

**Summary of Available Data for LOU 62  
State Industries, Inc. Site  
Tronox Facility – Henderson, Nevada**

- Name of Facility:** **LOU 62 – State Industries, Inc. Site including Impoundments and Catch Basin**
- Goal of Closure:**
- Closure for future commercial/industrial use.
- Site Investigation Area:**
- Size: Approximately 480 feet by 200 feet (2.2 acres).
    - Western surface impoundment (SI) was circular and was approximately 130 feet in diameter [Ref. 4].
    - Eastern SI was rectangular and was approximately 150 feet by approximately 250 feet [Ref. 4].
  - Location: Southern portion of the Site, approximately 1,200 feet south of Units 2 and 3.
  - Current Status/Features: LOU 62, which included two surface impoundments (SIs), is no longer active. Currently, the western portion of the LOU has a concrete surface and the eastern portion has a soil surface.
- Description:**
- LOU 62 consists of two surface impoundments that received spent pickling process wastes (for solar evaporation) generated during the manufacture of water heaters [Ref. 4].
    - The SIs received approximately 35,000 gallons per month [Ref. 4].
    - Wastes included spent sulphuric acid, borax, soda ash, phosphates, and TURCO II H.T.C soap, and spent cyanide [Ref. 4].
    - Spent cyanide wastes were typically mixed with calcium hypochlorate to destroy cyanide prior to discharge. On June 21, 1971 un-neutralized cyanide waste was discharged to the Beta Ditch.
  - Discharges to the eastern and western SIs occurred between June 1974 and December 1988 [Ref. 4].
  - Prior to June 1, 1974, approximately 35,000 gallons per month of waste streams were discharged to the Acid Drain System (LOU 60) [Ref. 4].
  - The SIs were constructed with PVC bottoms and reinforced butyl rubber side walls [Ref. 4].
  - One of the SIs (records do not state which one) is known to have leaked on three separate occasions between June 7 and December 10, 1974 [Ref. 4].
    - Discharges to the Acid Drain System were conducted in order to access and repair leaks in the SI liner [Ref. 4].
    - Discharges to the Acid Drain System were through a connection in the southwest corner of Building T-5 (State Industries, Inc. warehouse).

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- Due to the high flow rates during the pond pump-out operation, discharges to the Acid Drain System overflowed to the sanitary sewer [Ref.3].
- Discharges to the sanitary sewer via the Acid Drain System occurred on at least three occasions in 1974 to facilitate repairs to the leaking liner [Ref. 4].
- In 1983, a 20,000-square-foot warehouse was constructed over the westernmost SI [Ref. 4]. No records were found that described the method of abandonment of this impoundment [Ref. 4].
- The eastern SI was filled with soil in December 1988 [Ref 3]. The liner was apparently left in place. The contents of the pond were mixed with soil until the material solidified in place [Ref. 4].
  - Prior to closure of the eastern SI, sludge samples were collected and analyzed and as a result sludge was managed as non-hazardous industrial waste based on EP Toxicity Analysis [Ref. 4].
- Additional lease areas to State Industries, Inc. included portions of Unit 1 (used to store water heaters) and Buildings T-4, T-5, and T-8 [Ref. 4].
- State Industries, Inc. operated from 1969 to late 1988 and manufactured and stored hot water heaters [Ref. 4].

<b>Process Waste Streams Associated with LOU 62</b>	<b>Known or Potential Constituents Associated with LOU 62</b>
Pickling process wastewater discharged to Eastern and Western SIs and on occasion process wastewater was conveyed to Beta Ditch through the Acid Drain System (LOU 60) and the Storm Sewer System (LOU 59) [Ref 3].	<ul style="list-style-type: none"> <li>• Spent sulfuric acid</li> <li>• Borax</li> <li>• Soda ash</li> <li>• Phosphate chemicals</li> <li>• Spent cyanide</li> <li>• TURCO II HTC Soap</li> <li>• Metals at detectable concentration (iron, total chromium, barium)</li> <li>• pH of discharges typically &gt;2, but periods of discharge pH of 1.</li> </ul>
<b>Process Waste Streams Associated with the State Industries Manufacturing Warehouse and Storage Area</b>	<b>Known or Potential Constituents Associated with the State Industries Manufacturing Warehouse and Storage Area</b>
Potential leftover lubricants or wastewater containing lubricant constituents [Ref. 4].	<ul style="list-style-type: none"> <li>• Metals</li> <li>• TPH</li> </ul>

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<b>Process Waste Streams Associated with the State Industries Manufacturing Warehouse and Storage Area</b>	<b>Known or Potential Constituents Associated with the State Industries Manufacturing Warehouse and Storage Area</b>
Potential leftover paint and paint thinner or wastewater containing paint constituents [Ref. 4].	<ul style="list-style-type: none"> <li>• Lead</li> <li>• Metals</li> <li>• VOC</li> <li>• SVOC</li> </ul>

**Overlapping or Adjacent LOUs:**

The following LOUs overlap or are adjacent to LOU 62:

Overlapping LOUs

- None

Adjacent LOUs

- LOU 59 (Storm Sewer System) – A branch of the Storm Sewer System runs in an east-west direction about 150 feet north (downgradient) of LOU 62.

LOU 59 is downgradient to LOU 62 and no releases are known to have occurred from LOU 59; therefore, LOU 59 is not considered to affect LOU 62. As a result, the addition of other chemical classes to the Phase B Analytical Plan for LOU 62 is not required.

For detailed information on LOU 59 listed above, please refer to the LOU 59 data package.

