP under the Kerr-McGee Chemical Corporation's NPDES permit (NV0000078) and did not receive hazardous waste.
- The Old P-3 Pond acted as a holding pond for solutions which were destined for return to the sodium chlorate production operation, after concentration by evaporation [Ref. 5].
- During use, the pond contained an aqueous solution of sodium chlorate with small amounts of sodium dichromate Ref. 5].
- The Old P-3 Pond was decommissioned in April 1990. In the early 1990's, the liners, solids, and underlying and adjacent soil (unspecified volume) were removed and disposed of at U.S. Ecology in Beatty, Nevada as chromium contaminated wastes [Ref. 5].

LOU 9 – New P-2 Pond and Associated Piping

<u>New P-2 Pond</u>

- The New P-2 Pond was initially constructed with two liners (unreinforced PVC and reinforced polyester) and an additional HDPE liner was installed approximately 18 months later [Ref. 5].
- The pond was regulated by NDEP under Kerr-McGee Chemical Corporation's NPDES permit (NV0000078) and did not receive hazardous waste.
- The New P-2 Pond was decommissioned in 1996 [Ref. 5].

Summary of Available Data for LOUs 7, 8, 9, 13, and 14
Multiple Ponds in Central Area II Region
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LOU 13 and 14– Pond S-1 and Pond P-1 and Associated Conveyance Piping

- Ponds S-1 and P-1 received process waste streams from the production of potassium chlorate, potassium perchlorate, sodium perchlorate, along with metals, hexavalent chromium and boron, Pond P-1 received liquors, salt solutions, and rinsates from Pond S-1 and from decommissioning of the potassium perchlorate process [Refs. 2 and 6].
- Both ponds operated as evaporation ponds only, neither had facilities to recycle contents [Refs. 2 and 6].
- Pond S-1 was constructed in October 1974 with a single-liner of 20 mil PVC on the bottom and 30 mil CPE on the side walls [Ref. 6].
- The location of Pond S-1 was previously used for manganese tailing pile storage, from 1960 to circa 1969 [Ref. 6].
- Pond S-1 decommissioning began in the fall of 1982 and was completed in January 1983. Closure was approved by NDEP on December 5, 1985 [Ref. 6].
- During the decommissioning of Pond S-1, liquids were allowed to evaporate and were also pumped to Pond P-1. Dry contents, liners and 2 feet of soil (both below base and along sidewalls) were removed and disposed to LOU 10 (Onsite Hazardous Waste Landfill) before January 1983 [Ref. 6].
- After debris removal, confirmation samples were collected from four feet below the base of the closed Pond S-1 and from three feet below grade in immediately adjacent areas. The samples were analyzed for EP Toxicity [Ref. 6].
- Pond P-1 was constructed in April 1972 with a single PVC liner on bottom and CPE on the side walls. Pond P-1 was relined in 1980 with 30 mil Hypalon [Ref. 6].
- Decommissioning of Pond P-1 started during the winter of 1982 or 1983, following the decommissioning of Pond S-1 [Ref. 6].
- During decommissioning, liquids were removed from Pond P-1 by evaporation only. Dry contents, liners, and an unknown volume of soil were removed and disposed to LOU 10 (Onsite Hazardous Waste Landfill) between July 25, 1985 and August 8, 1985 [Ref. 6].
- Confirmation soil sampling was conducted after all debris was removed. The samples were collected at one-foot intervals between the surface and 1-1/2 feet below grade at six locations beneath the base of the former pond. The samples were analyzed for EP Toxicity metals [Ref. 6].

Summary of Available Data for LOUs 7, 8, 9, 13, and 14
Multiple Ponds in Central Area II Region
Tronox Facility – Henderson, Nevada

- The closure plan and final closure for Pond P-1 were approved by NDEP on April 16, 1985 and December 5, 1985, respectively.

Process Waste Streams Associated with LOUs 7, 8, and 9	Known or Potential Constituents Associated with LOUs 7, 8, and 9
Discharges of sodium chlorate process washdown [Ref. 6].	• Hexavalent chromium • Chloride • Wet chemistry analytes • Chlorate • Perchlorate
Discharges of excess volume from sodium chlorate process vessels [Ref. 6].	• Hexavalent chromium • Chloride • Wet chemistry analytes • Chlorate • Perchlorate
Sodium chlorate process area stormwater [Ref. 6].	• Hexavalent chromium • Chloride • Wet chemistry analytes • Chlorate • Perchlorate
Caustic scrubber solution from ammonium perchlorate plant [Ref. 6].	• Hexavalent chromium • Perchlorate • Chlorate • Ammonia • Chloride • Wet chemistry analytes
Cooling tower leaks [Ref. 6].	• Hexavalent chromium • Chlorate • Perchlorate • Ammonia • Chloride • Wet chemistry analytes
Process Waste Streams Associated with LOUs 13 and 14	**Known or Potential Constituents Associated with LOUs 13 and 14**
Sodium chlorate process wastes and rinsates	• Metals • Chlorate • Perchlorate • Wet chemistry

Summary of Available Data for LOUs 7, 8, 9, 13, and 14
Multiple Ponds in Central Area II Region
Tronox Facility – Henderson, Nevada

Sodium perchlorate and potassium perchlorate process wastes and rinsates	• Metals • Hexavalent chromium • Chlorate • Perchlorate • Ammonia • Wet chemistry
Boron manufacturing process wastes and rinsates	• Metals (including boron and manganese) • Ammonia • Wet chemistry
Plant blowdown from boilers and cooling towers	• Sodium hexametaphosphates • Sulfuric acid
Cooling Tower blowdown (Unit 5), reboiler wastes, halide wall solids, and screen filter wastes	• Metals (boron) • Wet chemistry

Overlapping or Adjacent LOUs:

LOUs 7, 8, 9, 13, and 14 are adjacent to each other. The following LOUs overlap or are adjacent to LOUs 7, 8, 9, 13, and 14 as shown on Figure 1:

Overlapping LOUs

- LOU 60 (Acid Drain System) – Branches of the Acid Drain System run along the northern boundaries of LOUs 7, 8, and 14.

Adjacent LOUs

- LOUs 24 and 46 (Leach Beds, Associated Facilities, and Former Old Main Cooling Tower and Recirculation Lines) – Located east (cross-gradient) of LOUs 13 and 14.
- LOU 45 (Diesel Storage Tank) – Located south (upgradient) of LOUs 7 and 8.
- LOU 34W (Former Manganese Tailings Area) – Located south (upgradient) of LOU 14.
- LOU 60 (Acid Drain System) – Located south (upgradient) of LOUs 9 and 13.
- LOU 64 (Koch Materials Company Site) – Located west (cross-gradient) of LOU 8.

LOUs 24, 46, and 64 are cross-gradient to LOUs 7, 8, 9, 13, and 14 and are not considered to have the potential to affect these LOUs. LOUs 7 and 14 are upgradient to LOUs 9 and 13, respectively; however, no releases are known to have occurred from LOUs 7 and 14; therefore, these LOUs are not considered to have the potential to affect LOUs 9 and 13.

Summary of Available Data for LOUs 7, 8, 9, 13, and 14
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The addition of chemical classes related to LOUs 24, 46, and 64 to the proposed Phase B Analytical Plan for LOUs 7, 8, 9, 13, and 14 is not required.

For detailed information on the LOUs listed above, please refer to the specific LOU data package.

LOUs Potentially Affecting Soils in LOUs 7, 8, 9, 13, and 14:

The following LOUs have the potential to affect each other:

- LOU 45 (Diesel Storage Tank) – Area consisted of a 500,000-gallon diesel above ground storage tank (AST) with an 18,000-gallon overflow AST [Ref. 6]. No releases have been reported from this area; therefore, the addition of other chemical classes to the Phase B Analytical Plan for LOUs 7, 8, 9, 13, and 14 is not required.
- LOU 60 (Acid Drain System) – A branch of LOU 60 is located along the northern (downgradient) boundary of LOUs 7, 8, and 14; however, since no leaks have been reported for LOU 60 and it is located on the downgradient side of LOUs 7, 8, and 14, the addition of other chemical classes to the Phase B Analytical Plan for LOUs 7, 8, 9, 13, and 14 is not required.

Known or Potential Chemical Classes:

- Metals
- Hexavalent chromium
- Perchlorate
- Wet chemistry analytes

Known or Potential Release Mechanisms:

- Infiltration to subsurface soils and groundwater.
- Potential pathway leakage through liner to underlying soil and possibly to groundwater.
- Possible impacts to surrounding soils from surface releases (none documented).

LOUs 7 and 8 – Old P-2 Pond and Associated Conveyance Facilities and Old P-3 Pond and Associated Conveyance Facilities

- Reported leaks include:
  - An unknown quantity of solution on more than one occasion from the Old P-2 Pond [Ref. 6].
  - Prior to June 1980, leaks had developed in the original single-liner in the Old P-2 Pond [Ref. 6].
  - In June 1982, 50,000 gallons of solution leaked through the second single-liner [Ref. 6].

- The double liner system in the Old P-2 Pond which was installed between 1982 and 1984 also reportedly leaked [Ref. 6].
- Surficial soils in the vicinity and on the floor of the Old P-2 Pond, and around the base of a nearby P-2 pump station exhibited white crystalline discoloration [Ref. 6].
- Shallow groundwater north (downgradient) of the Old P-2 Pond exhibited elevated chromium and conductivity values [Ref 6].

LOU 9 – New P-2 Pond and Associated Piping

- No known releases were identified in the documents reviewed for LOU 9.

LOUs 13 and 14 – Pond S-1 and Pond P-1 and Associated Conveyance Piping

- Both ponds are known to have releases from liner failures.

Results of Historical Sampling:

LOU 7 – Old P-2 Pond and Associated Conveyance Facilities

- In 1997, seven soil borings were drilled in the Old P-2 area and five additional borings were drilled in 1999. The soils from the borings were tested for total chromium and pH. Analytical results are summarized on LOUs 7, 8, 9, 13, and 14 Table 7 (see attached) [Refs. 1 and 2].

LOU 8 – Old P-3 Pond and Associated Conveyance Facilities

- In 1977, eight soil borings were drilled in the Old P-3 Pond area and three additional borings were drilled in 1999. The soils from the borings were tested for total chromium and pH. Analytical results are summarized on LOUs 7, 8, 9, 13, and 14 Table 7 (see attached) [Refs. 1 and 2].

LOU 9 – New P-2 Pond and Associated Piping

- No known historical soil sampling was identified in the documents reviewed for LOU 9.

LOUs 13 and 14– Pond S-1 and Pond P-1 and Associated Conveyance Piping

- Numerous soil samples were collected from Ponds S-1 and P-1 after the ponds were closed and stained soils were removed. All samples were tested for EP Toxicity chromium. All results were below EPA action levels. Analytical results are summarized on LOUs 7, 8, 9, 13, and 14 Tables 8 and 9 (see attached) [Refs. 1 and 2].

Summary of Available Data for LOUs 7, 8, 9, 13, and 14
Multiple Ponds in Central Area II Region
Tronox Facility – Henderson, Nevada

Groundwater

- Upgradient and downgradient monitoring wells M-2A, M-21, M-50, M-34, M-75, and M-76 are tested for hexavalent chromium, perchlorate, and TDS as part of a periodic or routine groundwater monitoring program. Analytical results are summarized on LOUs 7, 8, 9, 13, and 14 Tables 6 and 10 (see attached) [Ref. 4].

Did Historical Samples Address Potential Release?

- Not completely. Historical borings were limited in depth and constituents, and were not representative of the full extent of the LOU.

Summary of Phase A SAI:

Soil

- None specifically conducted for LOUs 7, 9, and 14.
- Boring SA11 is located within LOU 8 and was specifically designed to evaluate this LOU [Ref. 3].
- Boring SA12 is located within LOU 13 and was specifically designed to evaluate this LOU [Ref. 2].

Groundwater

- Monitoring wells M-2A and M-76 are approximately 200 and 100 feet to the north (downgradient) of LOUs 13 and 8, respectively, and were specifically designed to evaluate these LOUs [Ref. 3].

Chemical classes detected in Phase A soil borings from SA11 and SA12 include the following:

- Metals
- Hexavalent chromium
- Perchlorate
- Wet chemistry analytes
- VOCs
- SVOCs (SA11)
- TPH-DRO (SA11)
- Organochlorine pesticides
- Dioxins/furans
- Radionuclides
- Asbestos

As a result of the Phase A data, the Phase B analytical plan for samples collected from LOUs 7, 8, 9, 13, and 14 will be expanded to include analyses for, organochlorine pesticides, VOCs, SVOCs, TPH-DRO, dioxins/furans, radionuclides, and asbestos.

Summary of Available Data for LOUs 7, 8, 9, 13, and 14
Multiple Ponds in Central Area II Region
Tronox Facility – Henderson, Nevada

- Analytical results for soil and groundwater from the Phase A sampling event are summarized in LOUs 7, 8, 9, 13, and 14 Tables 1 through 5 and LOUs 7, 8, 9, 13, and 14 Tables 11 through 26 (see attached) [Ref. 3].

Are Phase A Sample Locations in "Worst Case" Areas?

- No

Is Phase B Investigation Recommended?

- Yes

Proposed Phase B Soil Investigation/Rationale:

The Phase B investigation for LOUs 7, 8, 9, 13, and 14 consists of collecting soil samples from the following six locations:

- Four (4) soil borings will be drilled within the LOUs.
- Two (2) soil borings will be drilled east (cross-gradient) and north (downgradient) of LOU 8.
- All six borings along with the analytical program to evaluate soil samples from LOUs 7, 8, 9, 13 and 14 are listed on **Table A – Soil Sampling and Analytical Plan for LOUs 7, 8, 9, 13, and 14.**

- Soil sample locations consist of both judgmental and randomly-placed locations.
- Judgmental sample locations:
  - Designed to evaluate soil for known or potential chemical classes associated with the LOUs, based on the known process waste streams.
  - Five (5) of the six sample locations are judgmental locations and include soil borings SA53, SA50, SA200, SA102, and SA51.
- Random sample grid locations:
  - Designed to assess whether unknown constituents associated with the LOUs are present.
  - One (1) of the six sample locations is a randomly-placed location. This soil boring is RSAO6.
  - All six borings along with the analytical program to evaluate soil samples from LOUs 7, 8, 9, 13, and 14 are listed on **Table A – Soil Sampling and Analytical Plan for LOUs 7, 8, 9, 13, and 14.**

Summary of Available Data for LOUs 7, 8, 9, 13, and 14
Multiple Ponds in Central Area II Region
Tronox Facility – Henderson, Nevada

Proposed Phase B Constituents List for Soils:

Both judgmental and random sample locations will be analyzed for the following constituents:

- Metals (Phase A list)
- Hexavalent chromium
- Perchlorate
- Wet chemistry analytes
- VOCs
- SVOCs
- TPH DRO/ORO/GRO
- Organochlorine pesticides
- Dioxins/furans
- Radionuclides
- Asbestos

Proposed Phase B Groundwater Investigation/Rationale:

The Phase B groundwater investigation of LOUs 7, 8, 9, 13, and 14 consists of collecting groundwater samples from six (6) locations to evaluate local groundwater conditions and as part of Site-wide evaluation of constituent trends in groundwater.

- Wells M-21 and M-50 south (upgradient) of LOUs 7, 8, 9, 13, and 14 will be used to evaluate local and area-wide groundwater conditions.
- Wells M-76, M-75, M-2A, and M-34 north (downgradient) of LOUs 7, 8, 9, 13, and 14 will be used to evaluate local and area-wide groundwater conditions.
- The sampling wells and the analytical program to evaluate groundwater samples associated with LOUs 7, 8, 9, 13, and 14 are listed on **Table B – Groundwater Sampling and Analytical Plan for LOUs 7, 8, 9, 13, and 14.**

Proposed Phase B Constituents List for Groundwater:

Groundwater samples will be analyzed for the following analytes:

- Metals (Phase A list)
- Hexavalent chromium
- Perchlorate
- Wet chemistry analytes
- VOCs
- SVOCs
- Organochlorine pesticides
- Radionuclides

Summary of Available Data for LOUs 7, 8, 9, 13, and 14
Multiple Ponds in Central Area II Region
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Proposed Phase B Soil Gas Investigation/Rationale:

Soil gas samples will be collected from five (5) locations to evaluate area conditions for the presence of vapor-phase VOCs in the vadose zone.

- SG78, SG76, SG89, SG77, and SG75 are located to evaluate the five ponds associated with LOUs 7, 8, 9, 13, and 14.

Details of the soil gas sampling program are contained in the NDEP-approved (March 26, 2008) Soil Gas Survey Work Plan, Tronox LLC, Henderson, Nevada, dated March 20, 2008.

Proposed Phase B Constituents List for Soil Gas:

- VOCs (EPA TO-15)

References:

1. ENSR Corporation (ENSR), 1997, Phase II Environmental Conditions Assessment located at Kerr-McGee Chemical Corporation, Henderson, Nevada, August 7, 1997.
2. ENSR, 2005, Conceptual Site Model, Kerr-McGee Facility, Henderson, Nevada, ENSR, Camarillo, California, 04020-023-130, February 2005 and August 2005.
3. ENSR, 2007a, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
4. ENSR, 2007b, Quarterly Performance Report for Remediation Systems, Tronox LLC, Henderson, Nevada, July, September 2007.
5. Kerr-McGee, 1996b, Response to Letter of Understanding, Henderson, Nevada, October 1996.
6. Kleinfelder, 1993, Environmental Conditions Assessment, Kerr-McGee Chemical Corporation, Henderson, Nevada Facility, April 15, 1993 (Final).
7. Region IX, 1980, Aerial Reconnaissance of Hazardous Waste Sources BMI Industrial Complex, Henderson, 1943-1979.

Summary of Available Data for LOUs 7, 8, 9, 13, and 14
Multiple Ponds in Central Area II Region

Tronox Facility – Henderson, Nevada

LOU Figure

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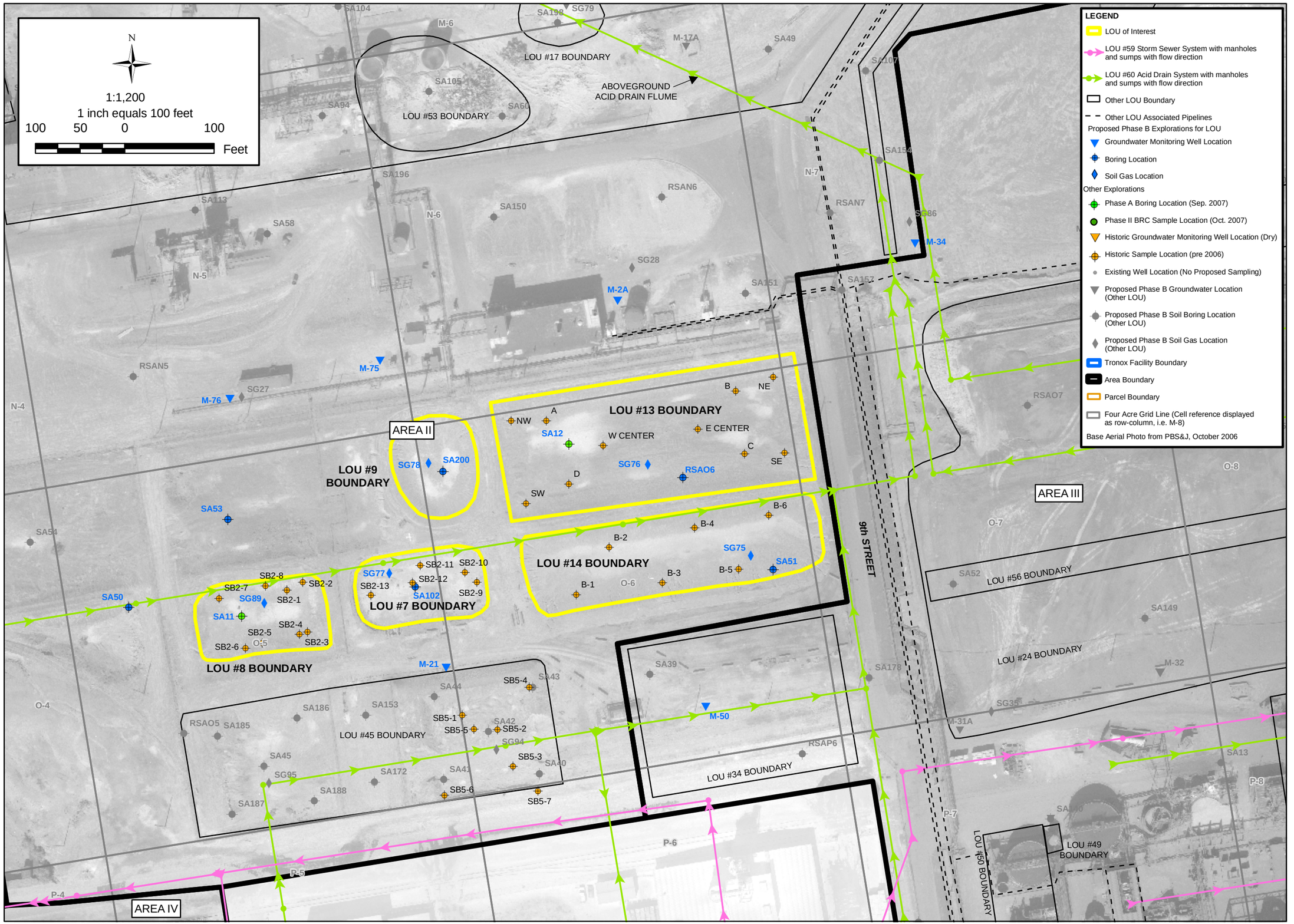


LEGEND

- LOU of Interest
- LOU #59 Storm Sewer System with manholes and sumps with flow direction
- LOU #60 Acid Drain System with manholes and sumps with flow direction
- Other LOU Boundary
- Other LOU Associated Pipelines

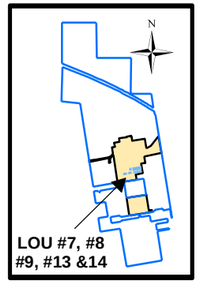
Proposed Phase B Explorations for LOU

- Groundwater Monitoring Well Location
- Boring Location
- Soil Gas Location

Other Explorations

- Phase A Boring Location (Sep. 2007)
- Phase II BRC Sample Location (Oct. 2007)
- Historic Groundwater Monitoring Well Location (Dry)
- Historic Sample Location (pre 2006)
- Existing Well Location (No Proposed Sampling)
- Proposed Phase B Groundwater Location (Other LOU)
- Proposed Phase B Soil Boring Location (Other LOU)
- Proposed Phase B Soil Gas Location (Other LOU)
- Tronox Facility Boundary
- Area Boundary
- Parcel Boundary
- Four Acre Grid Line (Cell reference displayed as row-column, i.e. M-8)

Base Aerial Photo from PBS&J, October 2006



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SAMPLE LOCATIONS FOR LOU #7, #8, #9, #13 AND #14 OLD PONDS P-2 AND P-3, NEW POND P-3, POND S-1, P-1 AND ASSOCIATED CONVEYANCE PIPING

Phase B Area II Source Area Investigation
Tronox Facility, Henderson, Nevada

SCALE:	DATE:	PROJECT NUMBER:
AS SHOWN	6/13/2008	04020-023-430

FIGURE NUMBER:

1

SHEET NUMBER:

X

Summary of Available Data for LOUs 7, 8, 9, 13, and 14
Multiple Ponds in Central Area II Region

Tronox Facility – Henderson, Nevada

Sampling and Analytical Plans for LOUs 7, 8, 9, 13, and 14

Table A – Soil Sampling and Analytical Plan for LOUs 7, 8, 9, 13, and 14
Table B – Groundwater Sampling and Analytical Plan for LOUs 7, 8, 9, 13, and 14

Table A
Soil Sampling and Analytical Plan for LOUs 7, 8, 9, 13, and 14 in Area II
Phase B Source Area Investigation Work Plan
Tronox Facility - Henderson, Nevada

Grid Location	LOU Number	Phase B Boring No.	Sample ID Number	Sample Depths[1.] (ft. bgs)	Perchlorate (EPA 314.0)	Metals (EPA 6020)	Hex Cr (EPA 7199)	TPH-DRO/ORO (EPA 8015B)	TPH-GRO (EPA 8015B)	VOCs[2.] (EPA 8260B)	Wet Chemistry[3.]	Total Cyanide (EPA 9012A)	OCPs[4.] (EPA 8081A)	SVOCs[5.] (EPA 8270C)	Radio-nuclides[6.]	Dioxins/ Furans[7.]	Asbestos[9.] EPA/540/R-97/028	Geo-technical Tests[10.]	Rationale
Borings are organized by grid location as shown on Plate A - Starting point is on the northwestern most grid in Area 2 (M-2) and ending with the southeastern most grid in Area 2 (S-7).																			
O-5	8	SA50	SA50-0.0	0.0													X		Boring located as a westward step out to LOU 8 (Old P-3 Pond and Associated Conveyance Facilities). For general
O-5	8		SA50-0.5	0.5	X	X	X	X		X	X		X	X	X	X			site conditions and possible overflow release of surface runoff. Borin will also serve to evaluate potential releases from
O-5	8		SA50-10	10	X	X	X	X		X	X		Hold	X	X				LOU 60 (former Acid Drain System).
O-5	8		SA50-20	20	X	X	X	X		X	X		Hold	X	X				
O-5	8		SA50-30	30	X	X	X	X		X	X		X	X	X				
O-5	7, 8, 9	SA53	SA53-0.0	0.0													X		Boring located to evaluate LOU 7 (Old P-2 Pond and Associated Conveyance Pond and Associated Conveyance
O-5	7, 8, 9		SA53-0.5	0.5	X	X	X	X		X	X		X	X	X	X			Facilities), and LOU 9 (New P-2 Pond and Associated Piping). Located downslope between all three LOUs to
O-5	7, 8, 9		SA53-10	10	X	X	X	X		X	X		Hold	X	X				evaluate potential overflow surface runoff releases.
O-5	7, 8, 9		SA53-20	20	X	X	X	X		X	X		Hold	X	X				
O-5	7, 8, 9		SA53-30	30	X	X	X	X		X	X		X	X	X				
O-5	7, 60	SA102	SA102-0.0	0.0													X		Boring located to evaluate LOU 7 (Old P-2 Pond and Associated Conveyance Facilities), LOU 8 (Old P-3 Facilities),
O-5	7, 60		SA102-0.5	0.5	X	X	X			X	X		X	X	X	X			and LOU 60 (Acid Drain System). Located at a lowspot in bottom of LOU 7 for worst case evaluation and near LOU 60
O-5	7, 60		SA102-10	10	X	X	X			X	X		Hold	X	X			X	for piping releases.
O-5	7, 60		SA102-20	20	X	X	X			X	X		X	X	X				
O-6	14	SA51	SA51-0.0	0.0													X		Boring located to evaluate LOU 14 (Pond P-1 and Associated Conveyance Piping). Located in a low spot in the
O-6	14		SA51-0.5	0.5	X	X	X	X		X	X		X	X	X	X			bottom of LOU 14 to evaluate worst case conditions.
O-6	14		SA51-10	10	X	X	X	X		X	X		Hold	X	X				
O-6	14		SA51-20	20	X	X	X	X		X	X		Hold	X	X				
O-6	14		SA51-30	30	X	X	X	X		X	X		X	X	X				
O-6	13	RSAO6	RSAO6-0.0	0.0													X		Boring located to evaluate LOU 13 (Pond S-1). Random boring in a lowspot in the bottom of LOU 13 to evaluate
O-6	13		RSAO6-0.5	0.5	X	X	X	X		X	X		X	X	X	X			worst case conditions and site wide conditions.
O-6	13		RSAO6-10	10	X	X	X	X		X	X		Hold	X	X				
O-6	13		RSAO6-20	20	X	X	X	X		X	X		Hold	X	X				
O-6	13		RSAO6-30	30	X	X	X	X		X	X		Hold	X	X				
O-6	13		RSAO6-35	35	X	X	X	X		X	X		X	X	X				
O-6	9	SA200	SA200-0.0	0.0													X		Boring located to evaluate LOU 9 (New P-2 Pond and Associated Piping). Located in a lowspot in the bottom of LOU 9
O-6	9		SA200-0.5	0.5	X	X	X	X		X	X		X	X	X	X			to evaluate worst case conditions.
O-6	9		SA200-10	10	X	X	X	X		X	X		Hold	X	X				
O-6	9		SA200-20	20	X	X	X	X		X	X		Hold	X	X				
O-6	9		SA200-30	30	X	X	X	X		X	X		X	X	X				
Number of Samples:					**24**	**24**	**24**	**21**	**0**	**24**	**24**	**0**	**12**	**24**	**24**	**6**	**6**	**1**	

Notes:

n/a	Not applicable - boring is not associated with a specific LOU but is located to evaluate soil for general area-wide coverage.
X	Sample will be collected and analyzed.
	No sample collected under Phase B sampling program.
DD*	Sample depth to be determined in the field where DD = sample depth (ft).
TPH-DRO/ORO	Total petroleum hydrocarbons - Diesel-Range Organics/Oil-Range Organics.
1.	The 0.5 ft bgs sample will be collected from the 0.0 to 0.5 ft bgs interval, unless the area is paved. If area is paved, samples will be collected at 0.5 feet below or from a representative depth beneath the pavement. Alternately, if an unpaved area is within a reasonable distance, the sample will be moved to the unpaved area.
2.	Samples for VOC analysis will be preserved in the field using sodium bisulfate (or DI water) and methanol preservatives per EPA Method 5035.
3.	Consists of wet chemistry parameters (including pH) listed on Table 1 of the Phase B Source Area Work Plan.
4.	Organochlorine Pesticides (includes analysis for hexachlorobenzene).
5.	Semi-volatile Organic Compounds
6.	Radionuclides consists of alpha spec reporting for isotopic thorium and isotopic uranium, and Radium-226, plus Radium-228 by beta counting (per NDEP).
7.	Dioxins/furans will be analyzed by EPA Method 8290 for all samples. Screening reports will be provided for 90% of the samples and full data packages for 10% of the samples.
8.	Polychlorinated biphenyls
9.	Soil samples for asbestos analyses will be collected from a depth of 0 to 2-inches bgs.
10.	Geotechnical Tests consist of: moisture content (ASTM D-2216), grain size analysis (ASTM D-422 and C117-04), Soil Dry Bulk Density (ASTM D-2937), Grain Density (ASTM D-854, Soil-Water Filled Porosity (ASTM D-2216); Vertical Hydraulic Conductivity (ASTM D-5084/USEPA 9100).
11.	SPLP samples will be analyzed by EPA method 1312 using two preparation methods: 1) with extraction fluid #2 (reagent water at pH 5.0±0.05), and 2) with extraction method #3 (reagent water); per NDEP.

Table B
Groundwater Sampling And Analysis Plan for LOU 7-9, 13, and 14 in Area II
Phase B Source Area Investigation Work Plan
Tronox Facility - Henderson Nevada

Grid Location	Location Area	Monitoring Well No.	Screen Interval (ft bgs)	Soil Type Expected Across Screen Interval[1]	Well Sampled for Phase A? (y/n)	Perchlorate (EPA 314.0)	Hex Cr (EPA 7199)	Metals	VOCs[2] (EPA 8260)	Wet Chemistry (a)	OCPs[3] (EPA 8081A)	SVOCs[4] (EPA 8270C)	Radionuclides[5]	Rationale
Wells are organized by grid location as shown on Plate A - Starting point is on the northwestern-most grid in Area II (L-4) and ending with the southeastern-most grid covering Area II (S-7).														
N5	II	M-75	34.6 - 49.3	Qal/MCfg1	no	X	X	X	X	X	X	X	X	Located to serve as a downgradient stepout for LOUs 7, 8, 9, and 45; as an upgradient stepout for LOUs 16, 17, 19, 53 and 57; and for general Site coverage.
N5	II	M-76	34.6 - 49.3	MCcg1	yes	X	X	X	X	X	X	X	X	Located to serve as a downgradient stepout for LOUs 8 and 45; as an upgradient stepout for LOUs 53 and 57; and for general Site coverage.
N6	II	M-2A*	nr	nr	yes	X	X	X	X	X	X	X	X	Located as a downgradient stepout for LOUs 7, 8, 9, 13, 14, 20, 34, and 45; as an upgradient stepout for LOUs 16, 17, 18, 22, 23, 53, and 57; and for general Site coverage.
N7	II	M-34	25 - 40	Qal/MCfg1	no	X	X	X	X	X	X	X	X	Located to evaluate the outfall of the culvert that empties into the Eastern Diversion segment of LOU 5; as a downgradient stepout for LOUs 13 and 14 as un upgradient step out for LOUs 20, 22, and 23; and for general Site coverage.
O5	II	M-21	18 - 38	MCfg1	no	X	X	X	X	X	X	X	X	Located to evaluate LOU 45; as an upgradient stepout for LOUs 7, 9, 13 and 14; as a downgradient stepout for LOU 59; and for general Site coverage.
O6	II	M-50	39.6 - 59.6	MCfg1	no	X	X	X	X	X	X	X	X	Located to serve as a downgradient stepout for a segment of LOU 59 located in Area II as a **???** well for LOUs 13 and 14; and for general Site coverage.
				Number of Field Samples:		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	

Notes:

*	Well completion information or boring log not available. Soil type inferred from nearby wells and geologic cross-section provided in the Phase A Source Area Investigation Report (ENSR 2007). ENSR is in the process of obtaining information from BMI.
X	Sample will be collected and analyzed.
1	It is anticipated that the large majority of the flow to the well will be from the coarse-grained sediments. As such, in the cases where there are two lithologies present across the screen interval, the water sampled will represent conditions in the coarse-grained interval.
2	VOCs = Volatile organic compounds (to include analysis for naphthalene).
3	OCPs = Organochlorine pesticides (to include analysis for hexachlorobenzene).
4	SVOCs = Semi volatile organic compounds.
5	Radionuclides consists of alpha spec reporting for isotopic Thorium and isotopic Uranium, and Radium-226, plus Radium-228 by beta counting (per NDEP).
IIIN/E/W/S	Well located outside (north, east, west, or south) of Area II.
nr	Not recorded in the All Wells Database (June 2008).
TBD	To be determined when well is constructed
(a)	Complete list of wet chemistry parameters are shown on Table 1. All groundwater samples will have pH measured in the field.
Qal	Quaternary Alluvium
MCfg1	Muddy Creek Formation - first fine-grained facies
MCcg1	Muddy Creek Formation - first coarse-grained facies

Summary of Available Data for LOUs 7, 8, 9, 13, and 14
Multiple Ponds in Central Area II Region

Tronox Facility – Henderson, Nevada

Soil and Groundwater Characterization Data

Summary of Available Data for LOUs 7, 8, 9, 13, and 14
Multiple Ponds in Central Area II Region

Tronox Facility – Henderson, Nevada

LOU-specific analytes identified include:

- Metals (Phase A list)
- Hexavalent chromium
- Perchlorate
- Wet chemistry analytes

The tables in **BOLD** below present historical data associated with these LOU-specific analytes.

LOUs 7, 8, 9, 13, and 14 Table 1 – Soil Characterization Data – Wet Chemistry
LOUs 7, 8, 9, 13, and 14 Table 2 – Groundwater Characterization Data – Wet Chemistry
LOUs 7, 8, 9, 13, and 14 Table 3 – Soil Characterization Data – Dioxins and Dibenzofurans
LOUs 7, 8, 9, 13, and 14 Table 4 – Soil Characterization Data – Metals
LOUs 7, 8, 9, 13, and 14 Table 5 – Groundwater Characterization Data – Metals
LOUs 7, 8, 9, 13, and 14 Table 6 – Groundwater Characterization Data – Routine Monitoring
LOUs 7, 8, 9, 13, and 14 Table 7 – Soil Characterization Data – Total Chromium
LOUs 7, 8, 9, 13, and 14 Table 8 – Groundwater Characterization Data – Chromium
LOUs 7, 8, 9, 13, and 14 Table 9 – Soil Characterization Data – Chromium
LOUs 7, 8, 9, 13, and 14 Table 10 – Groundwater Characterization Data – Routine Monitoring
LOUs 7, 8, 9, 13, and 14 Table 11 – Soil Characterization Data – Organochlorine Pesticides (OCPs)
LOUs 7, 8, 9, 13, and 14 Table 12 – Groundwater Characterization Data – Organochlorine Pesticides (OCPs)
LOUs 7, 8, 9, 13, and 14 Table 13 – Soil Characterization Data – Organophosphorus Pesticides (OPPs)
LOUs 7, 8, 9, 13, and 14 Table 14 – Groundwater Characterization Data – Organophosphorus Pesticides (OPPs)
LOUs 7, 8, 9, 13, and 14 Table 15 – Soil Characterization Data – PCBs
LOUs 7, 8, 9, 13, and 14 Table 16 – Groundwater Characterization Data – PCBs
LOUs 7, 8, 9, 13, and 14 Table 17 – Soil Characterization Data – Perchlorate
LOUs 7, 8, 9, 13, and 14 Table 18 – Groundwater Characterization Data – Perchlorate
LOUs 7, 8, 9, 13, and 14 Table 19 – Soil Characterization Data – Radionuclides
LOUs 7, 8, 9, 13, and 14 Table 20 – Groundwater Characterization Data – Radionuclides
LOUs 7, 8, 9, 13, and 14 Table 21 – Soil Characterization Data – SVOCs
LOUs 7, 8, 9, 13, and 14 Table 22 – Groundwater Characterization Data – SVOCs
LOUs 7, 8, 9, 13, and 14 Table 23 – Soil Characterization Data – TPH and Fuel Alcohols
LOUs 7, 8, 9, 13, and 14 Table 24 – Soil Characterization Data – VOCs
LOUs 7, 8, 9, 13, and 14 Table 25 – Groundwater Characterization Data – VOCs
LOUs 7, 8, 9, 13, and 14 Table 26 – Soil Characterization Data – Long Asbestos Fibers in Respirable Soil Fraction

Notes for Phase A Data Tables are presented at the end of the tables.

LOUs 7, 8, 9, 13, and 14 Table 1
Soil Characterization Data - Wet Chemistry

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.		SA11	SA11	SA11	SA11	SA11	SA12	SA12	SA12	SA12	
Sample ID		SA11-0.5	SA11-0.5D	SA11-10	SA11-20	SA11-30	SA12-0.5	SA12-10	SA12-20	SA12-30	
Sample Depth (ft)		0.5	0.5	10	20	30	0.5	10	20	30	
Sample Date		11/09/2006	11/09/2006	11/09/2006	11/09/2006	11/09/2006	11/10/2006	11/10/2006	11/10/2006	11/10/2006	
Wet Chemistry Parameter	**MSSL[2] mg/kg**										**Units**
Percent moisture	--	**7.6**	**12.0**	**6.9**	**4.6**	**38.8**	**10**	**6.7**	**7.6**	**38.0**	percent
Alkalinity (as CaCO3)	--	**339 J+**	**402 J+**	**97.6 J+**	52.4 UJ	81.7 UJ	**337**	**130**	**284**	80.6 U	mg/kg
Bicarbonate	--	**662 J+**	**1100 J+**	**694 J+**	**222 J+**	**322 J+**	**72.9**	**449**	**1110**	80.6 U	mg/kg
Total Alkalinity	--	**1000 J+**	**1500 J+**	**792 J+**	**233 J+**	**355 J+**	**409**	**579**	**1390**	**130**	mg/kg
Ammonia (as N)	--	5.4 UJ	5.7 UJ	5.4 UJ	5.2 UJ	8.2 UJ	5.6 UJ	5.4 UJ	5.4 UJ	8.1 UJ	mg/kg
Cyanide	1.37E+04	0.54 UJ	0.57 UJ	0.54 UJ	0.52 UJ	0.82 UJ	0.56 UJ	0.54 UJ	0.54 UJ	R	mg/kg
MBAS	--	2.6 U	2.2 U	2.7 U	2.8 U	3.5 U	2.1 U	2.2 U	**3.2 J**	**3.4 J**	mg/kg
pH (solid)	--	**9.8**	**8.8**	**8.4**	**8.4**	**8.5**	**8.1**	**8.2**	**8.4**	**7.4**	none
Bromide	--	2.7 U	28.4 U	26.8 U	**0.95 J**	4.1 U	2.8 U	2.7 U	2.7 U	**2.2 J**	mg/kg
Chlorate	--	**1300**	**1410**	5.4 U	5.2 U	**1370**	**1.9 J**	**8.4**	**7.2**	**660**	mg/kg
Chloride	--	**136**	**317**	**588**	**1980**	**518**	**7.1**	**16.7**	**16.8**	**3230**	mg/kg
Nitrate (as N)	--	**1.1 J+**	**3.5 J+**	**5.5**	**11.5**	**4.5**	**0.85 J+**	**2.7**	**0.23 J+**	**2.7 J+**	mg/kg
Nitrite	--	**2.0 J**	2.3 U	2.1 U	2.1 U	3.3 U	0.22 U	0.21 U	0.22 U	**17.2**	mg/kg
ortho-Phosphate	--	54.1 U	5.7 U	**2900 J**	**7760 J**	8.2 U	5.6 U	7.4 U	6.5 U	8.1 U	mg/kg
Sulfate	--	**93.6 J**	**199 J**	**381 J**	**49.7 J**	**174 J**	**153 J+**	**219 J+**	**84.8 J+**	**265 J+**	mg/kg
Total Organic Carbon	--	**6500**	**8700**	**7900**	**5300**	**3400**	**1980**	**7150**	**4300**	**4800**	mg/kg

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).

LOUs 7, 8, 9, 13, and 14 Table 2
Groundwater Characterization Data - Wet Chemistry Parameters

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	
Well ID		M2A	M76	
Sample ID		M2A	M76	
Sample Date		12/04/2006	12/04/2006	
Wet Chemistry Parameters	**MCL[2] mg/L**			**Units**
Total Dissolved Solids	5.00E+02 j	**12700**	**3970**	mg/L
Total Suspended Solids	--	**36.0 J**	**20.0 J**	mg/L
Alkalinity (as CaCO3)	--	5.0 U	5.0 U	mg/L
Bicarbonate	--	**92.0**	**125**	mg/L
Total Alkalinity	--	**92.0**	**125**	mg/L
Ammonia (as N)	--	50.0 U	50.0 U	ug/L
MBAS	--	**0.63**	**0.21**	mg/L
Cyanide	2.00E-01	R	R	ug/L
pH (liquid)	--	**7.2 J**	**7.2 J**	none
Specific Conductance	--	**2450 J+**	**2320 J+**	umhos/cm
Bromide	--	**0.54**	**0.96**	mg/L
Chlorate	--	**4600**	**820**	mg/L
Chloride	2.50E+02	**1800**	**829**	mg/L
Nitrate (as N)	1.00E+01	**13.6**	**8.8**	mg/L
Nitrite	1.00E+00	**22.5**	**14.5**	mg/L
ortho-Phosphate	--	500 U	**15.0**	mg/L
Sulfate	2.50E+02 j	**1250**	**770**	mg/L
Total Organic Carbon	--	50.0 U	50.0 U	mg/L

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(j) Secondary Drinking Water Regulation value.

LOUs 7, 8, 9, 13, and 14 Table 3
Soil Characterization Data - Dioxins and Dibenzofurans

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

			Sampling Program	Ph A[1]	Ph A	Ph A
			Boring No.	SA11	SA11	SA12
			Sample ID	SA11-0.5	SA11-0.5D	SA12-0.5
			Sample Depth (ft)	0.5	0.5	0.5
			Sample Date	11/09/2006	11/09/2006	11/10/2006
chemical_name:	**Method**	**Unit**	**MSSL[2] ng/kg**			
Dioxin 8290 SCREEN Total TEQ-ENSR Calculated (a) ng/kg		ng/kg	--	**10.3**		**0.078**
Dioxin SW 846 8290 Total TEQ-ENSR Calculated (a) ng/kg		ng/kg	--			
Dioxin 8290 SCREEN Total TEQ-ENSR Calculated (b) ng/kg		ng/kg	--	**10.3**		**0.11**
Dioxin SW 846 8290 Total TEQ-ENSR Calculated (b) ng/kg		ng/kg	--			
1,2,3,4,6,7,8-Heptachlorodibenzofuran	8290 Screen	ng/kg	--	**32.917**	**69.353**	**0.471**
1,2,3,4,6,7,8-Heptachlorodibenzofuran	SW 846 8290	ng/kg	--			
1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	**3.477**	**6.317**	**0.280**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--			
1,2,3,4,7,8,9-Heptachlorodibenzofuran	8290 Screen	ng/kg	--	**15.475**	**34.356**	0.073 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	SW 846 8290	ng/kg	--			
1,2,3,4,7,8-Hexachlorodibenzofuran	8290 Screen	ng/kg	--	**13.715**	**32.600**	**0.146**
1,2,3,4,7,8-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--			
1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	**0.279**	**0.600**	0.036 U
1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--			
1,2,3,6,7,8-Hexachlorodibenzofuran	8290 Screen	ng/kg	--	**8.318**	**19.180**	**0.060**
1,2,3,6,7,8-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--			
1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	**0.866**	**1.673**	**0.139**
1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--			
1,2,3,7,8,9-Hexachlorodibenzofuran	8290 Screen	ng/kg	--	**0.997**	**6.594**	0.044 U
1,2,3,7,8,9-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--			
1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	**0.845**	**1.687**	**0.198**
1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--			
1,2,3,7,8-Pentachlorodibenzofuran	8290 Screen	ng/kg	--	**6.223**	**16.527**	**0.068**
1,2,3,7,8-Pentachlorodibenzofuran	SW 846 8290	ng/kg	--			
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	**0.550**	**1.075**	0.028 U
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--			
2,3,4,6,7,8-Hexachlorodibenzofuran	8290 Screen	ng/kg	--	**3.861**	**9.620**	0.037 U
2,3,4,6,7,8-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--			
2,3,4,7,8-Pentachlorodibenzofuran	8290 Screen	ng/kg	--	**3.060**	**7.344**	**0.043**
2,3,4,7,8-Pentachlorodibenzofuran	SW 846 8290	ng/kg	--			
2,3,7,8-Tetrachlorodibenzofuran	8290 Screen	ng/kg	--	**7.570**	**19.669**	0.033 U
2,3,7,8-Tetrachlorodibenzofuran	SW 846 8290	ng/kg	--			
2,3,7,8-Tetrachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	1.00E+03 h,v	**0.209**	**0.454**	0.026 U
2,3,7,8-Tetrachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	1.00E+03 h,v			
Octachlorodibenzofuran	8290 Screen	ng/kg	--	**81.562**	**159.252**	**1.212**
Octachlorodibenzofuran	SW 846 8290	ng/kg	--			
Octachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	**6.222**	**9.591**	**1.472**

LOUs 7, 8, 9, 13, and 14 Table 3 (continued)
Soil Characterization Data - Dioxins and Dibenzofurans

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

			Sampling Program	Ph A[1]	Ph A	Ph A
			Boring No.	SA11	SA11	SA12
			Sample ID	SA11-0.5	SA11-0.5D	SA12-0.5
			Sample Depth (ft)	0.5	0.5	0.5
			Sample Date	11/09/2006	11/09/2006	11/10/2006
chemical_name:	**Method**	**Unit**	**MSSL[2] ng/kg**			
Octachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--			
Tetrachlorinated Dibenzofurans, (Total)	SW 846 8290	ng/kg	--			
Total HpCDD	SW 846 8290	ng/kg	--			
Total HpCDF	SW 846 8290	ng/kg	--			
Total HxCDD	SW 846 8290	ng/kg	--			
Total HxCDF	SW 846 8290	ng/kg	--			
Total PeCDD	SW 846 8290	ng/kg	--			
Total PeCDF	SW 846 8290	ng/kg	--			
Total TCDD	SW 846 8290	ng/kg	--			

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
(a) Calculated assuming 0 for non-detected congeners and 2006 toxic equivalency factors (TEFs).
(b) Calculated assuming 1/2 detection limit as proxy for non-detected congeners and 2006 TEFs.
(h) Dioxins and furans were expressed as 2,3,7,8- TCDD TEQ (toxic equivalents), calculated using the TEFs (Toxic Equivalency Factors) published by Van den Berg et al., 2006.
(v) USEPA. 1998. Approach for Addressing Dioxin in Soil at CERCLA and RCRA Sites. OSWER Directive 9200.4-26. April, 1998. A value of 1000 ng/kg is applicable to residential soils. The range of 5000 to 20000 ng/kg is applicable to commercial/industrial soils. The Agency for Toxic Substances and Disease Registry (ATSDR) provides a screening level of 50 ng/kg for dioxin in residential soil [http://www.atsdr.cdc.gov/substances/dioxin/policy/].

LOUs 7, 8, 9, 13, and 14 Table 4
Soil Characterization Data - Metals

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.		SA11	SA11	SA11	SA11	SA11	SA12	SA12	SA12	SA12	
Sample ID		SA11-0.5	SA11-0.5D	SA11-10	SA11-20	SA11-30	SA12-0.5	SA12-10	SA12-20	SA12-30	
Sample Depth (ft)		0.5	0.5	10	20	30	0.5	10	20	30	
Sample Date		11/09/2006	11/09/2006	11/09/2006	11/09/2006	11/09/2006	11/10/2006	11/10/2006	11/10/2006	11/10/2006	
Metals	**MSSL[2] mg/kg**										**Units**
Aluminum	1.00E+05	**7100**	**7150**	**7830**	**4880**	**15800**	**7740**	**6870**	**5750**	**17300**	mg/kg
Antimony	4.50E+02	**0.11 J-**	**0.13 J-**	**0.12 J-**	**0.083 J-**	**0.22 J-**	**0.14 J-**	**0.11 J-**	**0.083 J-**	**0.22 J-**	mg/kg
Arsenic	2.80E+02	**2.9**	**2.7**	**3.8**	**4.6**	**20.3**	**2.9**	**2.6**	**7.4**	**21.3**	mg/kg
Barium	1.00E+05	**187 J**	**155 J**	**159 J**	**128 J**	**64.1 J**	**168 J**	**178 J**	**111 J**	**64.7 J**	mg/kg
Beryllium	2.20E+03	**0.49**	**0.48**	**0.51**	**0.32**	**0.76**	**0.51**	**0.44**	**0.37**	**0.98**	mg/kg
Boron	1.00E+05	**14.6 J-**	**15.4 J-**	5.3 UJ	5.7 UJ	**19.5 J-**	9.0 UJ	7.1 UJ	5.7 UJ	**38.9 J-**	mg/kg
Cadmium	5.60E+02	**0.091**	**0.071**	**0.070**	**0.062**	**0.12**	**0.11**	**0.059**	**0.11**	**0.12**	mg/kg
Calcium	--	**29500**	**25300**	**23400**	**15100**	**10100**	**21700**	**27300**	**43000**	**8270**	mg/kg
Chromium (Total)	7.10E+01	**12.5 J-**	**13.1 J-**	**23.3 J-**	**11.7 J-**	**38.1 J-**	**8.2 J-**	**10.2 J-**	**6.1 J-**	**25.3 J-**	mg/kg
Chromium-hexavalent	5.00E+02	**2.1**	**2.1**	**11.8**	**3.1**	**2.1**	0.22 U	**0.13 J**	0.22 U	**0.26 J**	mg/kg
Cobalt	2.10E+03	**6.1 J-**	**6.3 J-**	**6.2 J-**	**3.2 J-**	**6.6 J-**	**5.5 J-**	**6.7 J-**	**4.1 J-**	**5.7 J-**	mg/kg
Copper	4.20E+04	**12.7 J**	**12.8 J**	**12.3 J**	**12.7 J**	**15.5 J**	**13.1 J**	**11.1 J**	**9.5 J**	**18.2 J**	mg/kg
Iron	1.00E+05	**11600**	**12100**	**11800**	**7650**	**17200**	**12000**	**11500**	**7660**	**18700**	mg/kg
Lead	8.00E+02	**7.0**	**8.2**	**8.2**	**6.0**	**10.0**	**8.1**	**7.0**	**5.4**	**10.5**	mg/kg
Magnesium	--	**7130 J-**	**7270 J-**	**10200 J-**	**5580 J-**	**47400 J-**	**5670 J-**	**9530 J-**	**6550 J-**	**44800 J-**	mg/kg
Manganese	3.50E+04	**250**	**261**	**298**	**128**	**335**	**248**	**278**	**131**	**229**	mg/kg
Molybdenum	5.70E+03	**0.48 J**	**0.48 J**	**0.41 J**	**0.44 J**	**0.84**	**0.67**	**0.43 J**	**0.36 J**	**1.1**	mg/kg
Nickel	2.30E+04	**11.8 J-**	**12.4 J-**	**12.3 J-**	**9.2 J-**	**14.0 J-**	**11.6 J-**	**11.4 J-**	**13.0 J-**	**13.5 J-**	mg/kg
Platinum	--	**0.011 J**	**0.012 J**	**0.013 J**	0.011 U	**0.018 J**	**0.012 J**	0.011 U	0.011 U	**0.023 J**	mg/kg
Potassium	--	**3510**	**2730**	**2730**	**2000**	**4110**	**2110**	**1270**	**1250**	**4780**	mg/kg
Selenium	5.70E+03	0.12 U	0.12 U	0.12 U	0.11 U	0.18 U	0.12 U	0.12 U	0.12 U	0.17 U	mg/kg
Silver	5.70E+03	**0.12 J**	**0.13 J**	**0.14 J**	**0.088 J**	**0.20 J**	**0.13 J**	**0.12 J**	**0.082 J**	**0.25 J**	mg/kg
Sodium	--	**2660 J-**	**2300 J-**	**3730 J-**	**1750 J-**	**3670 J-**	**662 J-**	**762 J-**	**661 J-**	**2280 J-**	mg/kg
Strontium	1.00E+05	**121 J**	**106 J**	**112 J**	**206 J**	**78.1 J**	**211 J**	**183 J**	**229 J**	**107 J**	mg/kg
Thallium	--	**0.096 J**	0.08 U	0.075 U	0.073 U	**0.24 J**	**0.086 J**	0.075 U	0.076 U	**0.24 J**	mg/kg
Tin	--	**0.52**	**0.47**	**0.46**	**0.41**	**0.81**	**0.51**	**0.43**	**0.33**	**0.97**	mg/kg
Titanium	--	**520**	**442**	**534**	**330**	**537**	**426**	**381**	**305**	**543**	mg/kg
Tungsten	--	**0.24 J-**	**0.27 J-**	**0.32 J-**	**0.24 J-**	**0.80 J-**	**0.28 J-**	**0.30 J-**	**0.21 J-**	**0.44 J-**	mg/kg
Uranium	--	**1.0**	**0.98**	**1.6**	**1.4**	**3.9**	**0.87**	**1.7**	**1.8**	**4.1**	mg/kg
Vanadium	5.70E+03	**29.6 J-**	**31.3 J-**	**31.9 J-**	**21.8 J-**	**27.6 J-**	**29.1 J-**	**33.2 J-**	**19.3 J-**	**40.0 J-**	mg/kg
Zinc	1.00E+05	**23.9 J-**	**24.9 J-**	**23.2 J-**	**16.6 J-**	**36.9 J-**	**24.8 J-**	**22.7 J-**	**16.7 J-**	**37.8 J-**	mg/kg
Mercury	3.41E+02 (t)	**0.014 J**	**0.015 J**	**0.026 J**	**0.0084 J**	**0.019 J**	**0.018 J**	**0.0084 J**	0.0072 UJ	**0.018 J**	mg/kg

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
(t) Value for mercury and compounds.

LOUs 7, 8, 9, 13, and 14 Table 5
Groundwater Characterization Data - Metals

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A[1]	Ph A[1]	
	Well ID:	M-2A	M-76	
	Sample ID	M-2A-Z	M-76-Z	
	Sample Date	05/09/2007	05/09/2007	
Metals	**MCL[2] ug/L**			**Unit**
Aluminum	5.00E+01 j	393 U	393 U	ug/L
Antimony	6.00E+00	25.0 U	25.0 U	ug/L
Arsenic	1.00E+01	100 U	100 U	ug/L
Barium	2.00E+03	**46.5 J**	23.5 U	ug/L
Beryllium	4.00E+00	4.4 U	4.4 U	ug/L
Boron	7.30E+03	**3210**	**3570**	ug/L
Cadmium	5.00E+00	2.9 U	2.9 U	ug/L
Calcium	--	**713000**	**120000**	ug/L
Chromium (Total)	1.00E+02	**18100**	**2380**	ug/L
Chromium-hexavalent	1.09E+02	**18700 J**	**2590 J**	ug/L
Cobalt	7.30E+02	15.7 U	15.7 U	ug/L
Copper	1.30E+03 p	12.5 U	12.5 U	ug/L
Iron	3.00E+02 j	470 UJ	470 UJ	ug/L
Lead	1.50E+01 u	24.6 U	24.6 U	ug/L
Magnesium	1.50E+05 a	**386000**	**74600**	ug/L
Manganese	5.00E+01 j	17.1 U	17.1 U	ug/L
Molybdenum	1.82E+02	25.0 U	**29.4 J**	ug/L
Nickel	7.30E+02	25.8 U	25.8 U	ug/L
Platinum	--	5.0 U	5.0 U	ug/L
Potassium	--	**34100**	**16900**	ug/L
Selenium	5.00E+01	50.0 U	50.0 U	ug/L
Silver	1.00E+02 j	10.1 U	10.1 U	ug/L
Sodium	--	**1620000**	**978000**	ug/L
Strontium	2.19E+04	**18600**	**3170**	ug/L
Thallium	2.00E+00	16.0 U	16.0 U	ug/L
Tin	2.19E+04	10.0 U	10.0 U	ug/L
Titanium	1.46E+05	19.6 U	19.6 U	ug/L
Tungsten	--	25.0 U	25.0 U	ug/L
Uranium	3.00E+01	**19.0 J**	**11.3 J**	ug/L
Vanadium	3.65E+01	80.0 U	80.0 U	ug/L
Zinc	5.00E+03 j	**146 J**	**96.5 J**	ug/L
Mercury	2.00E+00	**0.13 J+**	**0.17 J+**	ug/L

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(j) See footnote (b). Secondary Drinking Water Regulation value.
(p) The national primary drinking water regulations (b) lists a treatment technology action level of 1.3 mg/l as the MCL for Copper. Therefore, the secondary value is not used.
(u) See footnote (b). Treatment technology action level.
(a) NAC 445A.455 Secondary standards. Certain provisions of the National Primary Drinking Water Regulations are adopted by reference (NAC 445A.4525). These values are listed in the first column of this table and are therefore not listed again here. Only NAC 445A.455 Secondary standards are listed.

LOUs 7, 8, 9, 13, and 14 Table 6
Groundwater Characterization Data - Routine Monitoring[1]

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Well ID	Date	Depth to water (ft)	Perchlorate mg/l	Qual	MCL[2] mg/l	Total Chromium mg/l	Qual	MCL mg/L	TDS mg/l	Qual	MCL mg/L	Nitrate (as N)	Qual	MCL mg/L	Chlorate mg/l	Qual	MCL mg/L
M-2A	5/5/2006	---	430	d	1.80E-02 a,m	18	d	1.00E-01	12100		5.00E+02 j			1.00E+01			--
M-2A	5/4/2007	---	362		1.80E-02 a,m	17		1.00E-01	10200		5.00E+02 j			1.00E+01			--
M-21	5/3/2006	---	32	d	1.80E-02 a,m	1.5	d	1.00E-01	3650		5.00E+02 j			1.00E+01			--
M-21	5/2/2007	---	3.05		1.80E-02 a,m	1.4		1.00E-01	3460		5.00E+02 j			1.00E+01			--
M-34	2/2/2006	---	1800	d	1.80E-02 a,m	17	d	1.00E-01			5.00E+02 j			1.00E+01			--
M-34	5/3/2006	---	1700	d	1.80E-02 a,m	18	d	1.00E-01	8960		5.00E+02 j			1.00E+01			--
M-34	5/7/2006	40.86	1950	d	1.80E-02 a,m			1.00E-01	14500		5.00E+02 j			1.00E+01			--
M-34	8/2/2006	---	1550	d	1.80E-02 a,m	18	d	1.00E-01	7430		5.00E+02 j			1.00E+01			--
M-34	11/1/2006	---	1910	d	1.80E-02 a,m	18	d	1.00E-01	10900		5.00E+02 j			1.00E+01			--
M-34	1/31/2007	---	1860		1.80E-02 a,m	17		1.00E-01	12000		5.00E+02 j			1.00E+01			--
M-34	5/2/2007	37.52	1670		1.80E-02 a,m	17		1.00E-01	9850		5.00E+02 j			1.00E+01			--
M-34	8/1/2007	---	2130		1.80E-02 a,m	16		1.00E-01	11900		5.00E+02 j			1.00E+01			--
M-50	2/2/2006	46.44	970	d	1.80E-02 a,m	39	d	1.00E-01			5.00E+02 j			1.00E+01			--
M-50	5/3/2006	46.58	870	d	1.80E-02 a,m	37	d	1.00E-01	11700		5.00E+02 j			1.00E+01			--
M-50	8/2/2006	46.66	856	d	1.80E-02 a,m	34	d	1.00E-01	10400		5.00E+02 j			1.00E+01			--
M-50	11/1/2006	46.65	1030	d	1.80E-02 a,m	34	d	1.00E-01	13500		5.00E+02 j			1.00E+01			--
M-50	1/31/2007	46.66	801		1.80E-02 a,m	32		1.00E-01	14000		5.00E+02 j			1.00E+01			--
M-50	5/2/2007	46.53	776		1.80E-02 a,m	31		1.00E-01	12400		5.00E+02 j			1.00E+01			--
M-50	8/1/2007	47.02	1080		1.80E-02 a,m	29		1.00E-01	14100		5.00E+02 j			1.00E+01			--
M-75	2/3/2006	---	140	d	1.80E-02 a,m	6.9	d	1.00E-01			5.00E+02 j			1.00E+01			--
M-75	5/5/2006	---	110	d	1.80E-02 a,m	6	d	1.00E-01	5960		5.00E+02 j			1.00E+01			--
M-75	11/3/2006	---	99.8	d	1.80E-02 a,m	5.2	d	1.00E-01	5090		5.00E+02 j			1.00E+01			--
M-75	2/2/2007	---	91.3		1.80E-02 a,m	5.3		1.00E-01	4990		5.00E+02 j			1.00E+01			--
M-75	5/4/2007	---	83.7		1.80E-02 a,m	4.7		1.00E-01	5080		5.00E+02 j			1.00E+01			--
M-76	2/3/2006	39.05	80	d	1.80E-02 a,m	3.1	d	1.00E-01			5.00E+02 j			1.00E+01			--
M-76	5/5/2006	39.08	83	d	1.80E-02 a,m	3.6	d	1.00E-01	4400		5.00E+02 j			1.00E+01			--
M-76	11/3/2006	38.74	81.3	d	1.80E-02 a,m	4	d	1.00E-01	4200		5.00E+02 j			1.00E+01			--
M-76	2/2/2007	38.80	97.6		1.80E-02 a,m	3.1		1.00E-01	3980		5.00E+02 j			1.00E+01			--
M-76	5/4/2007	39.15	77.9		1.80E-02 a,m	3.7		1.00E-01	4320		5.00E+02 j			1.00E+01			--

Notes:
1. ENSR, 2007, Quarterly Performance Report for Remediation Systems, Tronox Facility - Henderson, Nevada, July – September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(a) NAC 445A.455 Secondary standards. Certain provisions of the National Primary Drinking Water Regulations are adopted by reference (NAC 445A.4525). These values are listed in the first column of this table and are therefore not listed again here. Only NAC 445A.455 Secondary standards are listed.
(m) Equal to the provisional action level derived by NDEP as referenced in "Defining a Perchlorate Drinking Water Standard". NDEP Bureau of Corrective Action. URL [http://ndep.nv.gov/bca/perchlorate02_05.htm].
(j) Secondary Drinking Water Regulation value.

< = less than the reporting limit
Blank cell or --- = no data and or no qualifier
Qual = data qualifiers applied by laboratory or during data validation
TDS = Total Dissolved Solids
mg/l = milligram per liter

Laboratory Qualifiers:
d = the sample was diluted

LOUs 7, 8, 9, 13, and 14 Table 7
Soil Characterization Data - Total Chromium

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Boring Number	Sample Date	Sample Depth (ft bgs)	Total Chromium [1] (mg/kg)	MSSL[2] mg/kg	pH [3]
Old P-2 Pond					
SB2-9	Apr-97	0-1.0	493 [5]	7.10E+01	9.5
SB2-9 [4]	Apr-97	2-3	141	7.10E+01	9.7 *
SB2-10	Apr-97	0-1.0	1,560 [5]	7.10E+01	9.8
SB2-10 [4]	Apr-97	2-3	679	7.10E+01	10.0*
SB2-11	Apr-97	0-1.0	1,130 [5]	7.10E+01	9.6
SB2-11 [4]	Apr-97	2-3	107	7.10E+01	10*
SB2-12	Apr-97	0-1.0	884 [5]	7.10E+01	9.5
SB2-12	Apr-97	2-3	861	7.10E+01	9.4
SB2-13	Apr-97	0-1.0	532 [5]	7.10E+01	9.9
SB2-13	Apr-97	0-1.0 (Duplicate)	481 [5]	7.10E+01	9.9
SB2-13 [4]	Apr-97	2-3	23.5	7.10E+01	10.2*
P-3 Pond					
SB2-1	Apr-97	0-1.0	1,030	7.10E+01	9.7 *
SB2-1S	Apr-97	Lab Duplicate	1,030 [5]	7.10E+01	9.7 *
SB2-1	Apr-97	2-3	131	7.10E+01	9.9
SB2-2	Apr-97	0-1.0	108 [5]	7.10E+01	9.6
SB2-2 [4]	Apr-97	2-3	2,130	7.10E+01	9.6*
SB2-2D [4]	Apr-97	Lab Duplicate	1,770	7.10E+01	9.60*
SB2-3	Apr-97	0-1.0	92.6 [5]	7.10E+01	10.3
SB2-3	Apr-97	2-3	NA	7.10E+01	NA
SB2-4	Apr-97	0-1.0	261 [5]	7.10E+01	10.4
SB2-4 [4]	Apr-97	2-3	78.7	7.10E+01	10.4*
SB2-5	Apr-97	0-1.0	131	7.10E+01	9.7
SB2-5	Apr-97	2-3	NA	7.10E+01	NA
SB2-6	Apr-97	0-1.0	24.8 [5]	7.10E+01	9.1
SB2-6	Apr-97	2-3	NA	7.10E+01	NA
SB2-7	Apr-97	0-1.0	224 [5]	7.10E+01	9.7
SB2-7 [4]	Apr-97	2-3	181	7.10E+01	10.5*
SB2-8	Apr-97	0-1.0	1,890 [5]	7.10E+01	10
SB2-8	Apr-97	0-1.0 (Duplicate)	1,680 [5]	7.10E+01	9.9
SB2-8 [4]	Apr-97	2-3	1,780	7.10E+01	9.9*
Old P-2 Pond – Interior					
SB2-14-1.5	Mar-99	1.5	59	7.10E+01	10
SB2-14-1.5D	Mar-99	Duplicate-1.5	76	7.10E+01	10
SB2-14-3	Mar-99	3	45	7.10E+01	10
SB2-14-4.5	Mar-99	4.5	36	7.10E+01	10
SB2-14-6	Mar-99	6	54	7.10E+01	9.6
SB2-14-7.5	Mar-99	7.5	51	7.10E+01	9.5
SB2-14-9	Mar-99	9	40	7.10E+01	9.7
SB2-14-10.5	Mar-99	10.5	42	7.10E+01	9.7
SB2-14-12	Mar-99	12	82	7.10E+01	9.8
SB2-14-13.5	Mar-99	13.5	57	7.10E+01	9.6
SB2-14-15	Mar-99	15	92	7.10E+01	9.2
SB2-14-16.5	Mar-99	16.5	75	7.10E+01	9.5
SB2-14-18	Mar-99	18	140	7.10E+01	9.3
SB2-14-19.5	Mar-99	19.5	46	7.10E+01	8.5
SB2-14-21	Mar-99	21	110	7.10E+01	8.7

LOUs 7, 8, 9, 13, and 14 Table 7 (continued)
Soil Characterization Data - Total Chromium

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Boring Number	Sample Date	Sample Depth (ft bgs)	Total Chromium [1] (mg/kg)	MSSL[2] mg/kg	pH [3]
SB2-14-22.5	Mar-99	22.5	100	7.10E+01	8.5
SB2-14-24	Mar-99	24	320	7.10E+01	8.1
SB2-14-25.5	Mar-99	25.5	250	7.10E+01	8.5
SB2-14-27	Mar-99	27	540	7.10E+01	8.2
SB2-14-28.5	Mar-99	28.5	280	7.10E+01	8.3
SB2-14-30	Mar-99	30	160	7.10E+01	8.6
SB2-14-31.5	Mar-99	31.5	99	7.10E+01	8.7
SB2-14-33	Mar-99	33	46	7.10E+01	8.2
SB2-15-1.5	Mar-99	1.5	98	7.10E+01	9.5
SB2-15-3	Mar-99	3	63	7.10E+01	9.6
SB2-15-4.5	Mar-99	4.5	150	7.10E+01	9.3
SB2-15-6	Mar-99	6	170	7.10E+01	9.4
SB2-15-7.5	Mar-99	7.5	230	7.10E+01	8.9
SB2-15-9	Mar-99	9	210	7.10E+01	9.1
SB2-15-10.5	Mar-99	10.5	200	7.10E+01	9.5
SB2-15-12	Mar-99	12	170	7.10E+01	9.2
SB2-15-13.5	Mar-99	13.5	190	7.10E+01	9.3
SB2-15-15	Mar-99	15	160	7.10E+01	9.1
SB2-15-16.5	Mar-99	16.5	18	7.10E+01	9.2
SB2-15-18	Mar-99	18	20	7.10E+01	9.9
SB2-15-19.5	Mar-99	19.5	27	7.10E+01	9.5
SB2-15-21	Mar-99	21	21	7.10E+01	9.6
SB2-15-22.5	Mar-99	22.5	31	7.10E+01	8.7
SB2-15-24	Mar-99	24	51	7.10E+01	8.1
SB2-15-25.5	Mar-99	25.5	61	7.10E+01	8.2
SB2-15-27	Mar-99	27	100	7.10E+01	8.6
SB2-15-28.5	Mar-99	28.5	53	7.10E+01	9.2
SB2-15-30	Mar-99	30	23	7.10E+01	9.7
SB2-15-31.5	Mar-99	31.5	28	7.10E+01	9.2
SB2-15-33	Mar-99	33	26	7.10E+01	8.9
Old P-3 Pond – Interior					
SB2-16-1.5	Mar-99	1.5	22	7.10E+01	9.1
SB2-16-3	Mar-99	3	19	7.10E+01	9.2
SB2-16-3D	Mar-99	3 Duplicate	17	7.10E+01	9
SB2-16-4.5	Mar-99	4.5	18	7.10E+01	9
SB2-16-6	Mar-99	6	15	7.10E+01	8.9
SB2-16-7.5	Mar-99	7.5	20	7.10E+01	8.7
SB2-16-9	Mar-99	9	44	7.10E+01	8.6
SB2-16-10.5	Mar-99	10.5	23	7.10E+01	8.6
SB2-16-12	Mar-99	12	18	7.10E+01	8.6
SB2-16-13.5	Mar-99	13.5	17	7.10E+01	8.6
SB2-16-15	Mar-99	15	14	7.10E+01	8.5
SB2-16-16.5	Mar-99	16.5	12	7.10E+01	8.4
SB2-16-18	Mar-99	18	12	7.10E+01	8.7
SB2-16-19.5	Mar-99	19.5	11	7.10E+01	8.8
SB2-16-21	Mar-99	21	12	7.10E+01	8.8
SB2-16-22.5	Mar-99	22.5	11	7.10E+01	8.8
SB2-16-24	Mar-99	24	18	7.10E+01	8.7
SB2-16-25.5	Mar-99	25.5	16	7.10E+01	8.2
SB2-16-27	Mar-99	27	16	7.10E+01	8.3
SB2-16-28.5	Mar-99	28.5	51(JI)	7.10E+01	8.2
SB2-16-30	Mar-99	30	20	7.10E+01	8.3
SB2-16-31.5	Mar-99	31.5	21	7.10E+01	8.5

LOUs 7, 8, 9, 13, and 14 Table 7 (continued)
Soil Characterization Data - Total Chromium

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Boring Number	Sample Date	Sample Depth (ft bgs)	Total Chromium [1] (mg/kg)	MSSL[2] mg/kg	pH [3]
SB2-16-33	Mar-99	33	23	7.10E+01	8.1
SB2-16-34.5	Mar-99	34.5	22	7.10E+01	8.1
SB2-17-1.5	Mar-99	1.5	140	7.10E+01	10
SB2-17-3	Mar-99	3	38	7.10E+01	9.5
SB2-17-4.5	Mar-99	4.5	36	7.10E+01	9.6
SB2-17-6	Mar-99	6	32	7.10E+01	9.7
SB2-17-7.5	Mar-99	7.5	28	7.10E+01	9.8
SB2-17-9	Mar-99	9	32	7.10E+01	9.7
SB2-17-10.5	Mar-99	No sample taken		7.10E+01	
SB2-17-12	Mar-99	12	47	7.10E+01	9.6
SB2-17-13.5	Mar-99	13.5	53	7.10E+01	9.3
SB2-17-15	Mar-99	15	130	7.10E+01	9.3
SB2-17-16.5	Mar-99	16.5	160	7.10E+01	9.2
SB2-17-18	Mar-99	18	190	7.10E+01	8.9
SB2-17-19.5	Mar-99	19.5	78	7.10E+01	9.1
SB2-17-21	Mar-99	21	87	7.10E+01	9.1
SB2-17-22.5	Mar-99	22.5	87	7.10E+01	9.1
SB2-17-24	Mar-99	24	85	7.10E+01	9.1
SB2-17-25.5	Mar-99	25.5	140	7.10E+01	9.2
SB2-17-27	Mar-99	27	130	7.10E+01	8.8
SB2-17-28.5	Mar-99	28.5	190	7.10E+01	8.2
SB2-17-30	Mar-99	30	48	7.10E+01	8.2
SB2-17-31.5	Mar-99	31.5	47	7.10E+01	8.4
SB2-17-33	Mar-99	33	100	7.10E+01	8.7
Old P-2 Pond – Northern Perimeter					
SB2-18-2	Mar-99	2	13	7.10E+01	9.1
SB2-18-5D	Mar-99	5 Duplicate	13	7.10E+01	8.5
SB2-18-6.5	Mar-99	6.5	14	7.10E+01	9.2
SB2-18-8	Mar-99	8	19	7.10E+01	8.8
SB2-1 8-9.5	Mar-99	9.5	8.2	7.10E+01	8.1
SB2-18-11	Mar-99	11	15	7.10E+01	8.2
SB2-18-12.5	Mar-99	12.5	19	7.10E+01	8.4
SB2-18-14	Mar-99	14	14	7.10E+01	8.3
SB2-18-15.5	Mar-99	15.5	15	7.10E+01	8
SB2-18-17	Mar-99	17	14	7.10E+01	8.1
SB2-18-18.5	Mar-99	18.5	14	7.10E+01	7.9
SB2-18-20	Mar-99	20	21	7.10E+01	8.1
SB2-18-21.5	Mar-99	21.5	18	7.10E+01	8.1
SB2-18-23	Mar-99	23	12	7.10E+01	8.1
SB2-18-24.5	Mar-99	24.5	12	7.10E+01	8
SB2-18-26	Mar-99	26	7.9	7.10E+01	7.9
SB2-18-27.5	Mar-99	27.5	10	7.10E+01	8.1
SB2-18-29	Mar-99	29	12	7.10E+01	8.2
SB2-18-30.5	Mar-99	30.5	8.9	7.10E+01	8
SB2-18-32	Mar-99	32	8.8	7.10E+01	7.9
SB2-18-33.5	Mar-99	33.5	9.2	7.10E+01	8.3
SB2-18-35	Mar-99	35	14	7.10E+01	7.8
SB2-18-36.5	Mar-99	36.5	14	7.10E+01	7.9
SB2-18-38	Mar-99	38	39	7.10E+01	8.1
SB2-18-39.5	Mar-99	39.5	29	7.10E+01	8.9
SB2-18-41	Mar-99	41	44	7.10E+01	8.3

LOUs 7, 8, 9, 13, and 14 Table 7 (continued)
Soil Characterization Data - Total Chromium

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Boring Number	Sample Date	Sample Depth (ft bgs)	Total Chromium [1] (mg/kg)	MSSL[2] mg/kg	pH [3]
Old P-2 Pond Eastern Perimeter					
SB2-19-2	Mar-99	2	3.6	7.10E+01	9.7
SB2-19-6.5	Mar-99	6.5	3.4	7.10E+01	9.9
SB2-19-8	Mar-99	8	12	7.10E+01	9.6
SB2-19-9.5	Mar-99	9.5	12	7.10E+01	8.7
SB2-19-11	Mar-99	11	10	7.10E+01	9.7
SB2-19-12.5	Mar-99	12.5	12	7.10E+01	9.2
SB2-19-14	Mar-99	14	11	7.10E+01	8.8
SB2-19-15.5	Mar-99	15.5	11	7.10E+01	9.6
SB2-19-17	Mar-99	17	14	7.10E+01	8.8
SB2-19-18.5	Mar-99	18.5	11	7.10E+01	8.7
SB2-19-20	Mar-99	20	10	7.10E+01	8.5
SB2-19-21.5	Mar-99	21.5	13	7.10E+01	8.8
SB2-19-23	Mar-99	23	10	7.10E+01	8.3
SB2-19-24.5	Mar-99	24.5	8.4	7.10E+01	8.8
SB2-19-26	Mar-99	26	9.5	7.10E+01	8.8
SB2-19-27.5	Mar-99	27.5	8.1	7.10E+01	8.4
SB2-19-29	Mar-99	29	7.9	7.10E+01	8.6
SB2-19-30.5	Mar-99	30.5	11	7.10E+01	8.6
SB2-19-32	Mar-99	32	9.6	7.10E+01	8.3
SB2-19-33.5	Mar-99	33.5	11	7.10E+01	8.1
SB2-19-35	Mar-99	35	20	7.10E+01	8.2
SB2-19-36.5	Mar-99	36.5	30	7.10E+01	8.1
SB2-19-38	Mar-99	38	22	7.10E+01	8.1
SB2-19-39.5	Mar-99	39.5	23	7.10E+01	8.1
SB2-19-41	Mar-99	41	20	7.10E+01	8.2
SB2-19-42.5	Mar-99	42.5	27	7.10E+01	8.1
Old P-3 Pond – Northern Perimeter					
SB2-20-6.5	Mar-99	6.5	31	7.10E+01	8.3
SB2-20-6.5D	Mar-99	6.5 Duplicate	31	7.10E+01	8.3
SB2-20-7	Mar-99	7	39	7.10E+01	8.2
SB2-20-9.5	Mar-99	9.5	49	7.10E+01	8.3
SB2-20-11	Mar-99	11	40	7.10E+01	8.2
SB2-20-11D	Mar-99	11 Duplicate	42	7.10E+01	8.3
SB2-20-12.5	Mar-99	12.5	39	7.10E+01	8.4
SB2-20-14	Mar-99	14	44	7.10E+01	9
SB2-20-15.5	Mar-99	15.5	54	7.10E+01	8.7
SB2-20-17	Mar-99	17	42	7.10E+01	8.9
SB2-20-18.5	Mar-99	18.5	36	7.10E+01	8.7
SB2-20-20	Mar-99	20	37	7.10E+01	8.8
SB2-20-21.5	Mar-99	21.5	39	7.10E+01	8.7
SB2-20-23	Mar-99	23	42	7.10E+01	8.8
SB2-20-24.5	Mar-99	24.5	39	7.10E+01	8.7
SB2-20-26	Mar-99	26	39	7.10E+01	8.7
SB2-20-27.5	Mar-99	27.5	23	7.10E+01	9.8
SB2-20-29	Mar-99	29	30	7.10E+01	9.2
SB2-20-30.5	Mar-99	30.5	16	7.10E+01	9.7
SB2-20-32	Mar-99	32	15	7.10E+01	9.5
SB2-20-33.5	Mar-99	33.5	14	7.10E+01	8.9
SB2-20-35	Mar-99	35	100	7.10E+01	8.8
SB2-20-36.5	Mar-99	36.5	53	7.10E+01	9
SB2-20-38	Mar-99	38	39	7.10E+01	9.3
SB2-20-39.5	Mar-99	39.5	19	7.10E+01	9.2
SB2-20-41	Mar-99	41	22	7.10E+01	8.8

LOUs 7, 8, 9, 13, and 14 Table 7 (continued)
Soil Characterization Data - Total Chromium

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Boring Number	Sample Date	Sample Depth (ft bgs)	Total Chromium [1] (mg/kg)	MSSL[2] mg/kg	pH [3]
Old P-3 Pond – Western Perimeter					
SB2-21-6.5	Mar-99	6.5	10	7.10E+01	8.4
SB2-21-8	Mar-99	8	13	7.10E+01	8.2
SB2-21-8D	Mar-99	8 Duplicate	13	7.10E+01	8.5
SB2-21-9.5	Mar-99	9.5	11	7.10E+01	8
SB2-21-11	Mar-99	11	12	7.10E+01	8
SB2-21-12.5	Mar-99	12.5	12	7.10E+01	8.6
SB2-21-14	Mar-99	14	15	7.10E+01	8.4
SB2-21-15.5	Mar-99	15.5	12	7.10E+01	8.5
SB2-21-17	Mar-99	17	14	7.10E+01	8.6
SB2-21-18.5	Mar-99	18.5	14	7.10E+01	8.4
SB2-21-20	Mar-99	20	15	7.10E+01	8.4
SB2-21-21.5	Mar-99	21.5	13	7.10E+01	8.5
SB2-21-23	Mar-99	23	15	7.10E+01	8.8
SB2-21-24.5	Mar-99	24.5	13	7.10E+01	8.6
SB2-21-26	Mar-99	26	12	7.10E+01	8.8
SB2-21-27.5	Mar-99	27.5	11	7.10E+01	9
SB2-21-29	Mar-99	29	6.5	7.10E+01	9.4
SB2-21-30.5	Mar-99	30.5	13	7.10E+01	9.2
SB2-21-32	Mar-99	32	10	7.10E+01	9.1
SB2-21-33.5	Mar-99	33.5	24	7.10E+01	8.2
SB2-21-35	Mar-99	35	16	7.10E+01	8.4
SB2-21-36.5	Mar-99	36.5	18	7.10E+01	8.2
SB2-21-38	Mar-99	38	28	7.10E+01	8.1
SB2-21-39.5	Mar-99	39.5	23	7.10E+01	8.1
SB2-21-41	Mar-99	41	18	7.10E+01	8.1
SB2-21-42.5	Mar-99	42.5	21	7.10E+01	8.1
Old P-3 Pond – Southern Perimeter					
SB2-22-6.5	Mar-99	6.5	12	7.10E+01	8.9
SB2-22-8	Mar-99	8	13	7.10E+01	8.6
SB2-22-9.5	Mar-99	9.5	12	7.10E+01	8.6
SB2-22-11	Mar-99	11	12	7.10E+01	8.5
SB2-22-12.5	Mar-99	12.5	14	7.10E+01	8.5
SB2-22B-15.5	Mar-99	15.5	17	7.10E+01	8.4
SB2-22B-17	Mar-99	17	17	7.10E+01	8.2
SB2-22B-18.5	Mar-99	18.5	15	7.10E+01	8.1
SB2-22B-20	Mar-99	20	14	7.10E+01	8.2
SB2-22B-21.5	Mar-99	21.5	16	7.10E+01	8.4
SB2-22B-23	Mar-99	23	15	7.10E+01	8.5
SB2-22B-24.5	Mar-99	24.5	14	7.10E+01	7.9
SB2-22B-26	Mar-99	26	12	7.10E+01	8.4
SB2-22B-27.5	Mar-99	27.5	10	7.10E+01	8.3
SB2-22B-29	Mar-99	29	6	7.10E+01	8.5
SB2-22B-30.5	Mar-99	30.5	8	7.10E+01	8.4
SB2-22B-32	Mar-99	32	13	7.10E+01	8.4
SB2-22B-33.5	Mar-99	33.5	6.6	7.10E+01	8.1
SB2-22B-35	Mar-99	35	18	7.10E+01	7.8
SB2-22B-36.5	Mar-99	36.5	12	7.10E+01	8.4
SB2-22B-38	Mar-99	38	25	7.10E+01	8.4
SB2-22B-39.5	Mar-99	39.5	19	7.10E+01	8.2
SB2-22B-41	Mar-99	41	21	7.10E+01	8.1
SB2-22B-42.5	Mar-99	42.5	25	7.10E+01	8.1
SB2-22B-44	Mar-99	44	19	7.10E+01	8.2

LOUs 7, 8, 9, 13, and 14 Table 7 (continued)
Soil Characterization Data - Total Chromium

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Boring Number	Sample Date	Sample Depth (ft bgs)	Total Chromium [1] (mg/kg)	MSSL[2] mg/kg	pH [3]
Old P-2 Pond – Southwestern Perimeter					
SB2-23-6.5	Mar-99	6.5	14	7.10E+01	8.9
SB2-23-8	Mar-99	8	15	7.10E+01	8.9
SB2-23-9.5	Mar-99	9.5	15	7.10E+01	9.1
SB2-23-11	Mar-99	11	12	7.10E+01	8.8
SB2-23-12.5	Mar-99	12.5	14	7.10E+01	8.8
SB2-23-14	Mar-99	14	14	7.10E+01	8.7
SB2-23-15.5	Mar-99	15.5	15	7.10E+01	8.7
SB2-23-17	Mar-99	17	11	7.10E+01	8.8
SB2-23-18.5	Mar-99	18.5	14	7.10E+01	8.7
SB2-23-20	Mar-99	20	12	7.10E+01	8.6
SB2-23-20D	Mar-99	20 Duplicate	13	7.10E+01	8.9
SB2-23-21.5	Mar-99	21.5	14	7.10E+01	8.7
SB2-23-23	Mar-99	23	8.9	7.10E+01	8.9
SB2-23-24.5	Mar-99	24.5	15	7.10E+01	9.1
SB2-23-26	Mar-99	26	7.6	7.10E+01	8.5
SB2-23-27.5	Mar-99	27.5	12	7.10E+01	8.3
SB2-23-29	Mar-99	29	12	7.10E+01	8.3
SB2-23-30.5	Mar-99	30.5	15	7.10E+01	8.2
SB2-23-32	Mar-99	32	16	7.10E+01	8.5
SB2-23-33.5	Mar-99	33.5	47	7.10E+01	8.5
SB2-23-35	Mar-99	35	16	7.10E+01	8.5
SB2-23-36.5	Mar-99	36.5	18	7.10E+01	8.4
SB2-23-38	Mar-99	38	23	7.10E+01	8.3
SB2-23-39.5	Mar-99	39.5	32	7.10E+01	8.5
SB2-23-41	Mar-99	41	20	7.10E+01	8.5
Old P-2 Pond – Southern Perimeter					
SB2-24-6.5	Mar-99	6.5	18	7.10E+01	8.6
SB2-24-7	Mar-99	7	16	7.10E+01	8.4
SB2-24-9.5	Mar-99	9.5	14	7.10E+01	8.4
SB2-24-11	Mar-99	11	16	7.10E+01	8.8
SB2-24-12.5	Mar-99	12.5	15	7.10E+01	9.9
SB2-24-14	Mar-99	14	16	7.10E+01	9.7
SB2-24-15.5	Mar-99	15.5	16	7.10E+01	9.5
SB2-24-17	Mar-99	17	15	7.10E+01	9.3
SB2-24-18.5	Mar-99	18.5	11	7.10E+01	9.6
SB2-24-20	Mar-99	20	12	7.10E+01	9.2
SB2-24-20D	Mar-99	20	15	7.10E+01	9.3
SB2-24-21.5	Mar-99	21.5	13	7.10E+01	9.1
SB2-24-23	Mar-99	23	10	7.10E+01	8.4
SB2-24-24.5	Mar-99	24.5	11	7.10E+01	8.2
SB2-24-26	Mar-99	26	10	7.10E+01	8.3
SB2-24-27.5	Mar-99	27.5	6	7.10E+01	8.1
SB2-24-29	Mar-99	29	14	7.10E+01	8
SB2-24-30.5	Mar-99	30.5	11	7.10E+01	8.3
SB2-24-32	Mar-99	32	15	7.10E+01	8.5
SB2-24-33.5	Mar-99	33.5	9.3	7.10E+01	8.5
SB2-24-35	Mar-99	35	32	7.10E+01	8.1
SB2-24-36.5	Mar-99	36.5	42	7.10E+01	8.3
SB2-24-38	Mar-99	38	17	7.10E+01	8.2
SB2-24-39.5	Mar-99	39.5	99	7.10E+01	8.2
SB2-24-41	Mar-99	41	37	7.10E+01	8.5

LOUs 7, 8, 9, 13, and 14 Table 7 (continued)
Soil Characterization Data - Total Chromium

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Notes:
1. Chromium analysis used EPA Method 6010. Method Detection Limit for SB2-1 through SB2-13 is 0.8 mg/kg. The Laboratory Reporting Limit for SB2-14 through SB2-24 is 0.5 mg/kg.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
3. pH analysis used Method 9045, laboratory reporting limit = 0.01 mg/kg.
4. Sample removed from hold status and analyzed after receiving preliminary shallow sample results.
5. Relative percent difference (RPD) exceeded acceptable quality control limits.

ft bgs = feet below ground surface
0-12 = shallow sample (referred to as -S in text) collected from 0 to 12 inches bgs
24-36 = deep sample (referred to as -D in text) collected from 24 to 36 inches bgs
Lab Dup= Laboratory Duplicate Analysis
D or DUP = duplicate sample
Duplicate 1.5 = Duplicate Sample taken at the specific depth (i.e. 1.5 feet bgs)
NA =not analyzed
* = Holding time for soil pH had expired
JI = The batch MS and/or MSD were outside accpetance limits. The batch LCS was acceptable.
Source: SB2-1 through SB2-13 from ENSR, 1997, Phase II ECA; SB2-14 through SB2-24 from ENSR, 2001, Supplemental Phase II ECA.

LOUs 7, 8, 9, 13, and 14 Table 8
Groundwater Characterization Data - Chromium[1]

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Sample #	Sample Date	Chromium (mg/l) MDL= 0.10 (mg/l)	MCL[2] mg/l
B-1 0 - 0.5'	8/9/85	0.11	1.00E-01
B-1 0.5 - 1.5'	8/9/85	<0.10	1.00E-01
B-1 1.5 - 2.5'	8/9/85	<0.10	1.00E-01
B-1 2.5 - 3.5'	8/9/85	<0.10	1.00E-01
B-1 3.5 - 4.5'	8/9/85	<0.10	1.00E-01
B-2 0 - 0.5'	8/9/85	<0.10	1.00E-01
B-2 0.5 - 1.5'	8/9/85	0.41	1.00E-01
B-2 1.5 - 2.5'	8/9/85	0.10	1.00E-01
B-2 2.5 - 3.5'	8/9/85	<0.10	1.00E-01
B-2 3.5 - 4.5'	8/9/85	<0.10	1.00E-01
B-13 0 - 0.5'	8/9/85	0.27	1.00E-01
B-3 0.5 - 1.5'	8/9/85	<0.10	1.00E-01
B-3 1.5 - 2.5'	8/9/85	<0.10	1.00E-01
B-3 2.5 - 3.5'	8/9/85	<0.10	1.00E-01
B-3 3.5 - 4.5'	8/9/85	<0.10	1.00E-01
B-4 0 - 0.5'	8/9/85	<0.10	1.00E-01
B-4 0.5 - 1.5'	8/9/85	<0.10	1.00E-01
B-4 1.5 - 2.5'	8/9/85	<0.10	1.00E-01
B-4 2.5 - 3.5'	8/9/85	<0.10	1.00E-01
B-4 3.5 - 4.5'	8/9/85	<0.10	1.00E-01
B-5 0 - 0.5'	8/9/85	0.21	1.00E-01
B-5 0.5 - 1.5'	8/9/85	<0.10	1.00E-01
B-5 1.5 - 2.5'	8/9/85	<0.10	1.00E-01
B-5 2.5 - 3.5'	8/9/85	<0.10	1.00E-01
B-5 3.5 - 4.5'	8/9/85	<0.10	1.00E-01
B-6 0 - 0.5'	8/9/85	0.25	1.00E-01
B-6 0.5 - 1.5'	8/9/85	<0.10	1.00E-01
B-6 1.5 - 2.5'	8/9/85	0.10	1.00E-01
B-6 2.5 - 3.5'	8/9/85	0.11	1.00E-01
B-6 3.5 - 4.5'	8/9/85	<0.10	1.00E-01

Notes:
1. ENSR, 2007, Quarterly Performance Report for Remediation Systems, Tronox LLC, Henderson, Nevada, July-September 2007, November 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
MDL = Method Detection Limit
mg/l = milligrams per liter
< = not detected above the designated method detection limit.
Source: Kerr-McGee, 1996b, Response to LOU Comments.
Lab: Water Analysis Laboratory, Desert Research Institute

LOUs 7, 8, 9, 13, and 14 Table 9
Soil Characterization Data - Chromium

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Analysis of soil from Pond S-1 for EP Toxicity for Chromium

Sample #	Sample Date	Chromium (mg/l) MDL= 0.02 mg/l
S-1 NW Corner	3/8/84	0.05
S-1 SW Corner	3/8/84	<0.02
S-1 W Center	3/8/84	<0.02
S-1 E Center	3/8/84	0.11
S-1 NE Corner	3/8/84	0.02
S-1 SE Corner	3/8/84	<0.02
M-1 Background	3/8/84	<0.02
M-21 Background	3/8/84	<0.02
M-4 Background	3/8/84	<0.02
A-1	8/24/84	0.03
A-2	8/24/84	<0.02
A-3	8/24/84	0.02
A-4	8/24/84	0.02
A-5	8/24/84	<0.02
A-6	8/24/84	<0.02
B-1	8/24/84	<0.02
B-2	8/24/84	<0.02
B-3	8/24/84	<0.02
B-4	8/24/84	<0.02
B-5	8/24/84	<0.02
B-6	8/24/84	<0.02
C-1	8/24/84	<0.02
C-2	8/24/84	<0.02
C-3	8/24/84	<0.02
C-4	8/24/84	<0.02
C-5	8/24/84	<0.02
C-6	8/24/84	<0.02
D-1	8/24/84	0.02
D-2	8/24/84	<0.02
D-3	8/24/84	<0.02
D-4	8/24/84	<0.02
D-5	8/24/84	<0.02
D-6	8/24/84	<0.02

Notes:
MDL = Method Detection Limit
mg/l = milligrams per liter
< = not detected above the designated method detection limit.
Source: Kerr-McGee, 1996b, Response to LOU Comments.
Lab: Water Analysis Laboratory, Desert Research Institute.

LOUs 7, 8, 9, 13, and 14 Table 10
Groundwater Characterization Data - Routine Monitoring

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

WELL #	Sample Date	Total Depth (ft bgs)	Depth to Water (ft TOC)	pH (Lab)	EC (Lab, µmho/cm)	Cr-total (ppm)	ClO_4 (ppm)	LAB	Well Location from Pond (Approximate)
M-2A	8/24/97	--	--	--	--	--	650	KMC	200 ft NE
M-2A	9/15/97	--	41.02	7.31	13000	--	--	KMC	
M-2A	4/27/98	46.71	41.41	7.28	6180	--	740	KMC	
M-2A	5/6/99	46.71	41.09	7.29	10900	20	800	KMC	
M-2A	5/5/00	46.71	41.78	7.39	14400	29	780	KMC	
M-2A	5/4/01	46.71	41.85	7.43	11700	25	580	KMC	
M-2A	4/30/02	--	40.55	7.3	12660	24	560	MW	
M-2A	4/30/03	--	41.37	--	14470	--	690	MW	
M-2A	5/6/04	--	--	7.3	13700	29	700	MW	
M-21	8/24/97	--	--	--	--	--	52	KMC	120 ft S
M-21	9/15/97	--	41.50	7.35	6000	--	NS	KMC	
M-21	4/27/98	44.63	42.05	7.28	6180	--	NS	KMC	
M-21	5/6/99	44.63	41.10	7.02	6460	4.00	66	KMC	
M-21	5/5/00	44.63	41.67	7.52	6410	3.30	50	KMC	
M-21	5/4/01	44.63	41.30	--	6200	--	49	KMC	
M-21	4/30/02	--	40.00	6.9	5580	3.6	54	MW	
M-21	4/30/03	--	41.09	--	5720	--	49	MW	
M-21	5/6/04	--	--	7.0	2970	0.8	24	MW	
M-50	9/15/97	61.77	46.17	7.08	19560	--	--	KMC	320 ft SE
M-50	4/27/98	--	46.45	7.17	16050	--	--	KMC	
M-50	10/21/98	--	46.50	--	--	--	--	--	
M-50	5/6/99	61.77	46.32	7.03	27800	59.00	1700	KMC	
M-50	5/5/00	61.77	46.66	7.24	30200	66.00	1700	KMC	
M-50	5/4/01	61.77	46.54	--	30500	--	1800	KMC	
M-50	4/30/02	--	45.50	7.1	26900	92	1700	MW	
M-50	12/9/02	--	46.30	7.2	26400	64	1900	MW	
M-50	1/21/03	--	46.40	7.0	25600	59	1960	MW	
M-50	5/1/03	--	46.08	--	26800	--	1500	MW	
M-50	7/9/03	--	46.68	7.2	26200	67	1700	MW	
M-50	8/13/03	--	46.36	--	--	--	--	--	
M-50	9/8/03	--	46.42	--	--	--	--	--	
M-50	10/5/03	--	46.44	--	--	--	--	--	
M-50	11/4/03	--	46.54	7.2	26800	67	1500	MW	
M-50	12/8/03	--	46.61	--	--	--	--	--	
M-50	1/8/04	--	46.62	--	--	--	--	--	
M-50	2/2/04	--	46.33	7.2	24900	67	1400	MW	
M-50	3/1/04	--	45.54	--	--	--	--	--	
M-50	4/1/04	--	45.36	--	--	--	--	--	
M-50	5/3/04	--	45.63	7.2	20300	55	1100	MW	
M-50	6/10/04	--	46.33	--	--	--	--	--	
M-50	8/4/04	--	--	7.4	21100	58	1200	MW	
M-75	4/27/98	--	42.51	7.39	5130	--	--	KMC	100 ft N
M-75	5/6/99	63.32	42.00	7.50	8610	8.80	160	KMC	
M-75	5/5/00	63.32	42.53	7.74	9140	12.00	180	KMC	
M-75	5/4/01	63.32	43.00	7.67	8180	11.00	150	KMC	

LOUs 7, 8, 9, 13, and 14 Table 10 (continued)
Groundwater Characterization Data - Routine Monitoring

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

WELL #	Sample Date	Total Depth (ft bgs)	Depth to Water (ft TOC)	pH (Lab)	EC (Lab, µmho/cm)	Cr-total (ppm)	ClO_4 (ppm)	LAB	Well Location from Pond (Approximate)
M-75	5/1/02	--	41.44	7.7	7260	5.1	100	MW	100 ft N
M-75	5/1/03	--	42.05	--	7410	--	24	MW	
M-75	5/6/04	--	--	7.7	6080	4.8	78	MW	
M-76	8/24/97	--	--	--	--	--	200	KMC	200 ft NW
M-76	9/15/97	54.17	39.79	7.57	8940	--	--	KMC	
M-76	4/27/98	--	39.85	7.52	5440	--	200	KMC	
M-76	10/21/98	--	39.52	--	--	--	--	--	
M-76	5/6/99	54.17	38.32	7.51	8570	14.00	220	KMC	
M-76	5/5/00	54.17	39.56	7.80	8000	11.00	160	KMC	
M-76	5/4/01	54.17	39.40	7.69	7480	11.00	130	KMC	
M-76	4/30/02	--	37.84	7.6	6360	8	98	MW	
M-76	12/10/02	--	39.33	7.9	6370	6.1	--	MW	
M-76	1/21/03	--	39.43	7.6	6250	4.8	--	MW	
M-76	5/1/03	--	38.65	--	6840	--	120	MW	
M-76	7/9/03	--	39.56	--	--	--	--	--	
M-76	8/13/03	--	39.64	--	--	--	--	--	
M-76	9/8/03	--	39.74	--	--	--	--	--	
M-76	10/5/03	--	39.81	--	--	--	--	--	
M-76	11/4/03	--	39.93	--	--	--	--	--	
M-76	12/8/03	--	39.97	--	--	--	--	--	
M-76	1/8/04	--	40.02	--	--	--	--	--	
M-76	2/2/04	--	40.03	--	--	--	--	--	
M-76	3/1/04	--	39.90	--	--	--	--	--	200 ft NW
M-76	4/1/04	--	39.76	--	--	--	--	--	
M-76	5/7/04	--	39.27	7.7	6190	4.8	100	MW	
M-76	6/10/04	--	39.56	--	--	--	--	--	

Notes:
ft bgs = feet below ground surface
µmho/cm = micromhos per centimeter
ppm = parts per million
ft TOC = feet from Top of Casing
EC = Electrical Conductivity
Cr-total: Total Chromium
ClO_4: Perchlorate
-- = Either no data was obtained or was not analyzed for the respective constituent.
Labs: KMC Kerr-McGee Chemical Corporation
MW Montgomery Watson
Source: Kerr-McGee Chemical Corporatoin, Mother-hen Database.

LOUs 7, 8, 9, 13, and 14 Table 11
Soil Characterization Data - Organochlorine Pesticides (OCPs)

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	
Boring No.		SA11	SA11	SA12	
Sample ID		SA11-0.5	SA11-0.5D	SA12-0.5	
Sample Depth (ft)		0.5	0.5	0.5	
Sample Date		11/09/2006	11/09/2006	11/10/2006	
Organochlorine Pesticides	**MSSL[2] mg/kg**				**Unit**
4,4'-DDD	1.10E+01	0.0018 UJ	0.0019 U	0.0019 U	mg/kg
4,4'-DDE	7.80E+00	**0.012 J+**	0.0019 UJ	0.0019 U	mg/kg
4,4'-DDT	7.80E+00	0.0018 UJ	0.0019 U	0.0019 U	mg/kg
Aldrin	1.10E-01	0.0018 UJ	0.0019 U	0.0019 U	mg/kg
Alpha-BHC	4.00E-01	0.0018 UJ	0.0019 U	0.0019 U	mg/kg
Alpha-chlordane	1.40E+00 (y)	0.0018 UJ	0.0019 U	0.0019 U	mg/kg
Beta-BHC	1.40E+00	**0.030 J+**	0.0019 UJ	**0.0028**	mg/kg
Delta-BHC	--	0.0018 UJ	0.0019 U	0.0019 U	mg/kg
Dieldrin	1.20E-01	0.0018 UJ	0.0019 U	0.0019 U	mg/kg
Endosulfan I	4.10E+03 (aa)	0.0018 UJ	0.0019 U	0.0019 U	mg/kg
Endosulfan II	4.10E+03 (aa)	0.0018 UJ	0.0019 U	0.0019 U	mg/kg
Endosulfan Sulfate	4.10E+03 (aa)	0.0018 UJ	0.0019 U	0.0019 U	mg/kg
Endrin	2.10E+02	0.0018 UJ	0.0019 U	0.0019 U	mg/kg
Endrin Aldehyde	2.10E+02 (k)	0.0018 UJ	0.0019 U	0.0019 U	mg/kg
Endrin Ketone	2.10E+02 (k)	0.0018 UJ	0.0019 U	0.0019 U	mg/kg
Gamma-BHC (Lindane)	1.90E+00	0.0018 UJ	0.0019 U	0.0019 U	mg/kg
Gamma-Chlordane	1.40E+00 (y)	0.0018 UJ	0.0019 U	0.0019 U	mg/kg
Heptachlor	4.30E-01	0.0018 UJ	0.0019 U	0.0019 U	mg/kg
Heptachlor Epoxide	2.10E-01	0.0018 UJ	0.0019 U	0.0019 U	mg/kg
Methoxychlor	3.40E+03	0.0036 UJ	0.0038 U	0.0037 U	mg/kg
Tech-Chlordane	1.40E+00	0.011 UJ	0.011 U	0.011 U	mg/kg
Toxaphene	1.70E+00	0.054 UJ	0.057 U	0.056 U	mg/kg

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
(y) Value for chlordane (technical) used as surrogate for alpha-chlordane and gamma-chlordane based on structural similarities.
(aa) Value for endosulfan used as surrogate for endosulfan I, endosulfan II and endosulfan sulfate based on structural similarities.
(k) Value for endrin used as surrogate for endrin aldehyde and endrin ketone due to structural similarities.

LOUs 7, 8, 9, 13, and 14 Table 12
Groundwater Characterization Data - Organochlorine Pesticides (OCPs)

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A[1]	Ph A[1]	
	Well ID	M-2A	M-76	
	Sample ID	M-2A	M-76	
	Sample Date	12/04/2006	12/04/2006	
Organochlorine Pesticides	**MCL[2] ug/L**			**Unit**
4,4'-DDD	2.80E-01	0.050 U	0.050 U	ug/L
4,4'-DDE	1.98E-01	0.050 U	0.050 U	ug/L
4,4'-DDT	1.98E-01	0.050 U	0.050 U	ug/L
Aldrin	4.00E-03	0.050 U	0.050 U	ug/L
Alpha-BHC	1.10E-02	0.050 U	0.050 U	ug/L
Alpha-chlordane	2.00E+00 (l)	0.050 U	0.050 U	ug/L
Beta-BHC	3.74E-02	0.050 U	0.050 U	ug/L
Delta-BHC	1.10E-02 (z)	0.050 U	0.050 U	ug/L
Dieldrin	4.20E-03 (z)	0.050 U	0.050 U	ug/L
Endosulfan I	2.19E+02 (aa)	0.050 U	0.050 U	ug/L
Endosulfan II	2.19E+02 (aa)	0.050 U	0.050 U	ug/L
Endosulfan Sulfate	2.19E+02 (aa)	0.050 U	0.050 U	ug/L
Endrin	2.00E+00	0.050 U	0.050 U	ug/L
Endrin Aldehyde	1.09E+01 (k)	0.050 U	0.050 U	ug/L
Endrin Ketone	1.09E+01 (k)	0.050 U	0.050 U	ug/L
Gamma-BHC (Lindane)	2.00E-01	0.050 U	0.050 U	ug/L
Gamma-Chlordane	2.00E+00 (l)	0.050 U	0.050 U	ug/L
Heptachlor	4.00E-01	0.050 U	0.050 U	ug/L
Heptachlor Epoxide	2.00E-01	0.050 U	0.050 U	ug/L
Methoxychlor	4.00E+01	0.10 U	0.10 U	ug/L
Tech-Chlordane	2.00E+00 (l)	0.50 U	0.50 U	ug/L
Toxaphene	3.00E+00	2.0 U	2.0 U	ug/L

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(z) Value for alpha-BHC used as surrogate for delta-BHC based on structural similarities.
(aa) Value for endosulfan used as surrogate for endosulfan I, endosulfan II and endosulfan sulfate based on structural similarities.
(k) Value for endrin used as surrogate for endrin aldehyde and endrin ketone due to structural similarities.
(l) Value for chlordane used as surrogate for alpha-chlordane, chlordane (technical) and gamma-chlordane due to structural similarities.

LOUs 7, 8, 9, 13, and 14 Table 13
Soil Characterization Data - Organophosphorus Pesticides (OPPs)

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	
Boring No.		SA11	SA11	SA12	
Sample ID		SA11-0.5	SA11-0.5D	SA12-0.5	
Sample Depth (ft)		0.5	0.5	0.5	
Sample Date		11/09/2006	11/09/2006	11/10/2006	
OPPs	**MSSL[2] mg/kg**				**Unit**
Azinphos-methyl	--	0.014 UJ	0.015 UJ	0.014 U	mg/kg
Bolstar	--	0.014 UJ	0.015 U	0.014 U	mg/kg
Chlorpyrifos	2.10E+03	0.022 UJ	0.023 U	0.022 U	mg/kg
Coumaphos	--	0.014 UJ	0.015 U	0.014 U	mg/kg
Demeton-O	--	0.042 UJ	0.044 U	0.043 U	mg/kg
Demeton-S	--	0.016 UJ	0.017 U	0.017 U	mg/kg
Diazinon	6.20E+02	0.024 UJ	0.025 U	0.024 U	mg/kg
Dichlorvos	6.60E+00	0.025 UJ	0.026 U	0.026 U	mg/kg
Dimethoate	--	0.024 UJ	0.025 U	0.024 U	mg/kg
Disulfoton	2.70E+01	0.052 UJ	0.055 U	0.053 U	mg/kg
EPN	--	0.014 UJ	0.015 U	0.014 UJ	mg/kg
Ethoprop	--	0.016 UJ	0.017 U	0.017 U	mg/kg
Ethyl Parathion	4.10E+03	0.019 UJ	0.020 U	0.020 UJ	mg/kg
Famphur	--	0.014 UJ	0.015 U	0.014 U	mg/kg
Fensulfothion	--	0.014 UJ	0.015 U	0.014 U	mg/kg
Fenthion	1.70E+02 (ff)	0.036 UJ	0.038 U	0.037 U	mg/kg
Malathion	1.40E+04	0.016 UJ	0.017 U	0.017 U	mg/kg
Merphos	--	0.032 UJ	0.034 U	0.033 U	mg/kg
Methyl parathion	1.70E+02	0.022 UJ	0.023 U	0.022 U	mg/kg
Mevinphos	--	0.016 UJ	0.017 U	0.017 U	mg/kg
Naled	1.40E+03	0.036 UJ	0.038 UJ	0.037 UJ	mg/kg
Phorate	--	0.022 UJ	0.023 U	0.022 U	mg/kg
Ronnel	3.40E+04	0.019 UJ	0.020 UJ	0.020 U	mg/kg
Stirphos	--	0.016 UJ	0.017 UJ	0.017 U	mg/kg
Sulfotep	--	0.022 UJ	0.023 U	0.022 U	mg/kg
Thionazin	--	0.019 UJ	0.020 U	0.020 U	mg/kg
Tokuthion	--	0.022 UJ	0.023 U	0.022 U	mg/kg
Trichloronate	--	0.022 UJ	0.023 U	0.022 U	mg/kg

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
(ff) Value for methyl parathion used as surrogate for fenthion based on structural similarities.

LOUs 7, 8, 9, 13, and 14 Table 14
Groundwater Characterization Data - Organophosphorus Pesticides (OPPs)

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A[1]	Ph A[1]	
	Well ID	M-2A	M-76	
	Sample ID	M-2A	M-76	
	Sample Date	12/04/2006	12/04/2006	
OPPs	**MCL[2] ug/L**			**Unit**
Azinphos-methyl	--	2.5 U	2.5 U	ug/L
Bolstar	--	1.0 U	1.0 U	ug/L
Chlorpyrifos	1.09E+02	1.0 U	1.0 U	ug/L
Coumaphos	--	1.0 U	1.0 U	ug/L
Demeton-O	1.46E+00 (cc)	1.0 U	1.0 U	ug/L
Demeton-S	1.46E+00 (cc)	1.0 UJ	1.0 UJ	ug/L
Diazinon	3.28E+01	1.0 U	1.0 U	ug/L
Dichlorvos	2.32E-01	1.0 U	1.0 U	ug/L
Dimethoate	7.30E+00	1.0 U	1.0 UJ	ug/L
Disulfoton	1.46E+00	0.50 U	0.50 U	ug/L
EPN	3.65E-01	1.2 U	1.2 UJ	ug/L
Ethoprop	--	0.50 U	0.50 U	ug/L
Ethyl Parathion	9.12E+00 (tt)	1.0 U	1.0 U	ug/L
Famphur	--	1.0 U	1.0 U	ug/L
Fensulfothion	--	2.5 U	2.5 U	ug/L
Fenthion	9.10E+00 (ff)	2.5 U	2.5 U	ug/L
Malathion	7.30E+02	1.2 U	1.2 U	ug/L
Merphos	1.09E+00	5.0 U	5.0 U	ug/L
Methyl parathion	9.12E+00	4.0 U	4.0 U	ug/L
Mevinphos	--	6.2 U	6.2 U	ug/L
Naled	7.30E+01	1.0 UJ	1.0 U	ug/L
Phorate	7.30E+00	1.2 U	1.2 UJ	ug/L
Ronnel	1.82E+03	10 U	10 U	ug/L
Stirphos	--	3.5 U	3.5 U	ug/L
Sulfotep	1.82E+01	1.5 U	1.5 U	ug/L
Thionazin	--	1.0 U	1.0 U	ug/L
Tokuthion	--	1.6 U	1.6 U	ug/L
Trichloronate	--	0.50 U	0.50 U	ug/L

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(cc) Value for demeton used as surrogate for demeton-o and demeton-s based on structural similarities.
(ff) Value for methyl parathion used as surrogate for fenthion based on structural similarities.
(tt) Value for parathion-methyl used as surrogate for parathion-ethyl due to structural similarities.

LOUs 7, 8, 9, 13, and 14 Table 15
Soil Characterization Data - PCBs

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring ID		SA11	SA11	SA11	SA11	SA11	SA12	SA12	SA12	SA12	
Sample ID		SA11-0.5	SA11-0.5D	SA11-10	SA11-20	SA11-30	SA12-0.5	SA12-10	SA12-20	SA12-30	
Sample Depth (ft)		0.5	0.5	10	20	30	0.5	10	20	30	
Sample Date		11/09/2006	11/09/2006	11/09/2006	11/09/2006	11/09/2006	11/10/2006	11/10/2006	11/10/2006	11/10/2006	
PCBs	**MSSL[2] mg/kg**										**Unit**
Aroclor-1016	2.40E+01 (i)	0.036 U	0.038 U	0.035 U	0.035 U	0.054 U	0.037 U	0.035 U	0.036 U	0.053 U	mg/kg
Aroclor-1221	8.30E-01 (i)	0.036 U	0.038 U	0.035 U	0.035 U	0.054 U	0.037 U	0.035 U	0.036 U	0.053 U	mg/kg
Aroclor-1232	8.30E-01 (i)	0.036 U	0.038 U	0.035 U	0.035 U	0.054 U	0.037 U	0.035 U	0.036 U	0.053 U	mg/kg
Aroclor-1242	8.30E-01 (i)	0.036 U	0.038 U	0.035 U	0.035 U	0.054 U	0.037 U	0.035 U	0.036 U	0.053 U	mg/kg
Aroclor-1248	8.30E-01 (i)	0.036 U	0.038 U	0.035 U	0.035 U	0.054 U	0.037 U	0.035 U	0.036 U	0.053 U	mg/kg
Aroclor-1254	8.30E-01 (i)	0.036 U	0.038 U	0.035 U	0.035 U	0.054 U	0.037 U	0.035 U	0.036 U	0.053 U	mg/kg
Aroclor-1260	8.30E-01 (i)	0.036 U	0.038 U	0.035 U	0.035 U	0.054 U	0.037 U	0.035 U	0.036 U	0.053 U	mg/kg

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008)
(i) For PCBs, the individual Aroclors were compared to the TSCA action level of 10 mg/kg, for high occupancy, restricted (non-residential) use. (40 CFR Part 761; 63 FR 35383-35474, June 29, 1998).

LOUs 7, 8, 9, 13, and 14 Table 16
Groundwater Characterization Data - PCBs

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A[1]	
Well ID		M-2A	M-76	
Sample ID		M-2A	M-76	
Sample Date		12/04/2006	12/04/2006	
PCBs	**MCL[2] ug/L**			**Unit**
Aroclor-1016	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1221	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1232	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1242	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1248	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1254	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1260	5.00E-01 (bb)	0.10 U	0.10 U	ug/L

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(bb) Value for total PCBs.

LOUs 7, 8, 9, 13, and 14 Table 17
Soil Characterization Data - Perchlorate

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Boring ID	Sample ID	Sample Depth (ft)	Sample Date	Perchlorate ug/kg	MSSL[1] ug/kg	Sampling Program
SA11	SA11-0.5	0.5	11/09/2006	**62500**	7.95E+05	Ph A[2]
SA11	SA11-0.5D	0.5	11/09/2006	**72400**	7.95E+05	Ph A
SA11	SA11-10	10	11/09/2006	**204000**	7.95E+05	Ph A
SA11	SA11-20	20	11/09/2006	**210000**	7.95E+05	Ph A
SA11	SA11-30	30	11/09/2006	**56900**	7.95E+05	Ph A
SA12	SA12-0.5	0.5	11/10/2006	**6410**	7.95E+05	Ph A
SA12	SA12-10	10	11/10/2006	**7210**	7.95E+05	Ph A
SA12	SA12-20	20	11/10/2006	**9550**	7.95E+05	Ph A
SA12	SA12-30	30	11/10/2006	**184000**	7.95E+05	Ph A

Notes:
1. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
2. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.

LOUs 7, 8, 9, 13, and 14 Table 18
Groundwater Characterization Data - Perchlorate

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Well ID Number	Sample ID	Sample Date	Perchlorate ug/L	MCL[1] ug/L	Sampling Program
M-2A	M-2A	12/04/2006	**465000**	1.80E+01 a,(m)	Ph A[2]
M-76	M-76	12/04/2006	**77300 J+**	1.80E+01 a,(m)	Ph A

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(a) NAC 445A.455 Secondary standards. Certain provisions of the National Primary Drinking Water Regulations are adopted by reference (NAC 445A.4525). These values are listed in the first column of this table and are therefore not listed again here. Only NAC 445A.455 Secondary standards are listed.
(m) Equal to the provisional action level derived by NDEP as referenced in "Defining a Perchlorate Drinking Water Standard". NDEP Bureau of Corrective Action. URL [http://ndep.nv.gov/bca/perchlorate02_05.htm].

LOUs 7, 8, 9, 13, and 14 Table 19
Soil Characterization Data - Radionuclides

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

				Ra-226	**Ra-228**	**Th-228**	**Th-230**	**Th-232**	**U-233/234**	**U-235/236**	**U-238**	
				(gamma)	(gamma)	(TH MOD)	(TH MOD)	(TH MOD)	(U MOD)	(U MOD)	(U MOD)	
				pci/g	pci/g	pci/g	pci/g	pci/g	pci/g	pci/g	pci/g	
Boring ID Number	**Sample ID**	**Sample Depth (ft)**	**Date**									**Sampling Program**
SA11	SA11-0.5	0.5	11/09/2006	**0.947 J+**	**1.8 J+**							Ph A[1]
SA11	SA11-0.5D	0.5	11/09/2006	**0.905 J+**	**1.87 J+**							Ph A
SA11	SA11-10	10	11/09/2006	**1.7 J+**	**1.95 J+**	**0.663 J**	**0.833 J**	**0.836 J**	**0.663**	0.004 U	**0.37 J**	Ph A
SA11	SA11-20	20	11/09/2006	**1.06 J+**	**1.68 J+**							Ph A
SA11	SA11-30	30	11/09/2006	**2.49 J+**	**1.17 J+**							Ph A
SA12	SA12-0.5	0.5	11/10/2006	**1.16 J+**	**1.79 J+**							Ph A
SA12	SA12-10	10	11/10/2006	**0.98 J+**	**1.83 J+**							Ph A
SA12	SA12-20	20	11/10/2006	**1.84 J+**	**2.01 J+**							Ph A
SA12	SA12-30	30	11/10/2006	**1.44 J+**	**1.03 J+**							Ph A

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.

LOUs 7, 8, 9, 13, and 14 Table 20
Groundwater Characterization Data - Radionuclides

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

			Ra-226	Ra-228	Th-228	Th-230	Th-232	U-233/234	U-235/236	U-238	
			pCi/L	pCi/L	pCi/L	pCi/L	pCi/L	pCi/L	pCi/L	pCi/L	
Well ID Number	**Sample ID**	**Date**									**Sampling Program**
M-2A	M-2A-Z	05/09/2007	0.0440 U	0.402 UJ							Ph A[1]
M-76	M-76-Z	05/09/2007	0.184 U	0.543 UJ							Ph A

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.

LOUs 7, 8, 9, 13, and 14 Table 21
Soil Characterization Data - SVOCs

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

		Sampling Program	Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
		Boring No.	SA 11	SA 11	SA 11	SA 11	SA 11	SA 12	SA 12	SA 12	SA 12
		Sample ID	SA11-0.5	SA11-0.5D	SA11-10	SA11-20	SA11-30	SA12-0.5	SA12-10	SA12-20	SA12-30
		Sample Depth (ft)	0.5	0.5	10	20	30	0.5	10	20	30
		Sample Date	11/09/2006	11/09/2006	11/09/2006	11/09/2006	11/09/2006	11/10/2006	11/10/2006	11/10/2006	11/10/2006
SVOC	**MSSL[2] ug/kg**	**Analytical Method**	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,4-Dioxane	1.70E+05	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
2-Methylnaphthalene	2.10E+05 (jj)	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
2-Methylnaphthalene	2.10E+05 (jj)	SIM									
Acenaphthene	3.30E+07	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Acenaphthene	3.30E+07	SIM									
Acenaphthylene	3.30E+07 (pp)	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Acenaphthylene	3.30E+07 (pp)	SIM									
Anthracene	1.00E+08	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Anthracene	1.00E+08	SIM									
Benz(a)anthracene	2.30E+03	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Benz(a)anthracene	2.30E+03	SIM									
Benzo(a)pyrene	2.30E+02	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Benzo(a)pyrene	2.30E+02	SIM									
Benzo(b)fluoranthene	2.30E+03	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Benzo(b)fluoranthene	2.30E+03	SIM									
Benzo(g,h,i)perylene	3.20E+07 (w)	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Benzo(g,h,i)perylene	3.20E+07 (w)	SIM									
Benzo(k)fluoranthene	2.30E+04	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Benzo(k)fluoranthene	2.30E+04	SIM									
bis(2-Ethylhexyl)phthalate	1.40E+05	non-SIM	**410**	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Butyl benzyl phthalate	2.40E+05	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Chrysene	2.30E+05	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Chrysene	2.30E+05	SIM									
Dibenz(a,h)anthracene	2.30E+02	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Dibenz(a,h)anthracene	2.30E+02	SIM									
Diethyl phthalate	1.00E+08	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Dimethyl phthalate	1.00E+08	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Di-N-Butyl phthalate	6.80E+07	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Di-N-Octyl phthalate	--	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U

LOUs 7, 8, 9, 13, and 14 Table 21 (continued)
Soil Characterization Data - SVOCs

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

		Sampling Program	Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
		Boring No.	SA 11	SA 11	SA 11	SA 11	SA 11	SA 12	SA 12	SA 12	SA 12
		Sample ID	SA11-0.5	SA11-0.5D	SA11-10	SA11-20	SA11-30	SA12-0.5	SA12-10	SA12-20	SA12-30
		Sample Depth (ft)	0.5	0.5	10	20	30	0.5	10	20	30
		Sample Date	11/09/2006	11/09/2006	11/09/2006	11/09/2006	11/09/2006	11/10/2006	11/10/2006	11/10/2006	11/10/2006
SVOC	**MSSL[2] ug/kg**	**Analytical Method**	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Fluoranthene	2.40E+07	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Fluoranthene	2.40E+07	SIM									
Fluorene	2.60E+07	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Fluorene	2.60E+07	SIM									
Hexachlorobenzene	1.20E+03	non-SIM	**960**	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Hexachlorobenzene	1.20E+03	SIM									
Indeno(1,2,3-cd)pyrene	2.30E+03	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Indeno(1,2,3-cd)pyrene	2.30E+03	SIM									
Naphthalene	2.10E+05	non-SIM	5.4 UJ	9.1 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
Naphthalene	2.10E+05	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Naphthalene	2.10E+05	SIM									
Nitrobenzene	1.10E+05	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Octachlorostyrene	--	non-SIM	**210 J**	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Phenanthrene	1.00E+08 (n)	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Phenanthrene	1.00E+08 (n)	SIM									
Pyrene	3.20E+07	non-SIM	360 U	380 U	350 U	350 U	540 U	370 U	350 U	360 U	530 U
Pyrene	3.20E+07	SIM									
Pyridine	6.80E+05	non-SIM	1700 U	1800 U	1700 U	1700 U	2600 U	1800 U	1700 U	1700 U	2600 U

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
(jj) Value for naphthalene used as surrogate for 2-methylnaphthalene based on structural similarities.
(pp) Value for acenaphthene used as surrogate for acenapthylene based on structural similarities.
(w) Value for pyrene used as surrogate for benzo(g,h,i)perylene based on structural similarities.
(n) Value for anthracene used as surrogate for phenanthrene due to structural similarities.

LOUs 7, 8, 9, 13, and 14 Table 22
Groundwater Characterization Data - SVOCs

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

		Sampling Program	Ph A[1]	Ph A
		Well No.	M-2A	M-76
		Sample ID	M-2A	M-76
		Sample Date	12/04/2006	12/04/2006
SVOCs	**MCL[2] ug/L**	**Analytic Method**	ug/L	ug/L
1,4-Dioxane	6.11E+00	non-SIM	10 U	10 U
2-Methylnaphthalene	6.20E+00 (jj)	non-SIM	10 U	10 U
2-Methylnaphthalene	6.20E+00 (jj)	SIM		
Acenaphthene	3.65E+02	non-SIM	10 UJ	10 U
Acenaphthene	3.65E+02	SIM		
Acenaphthylene	3.65E+02 (pp)	non-SIM	R	10 U
Acenaphthylene	3.65E+02 (pp)	SIM		
Anthracene	1.83E+03	non-SIM	10 UJ	10 U
Anthracene	1.83E+03	SIM		
Benz(a)anthracene	9.21E-02	non-SIM	10 U	10 U
Benz(a)anthracene	9.21E-02	SIM		
Benzo(a)pyrene	2.00E-01	non-SIM	10 U	10 U
Benzo(a)pyrene	2.00E-01	SIM		
Benzo(b)fluoranthene	9.21E-02	non-SIM	10 U	10 U
Benzo(b)fluoranthene	9.21E-02	SIM		
Benzo(g,h,i)perylene	1.83E+02 (w)	non-SIM	10 U	10 U
Benzo(g,h,i)perylene	1.83E+02 (w)	SIM		
Benzo(k)fluoranthene	9.21E-01	non-SIM	10 U	10 U
Benzo(k)fluoranthene	9.21E-01	SIM		
bis(2-Ethylhexyl)phthalate	6.00E+00	non-SIM	10 U	10 U
Butyl benzyl phthalate	7.30E+03	non-SIM	10 U	10 U
Chrysene	9.21E+00	non-SIM	10 U	10 U
Chrysene	9.21E+00	SIM		
Dibenz(a,h)anthracene	9.21E-03	non-SIM	10 U	10 U
Dibenz(a,h)anthracene	9.21E-03	SIM		
Diethyl phthalate	2.92E+04	non-SIM	10 U	10 U
Dimethyl phthalate	3.65E+05	non-SIM	10 U	10 U
Di-N-Butyl phthalate	3.65E+03	non-SIM	10 U	10 U
Di-N-Octyl phthalate	1.46E+03	non-SIM	10 U	10 U
Fluoranthene	1.46E+03	non-SIM	10 U	10 U
Fluoranthene	1.46E+03	SIM		
Fluorene	2.43E+02	non-SIM	10 U	10 U
Fluorene	2.43E+02	SIM		
Hexachlorobenzene	1.00E+00	non-SIM	10 U	10 U
Hexachlorobenzene	1.00E+00	SIM		
Indeno(1,2,3-cd)pyrene	9.21E-02	non-SIM	10 U	10 U
Indeno(1,2,3-cd)pyrene	9.21E-02	SIM		
Naphthalene	6.20E+00	non-SIM	5.0 U	5.0 U
Naphthalene	6.20E+00	non-SIM	10 U	10 U
Naphthalene	6.20E+00	SIM		
Nitrobenzene	3.40E+00	non-SIM	10 U	10 U
Octachlorostyrene	--	non-SIM	10 U	10 U

LOUs 7, 8, 9, 13, and 14 Table 22 (continued)
Groundwater Characterization Data - SVOCs

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

		Sampling Program	Ph A[1]	Ph A
		Well No.	M-2A	M-76
		Sample ID	M-2A	M-76
		Sample Date	12/04/2006	12/04/2006
SVOCs	**MCL[2] ug/L**	**Analytic Method**	ug/L	ug/L
Phenanthrene	1.80E+03 (n)	non-SIM	10 U	10 U
Phenanthrene	1.80E+03 (n)	SIM		
Pyrene	1.83E+02	non-SIM	10 U	10 U
Pyrene	1.83E+02	SIM		
Pyridine	3.65E+01	non-SIM	20 UJ	20 UJ

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(jj) Value for naphthalene used as surrogate for 2-methylnaphthalene based on structural similarities.
(pp) Value for acenaphthene used as surrogate for acenapthylene based on structural similarities.
(w) Value for pyrene used as surrogate for benzo(g,h,i)perylene based on structural similarities.
(n) Value for anthracene used as surrogate for phenanthrene due to structural similarities.

LOUs 7, 8, 9, 13, and 14 Table 23
Soil Characterization Data - TPH and Fuel Alcohols

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

				Fuel Alcohols			Total Petroleum Hydrocarbons (TPH)			
				Ethanol	Ethylene glycol	Methanol	TPH - ORO	TPH - DRO	TPH - GRO	
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
			MSSL[1] mg/kg	--	1.00E+05	1.00E+05	1.00E+02 vv	1.00E+02 vv	1.00E+02 vv	
Boring No.	**Sample ID.**	**Sample Depth (ft)**	**Sample Date**							**Sampling Program**
SA11	SA11-0.5	0.5	11/09/2006				**86**	27 U	0.11 UJ	Ph A[2]
SA11	SA11-0.5D	0.5	11/09/2006				28 U	28 U	0.11 U	Ph A
SA11	SA11-10	10	11/09/2006				27 U	27 U	0.11 U	Ph A
SA11	SA11-20	20	11/09/2006				26 U	26 U	0.10 U	Ph A
SA11	SA11-30	30.0	11/09/2006				41 U	41 U	0.16 U	Ph A

Notes:
1. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
2. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
(w) Value for pyrene used as surrogate for benzo(g,h,i)perylene based on structural similarities.

LOUs 7, 8, 9, 13, and 14 Table 24
Soil Characterization Data - VOCs

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
	Boring No.	SA11	SA11	SA11	SA11	SA11	SA12	SA12	SA12	SA12
	Sample ID	SA11-0.5	SA11-0.5D	SA11-10	SA11-20	SA11-30	SA12-0.5	SA12-10	SA12-20	SA12-30
	Sample Depth (ft)	0.5	0.5	10	20	30	0.5	10	20	30
	Sample Date	11/09/2006	11/09/2006	11/09/2006	11/09/2006	11/09/2006	11/10/2006	11/10/2006	11/10/2006	11/10/2006
VOCs	**MSSL[2] ug/kg**	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Naphthalene	2.10E+05	5.4 UJ	9.1 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
1,1,1,2-Tetrachloroethane	7.60E+03	5.4 U	9.1 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
1,1,1-Trichloroethane	1.40E+06	5.4 UJ	9.1 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
1,1,2,2-Tetrachloroethane	9.70E+02	5.4 U	9.1 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
1,1,2-Trichloroethane	2.10E+03	5.4 U	9.1 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
1,1-Dichloroethane	2.30E+06	5.4 UJ	5.7 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
1,1-Dichloroethene	4.70E+05	5.4 UJ	9.1 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
1,1-Dichloropropene	1.75E+03 (gg)	5.4 U	9.1 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
1,2,3-Trichlorobenzene	2.60E+05 (hh)	**1.3 J**	9.1 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
1,2,3-Trichloropropane	1.60E+03	5.4 U	9.1 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
1,2,4-Trichlorobenzene	2.60E+05	**3.7 J**	9.1 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
1,2,4-Trimethylbenzene	2.20E+05	5.4 UJ	9.1 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
1,2-Dibromo-3-chloropropane	2.00E+01	5.4 U	5.7 U	5.4 U	5.2 U	8.2 U	5.6 UJ	5.4 UJ	5.4 UJ	8.1 UJ
1,2-Dichlorobenzene	3.70E+05	5.4 UJ	5.7 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
1,2-Dichloroethane	8.40E+02	5.4 UJ	5.7 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
1,2-Dichloropropane	8.50E+02	5.4 U	9.1 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
1,3,5-Trimethylbenzene	7.80E+04	5.4 UJ	9.1 UJ	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
1,3-Dichlorobenzene	1.40E+05	5.4 UJ	5.7 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
1,3-Dichloropropane	4.10E+05	5.4 U	9.1 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
1,4-Dichlorobenzene	8.10E+03	**1.7 J**	5.7 U	5.4 UJ	**0.92 J**	**5.6 J**	5.6 U	5.4 U	5.4 U	8.1 U
2,2-Dichloropropane	8.50E+02 (ii)	5.4 UJ	9.1 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
2-Butanone	3.40E+07	11 U	11 U	**1.7 J**	10 U	16 U	11 U	11 U	11 U	16 U
2-Chlorotoluene	5.10E+05	5.4 U	5.7 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
2-Hexanone	1.72E+07 (nn)	11 U	18 UJ	11 U	10 U	16 U	11 UJ	11 UJ	11 UJ	16 UJ
2-Methoxy-2-methyl-butane	--	5.4 U	9.1 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
4-Chlorotoluene	5.10E+05 (ww)	5.4 UJ	5.7 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
4-Isopropyltoluene	--	5.4 UJ	9.1 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
4-Methyl-2-pentanone	1.70E+07	11 U	18 U	11 U	10 U	16 U	11 UJ	11 UJ	11 UJ	16 UJ
Acetone	6.00E+07	11 UJ	11 U	14 UJ	10 UJ	16 UJ	**4.3 J**	11 U	11 U	16 U
Benzene	1.60E+03	5.4 UJ	5.7 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
Bromobenzene	1.20E+05	5.4 U	5.7 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
Bromochloromethane	1.75E+03 (qq)	5.4 U	5.7 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
Bromodichloromethane	2.60E+03	5.4 UJ	5.7 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
Bromoform	2.40E+05	5.4 U	5.7 U	5.4 U	**0.93 J**	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
Bromomethane	1.50E+04	11 UJ	11 U	11 UJ	10 UJ	16 UJ	11 U	11 U	11 U	16 U
Carbon tetrachloride	5.80E+02	5.4 UJ	5.7 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
Chlorobenzene	5.00E+05	5.4 UJ	5.7 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
Chloroethane	7.20E+03	5.4 UJ	5.7 UJ	5.4 UJ	5.2 UJ	8.2 UJ	5.6 UJ	5.4 UJ	5.4 UJ	8.1 UJ
Chloroform	5.80E+02	**150**	**130**	**14**	**48**	**17**	5.6 U	**0.31 J**	**0.46 J**	**56**
Chloromethane	1.70E+05	5.4 UJ	5.7 UJ	5.4 UJ	5.2 UJ	8.2 UJ	5.6 UJ	5.4 UJ	5.4 UJ	8.1 UJ
cis-1,2-Dichloroethene	1.60E+05	5.4 U	9.1 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
cis-1,3-Dichloropropene	1.75E+03 (gg)	5.4 U	9.1 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U

LOUs 7, 8, 9, 13, and 14 Table 24 (continued)
Soil Characterization Data - VOCs

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
	Boring No.	SA11	SA11	SA11	SA11	SA11	SA12	SA12	SA12	SA12
	Sample ID	SA11-0.5	SA11-0.5D	SA11-10	SA11-20	SA11-30	SA12-0.5	SA12-10	SA12-20	SA12-30
	Sample Depth (ft)	0.5	0.5	10	20	30	0.5	10	20	30
	Sample Date	11/09/2006	11/09/2006	11/09/2006	11/09/2006	11/09/2006	11/10/2006	11/10/2006	11/10/2006	11/10/2006
VOCs	**MSSL[2] ug/kg**	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dibromochloromethane	2.60E+03	5.4 U	5.7 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
Dibromomethane	5.90E+05 (xx)	5.4 U	5.7 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
Dichlorodifluoromethane	3.40E+05	5.4 UJ	5.7 UJ	5.4 UJ	5.2 UJ	8.2 UJ	5.6 UJ	5.4 UJ	5.4 UJ	8.1 UJ
Ethyl t-butyl ether	7.90E+04 (kk)	5.4 U	9.1 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
Ethylbenzene	2.30E+05	5.4 U	9.1 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
Ethylene dibromide	7.00E+01	5.4 U	5.7 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
Hexachlorobutadiene	2.50E+04	**4.5 J**	9.1 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
isopropyl ether	--	5.4 U	9.1 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
Isopropylbenzene	5.80E+05	5.4 UJ	9.1 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
Methyl tert butyl ether	7.90E+04	5.4 UJ	9.1 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
Methylene chloride	2.20E+04	5.4 UJ	9.1 U	5.4 UJ	5.2 UJ	14 UJ	5.6 U	5.4 U	5.4 U	8.1 U
N-Butylbenzene	2.40E+05	5.4 UJ	5.7 UJ	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
N-Propylbenzene	2.40E+05	5.4 UJ	9.1 UJ	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
sec-Butylbenzene	2.20E+05	5.4 UJ	5.7 UJ	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
Styrene	1.70E+06	5.4 UJ	9.1 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
t-Butyl alcohol	--	17 UJ	23 UJ	14.0 UJ	13 UJ	22 UJ	11 UJ	11 UJ	11 UJ	16 UJ
tert-Butylbenzene	3.90E+05	5.4 UJ	5.7 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
Tetrachloroethene	1.70E+03	5.4 UJ	9.1 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
Toluene	5.20E+05	5.4 U	9.1 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
trans-1,2-Dichloroethylene	2.00E+05	5.4 UJ	9.1 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
trans-1,3-Dichloropropene	1.75E+03 (gg)	5.4 UJ	9.1 U	5.4 UJ	5.2 UJ	8.2 UJ	5.6 U	5.4 U	5.4 U	8.1 U
Trichloroethene	1.00E+02	5.4 UJ	9.1 U	5.4 UJ	5.2 UJ	**1.4 J**	5.6 U	5.4 U	5.4 U	**8.0 J**
Trichlorofluoromethane	1.40E+06	5.4 UJ	9.1 UJ	5.4 UJ	5.2 UJ	8.2 UJ	5.6 UJ	5.4 UJ	5.4 UJ	8.1 UJ
Vinylchloride	8.60E+02	5.4 U	9.1 U	5.4 U	5.2 U	8.2 U	5.6 U	5.4 U	5.4 U	8.1 U
Xylene (Total)	2.10E+05	11 UJ	18 U	11 UJ	10 UJ	16 UJ	11 U	11 U	11 U	16 U

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
(gg) Value for 1,3-dichloropropene used as surrogate for 1,1-dichloropropene, cis-1,3-dichloropropene and trans-1,3-dichloropropene based on structural similarities.
(hh) Value for 1,2,4-trichlorobenzene used as surrogate for 1,2,3-trichlorobenzene based on structural similarities.
(ii) Value for 1,2-dichloropropane used as surrogate for 2,2-dichloropropane based on structural similarities.
(nn) Value for methyl isobutyl ketone used as surrogate for 2-hexanone based on structural similarities.
(ww) Value for 2-chlorotoluene used as surrogate for 4-chlorotoluene based on structural similarities.
(qq) Value for bromodichloromethane used as surrogate for bromochloromethane due to structural similarities.
(xx) Value for methylene bromide used as surrogate for dibromomethane based on structural similarities.
(kk) Value for methyl tertbutyl ether (MTBE) used as surrogate for ethyl-tert-butyl ether (ETBE) based on structural similarities.

LOUs 7, 8, 9, 13, and 14 Table 25
Groundwater Characterization Data - VOCs

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

	Sampling Program		Ph A[1]	Ph A
	Well ID		M-2A	M-76
	Sample ID		M-2A	M-76
	Sample Date		12/04/2006	12/04/2006
VOCs	**MCL[2] ug/L**		ug/L	ug/L
Naphthalene	6.20E+00		5.0 U	5.0 U
1,1,1,2-Tetrachloroethane	4.32E-01		5.0 U	5.0 U
1,1,1-Trichloroethane	2.00E+02		5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	5.00E+00		5.0 U	5.0 U
1,1,2-Trichloroethane	5.00E+00		5.0 U	5.0 U
1,1-Dichloroethane	8.11E+02		5.0 U	5.0 U
1,1-Dichloroethene	7.00E+00		**0.83 J**	5.0 U
1,1-Dichloropropene	3.95E-01	gg	5.0 U	5.0 U
1,2,3-Trichlorobenzene	7.16E+00	hh	5.0 U	5.0 U
1,2,3-Trichloropropane	5.60E-03		5.0 U	5.0 U
1,2,4-Trichlorobenzene	7.00E+01		5.0 U	5.0 U
1,2,4-Trimethylbenzene	1.23E+01		5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	2.00E-01		5.0 UJ	5.0 UJ
1,2-Dichlorobenzene	6.00E+02		5.0 U	5.0 U
1,2-Dichloroethane	5.00E+00		5.0 U	5.0 U
1,2-Dichloropropane	5.00E+00		5.0 U	5.0 U
1,3,5-Trimethylbenzene	1.23E+01		5.0 U	5.0 U
1,3-Dichlorobenzene	1.83E+02		5.0 U	5.0 U
1,3-Dichloropropane	1.22E+02		5.0 U	5.0 U
1,4-Dichlorobenzene	7.50E+01		5.0 U	**0.86 J**
2,2-Dichloropropane	1.65E-01	ii	5.0 U	5.0 U
2-Butanone	6.97E+03		10 U	10 U
2-Chlorotoluene	1.22E+02		5.0 U	5.0 U
2-Hexanone	2.00E+03	nn	10 U	10 U
2-Methoxy-2-methyl-butane	--		5.0 U	5.0 U
4-Chlorotoluene	1.22E+02	ww	5.0 U	5.0 U
4-Isopropyltoluene	--		5.0 U	5.0 U
4-Methyl-2-pentanone	1.99E+03		10 UJ	10 UJ
Acetone	5.48E+03		10 UJ	10 U
Benzene	5.00E+00		5.0 U	5.0 U
Bromobenzene	2.03E+01		5.0 U	5.0 U
Bromochloromethane	1.81E-01	qq	5.0 U	5.0 U
Bromodichloromethane	8.00E+01	r	5.0 U	5.0 U
Bromoform	8.00E+01	r	5.0 U	5.0 U
Bromomethane	8.66E+00		10 UJ	10 UJ
Carbon tetrachloride	5.00E+00		**1.2 J**	**1.0 J**
Chlorobenzene	1.00E+02	o	5.0 U	5.0 U
Chloroethane	4.64E+00		5.0 U	5.0 U
Chloroform	8.00E+01	r	**1300 J+**	**290 J+**
Chloromethane	1.58E+02		5.0 U	5.0 U
cis-1,2-Dichloroethene	7.00E+01		5.0 U	5.0 U
cis-1,3-Dichloropropene	3.95E-01	gg	5.0 U	5.0 U
Dibromochloromethane	8.00E+01	r	5.0 U	5.0 U
Dibromomethane	6.08E+01	xx	5.0 U	5.0 U
Dichlorodifluoromethane	3.95E+02		5.0 U	5.0 U
Ethyl t-butyl ether	1.10E+01	kk	5.0 U	5.0 U
Ethylbenzene	7.00E+02		5.0 U	5.0 U
Ethylene dibromide	--		5.0 U	5.0 U
Hexachlorobutadiene	8.62E-01		5.0 U	5.0 U
Dibromomethane	6.08E+01	xx	5.0 U	5.0 U
Dichlorodifluoromethane	3.95E+02		5.0 U	5.0 U

LOUs 7, 8, 9, 13, and 14 Table 25 (continued)
Groundwater Characterization Data - VOCs

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A[1]	Ph A
	Well ID	M-2A	M-76
	Sample ID	M-2A	M-76
	Sample Date	12/04/2006	12/04/2006
VOCs	**MCL[2] ug/L**	ug/L	ug/L
Ethyl t-butyl ether	1.10E+01 kk	5.0 U	5.0 U
Ethylbenzene	7.00E+02	5.0 U	5.0 U
Ethylene dibromide	--	5.0 U	5.0 U
Hexachlorobutadiene	8.62E-01	5.0 U	5.0 U
isopropyl ether	--	5.0 U	5.0 U
Isopropylbenzene	6.58E+02	5.0 U	5.0 U
Methyl tert butyl ether	2.00E+01 a,uu	**0.67 J**	5.0 U
Methylene chloride	5.00E+00	5.0 U	5.0 U
N-Butylbenzene	2.43E+02	5.0 U	5.0 U
N-Propylbenzene	2.43E+02	5.0 U	5.0 U
sec-Butylbenzene	2.43E+02	5.0 U	5.0 U
Styrene	1.00E+02	R	5.0 U
t-Butyl alcohol	--	10 UJ	10 UJ
tert-Butylbenzene	2.43E+02	5.0 U	5.0 U
Tetrachloroethene	5.00E+00	5.0 U	5.0 U
Toluene	1.00E+03	5.0 U	5.0 U
trans-1,2-Dichloroethylene	1.00E+02	5.0 U	5.0 U
trans-1,3-Dichloropropene	--	5.0 U	5.0 U
Trichloroethene	5.00E+00	**25**	5.0 U
Trichlorofluoromethane	--	5.0 U	5.0 U
Vinylchloride	2.00E+00	5.0 U	5.0 U
Xylene (Total)	1.00E+04	10 U	10 U

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(gg) Value for 1,3-dichloropropene used as surrogate for 1,1-dichloropropene, cis-1,3-dichloropropene and trans-1,3-dichloropropene based on structural similarities.
(hh) Value for 1,2,4-trichlorobenzene used as surrogate for 1,2,3-trichlorobenzene based on structural similarities.
(ii) Value for 1,2-dichloropropane used as surrogate for 2,2-dichloropropane based on structural similarities.
(nn) Value for methyl isobutyl ketone used as surrogate for 2-hexanone based on structural similarities.
(ww) Value for 2-chlorotoluene used as surrogate for 4-chlorotoluene based on structural similarities.
(qq) Value for bromodichloromethane used as surrogate for bromochloromethane due to structural similarities.
(o) See footnote (b). Listed under synonym monochlorobenzene.
(xx) Value for methylene bromide used as surrogate for dibromomethane based on structural similarities.
(kk) Value for methyl tertbutyl ether (MTBE) used as surrogate for ethyl-tert-butyl ether (ETBE) based on structural similarities.
(a) NAC 445A.455 Secondary standards. Certain provisions of the National Primary Drinking Water Regulations are adopted by reference (NAC 445A.4525). These values are listed in the first column of this table and are therefore not listed again here. Only NAC 445A.455 Secondary standards are listed.
(uu) NDEP, 1998. Oxygenated Fuel Corrective Action Guidance. Draft. October, 12 1998. URL [http://ndep.nv.gov/bca/mtbe_doc.htm].

LOUs 7, 8, 9, 13, and 14 Table 26
Soil Characterization Data - Long Asbestos Fibers in Respirable Soil Fraction

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Boring No.	Sample ID	Sample Date	Long Amphibole Protocol Structures (s/gPM10)	Long Amphibole Protocol Structures (structures/samples)	Long Chrysotile Protocol Structures (s/gPM10)	Long Chrysotile Protocol Structures (structures/samples)	Sampling Program
SA11	SA11	12/02/2006	**2940000**	1	**5890000**	2	Ph A[1]
SA11D	SA11D	12/02/2006	2922000 U	0	**5840000**	2	Ph A
SA12	SA12	12/02/2006	2925000 U	0	2925000 U	0	Ph A
SA12D	SA12D	12/02/2006	2962000 U	0	**2960000**	1	Ph A

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.

LOUs 7, 8, 9, 13, and 14
Notes for Phase A Data Tables

Multiple Ponds in Central Area II Region
Tronox Facility - Henderson, Nevada

Blank	Not analyzed
Bold	Bold values are constituents detected above the laboratory sample quantitation limit.
Gray	Grayed out values are non-detected values with the laboratory sample quantitation limits shown.
B	The result may be a false positive totally attributable to blank contamination.
D	Dissolved Metal
DO	Dissolved Oxygen
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J-	The result is an estimated quantity and the result may be biased low.
J+	The result is an estimated quantity and the result may be biased high.
JB	The result may be biased high partially attributable to blank contamination.
JK	The result is an estimated maximum possible concentration.
R	The result was rejected and unusable due to serious data deficiencies. The presence or absence of the analyte cannot be verified.
S	Soluable metals
T	Total Metals
U	The analyte was analyzed for, but was not detected above the laboratory sample quantitation limit.
UJ	The analyte was not detected above the laboratory sample quantitation limit and the limit is approximate.
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
ml/min	Milliliters per minute
ng/kg	Nanogram per kilogram
nm	Not measured
NTUs	Nephelometric Turbidity Units
ORP	Oxidation-reduction potential
pCi/g	PicoCuries per gram
pci/L	PicoCuries per liter
s/gPM10	Revised protocol structures per gram PM10 fraction dust.
TEF	Toxic Equivalency Factor
TEQ	Toxic Equivalent Concentration
ug/kg	Micrograms per kilogram
ug/L	Micrograms per liter
umhos/cm	MicroSiemens per centimeter.
L	Sample ID suffix indicating the sample was collected using low low-flow pumping rates (100-150 ml/min).
F	Sample ID suffix indicating the sample was collected using low-flow pumping rates (150-480 ml/min) and field filtered.
Z	Sample ID suffix indicating the sample was collected using low-flow pumping rates (150-480 ml/min).
*	No analytical data is available for this sample due to a laboratory error.
(a)	Calculated assuming 0 for non-detected congeners and 2006 toxic equivalency factors (TEFs).
(b)	Calculated assuming 1/2 detection limit as proxy for non-detected congeners and 2006 TEFs.
--	Not established