**Other LOUs Potentially Affecting Soils in LOU 62:**

- None

**Known or Potential Chemical Classes:**

- Metals
- Cyanide
- Wet chemistry analytes
- VOCs
- SVOCs
- TPH

**Known or Potential Release Mechanisms:**

- Potential infiltration to subsurface soils and groundwater.
- Possible impacts to surrounding soils from surface releases.
- Process waste discharge to the Acid Drain System through a connection in the southwest corner of Building T-5 (State Industries, Inc. warehouse) [Ref. 4].
- Acidic waste discharge to catch basin and subsequent neutralization [Ref. 4].

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- One of the SIs (records do not state which one) is known to have leaked on three separate occasions between June 7 and December 10, 1974 [Ref. 4].
- During the liner repair, the ponds were drained to the Acid Drain System; however, due to the high pump rates the system overflowed to the sanitary sewer [Ref. 4].
- In 1980, State Industries, Inc. informed the EPA of a ripped liner on one of the ponds (SI not identified) [Ref. 4].

**Results of Historical Sampling:**

- Prior to closure of the eastern SI, sludge samples were collected and analyzed. The EP Toxicity test detected non-hazardous concentrations of arsenic, lead, nickel, and selenium. The sludge was handled as non-hazardous waste based on the results [Ref. 4].
- The 1995 and 1996 assessments of the SIs by Western Technologies identified metals and VOCs in the soil [Ref. 4].
- Wells TR-9 and TR-10 are sampled as part of the routine groundwater monitoring program. These wells are sampled for perchlorate, manganese, pH, electrical conductivity, hexavalent chromium, and total chromium [Ref. 2].
- Analytical results are summarized on LOU 62 Tables 22 and 23 a through 23d (see attached).

**Did Historical Samples Address Potential Release?**

- No. Historical borings were limited in depth. The constituents were tested and were not representative of the full extent of the LOU.

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**Summary of Phase A SAI:**

Soil

- Boring SA02 is located within LOU 62 (but not within either SI) and was specifically sampled to evaluate this LOU [Ref. 1].

Groundwater

- Groundwater grab sample (GWSA02) was collected from Phase A boring SA02, and was specifically sampled to evaluate this LOU [Ref. 1].

Chemical classes detected in Phase A soil boring SA02:

- Metals
- Perchlorate
- Wet chemistry analytes
- VOCs
- Dioxins/furans
- Radionuclides

As a result of the Phase A data, the Phase B analytical plan for samples collected from LOU 62 will be expanded to include analyses for perchlorate, dioxins/furans, and radionuclides.

- Analytical results for soil and groundwater from the Phase A sampling event are summarized in LOU 62 Tables 1 through 21 [Ref. 1] (see attached).

**Are Phase A Sample Locations in “Worst Case” Areas?**

- No. Sample locations are located cross-gradient of the SIs. Sample locations are also located too far west to be pertinent to any releases from the LOU 62 SIs.

**Is Phase B Investigation Recommended?**

- Yes

**Proposed Phase B Soil Investigation/Rationale:**

- The Phase B Source Area Investigation for LOU 62 consists of collecting soil samples from six locations:
  - Three (3) borings will be drilled in the eastern SI;
  - Two (2) borings will be drilled in the western SI;
  - One (1) boring will be drilled in the southwest corner of the T-5 building (State Industries Manufacturing Warehouse).
  - All six borings along with the analytical program to evaluate soil samples from LOU 62 are listed in **Table A – Soil Sampling and Analytical Plan for LOU 62.**
- 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 LOU 62 based on the known process waste streams.

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- Two (2) sample locations (SA28 and SA146) in the eastern SI, one (1) sample location (SA147) in the western SI, and one (1) sample location (SA119) in the southwest corner of the T-5 Building are judgmental locations.
- Random sample locations:
  - Designed to assess whether unknown constituents associated with LOU 62 are present.
  - One (1) sample location (RSAU5) in the eastern SI and one (1) sample location (RSAU4) are randomly placed locations.

**Proposed Phase B Constituents List for Soils:**

Judgmental sample locations will be analyzed for LOU-specific constituents consisting of the following:

- Metals (Phase A List)
- Cyanide
- Wet chemistry analytes
- VOCs
- SVOCs
- TPH-DRO/ORO

Judgmental sample locations will also be analyzed for the following constituents for area-wide coverage purposes:

- Hexavalent chromium
- Perchlorate
- Organochlorine pesticides
- Dioxins/furans
- Radionuclides
- Asbestos

Random sample grid locations will be analyzed for the following list of Phase A Site-related chemicals for area-wide coverage purposes:

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

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**Proposed Phase B Groundwater Investigation/Rationale:**

- The Phase B groundwater investigation of LOU 62 consists of collecting groundwater samples from three locations to evaluate local groundwater conditions and as a part of the Site-wide evaluation of constituent trends in groundwater.
  - One (1) well (TR-10) within the boundaries of LOU 62 will be sampled.
  - Two (2) wells (M-137 and M-138) north (downgradient) of LOU 62 will be sampled.
  - All three wells along with the analytical program to evaluate groundwater in the vicinity of LOU 62 are listed in **Table B – Groundwater Sampling and Analytical Plan for LOU 62.**

**Proposed Phase B Constituents List for Groundwater:**

- Groundwater samples will be analyzed for following analytes:
- Metals (Phase A List)
  - Cyanide
  - Wet chemistry analytes
  - VOCs
  - SVOCs
  - Organochlorine pesticides
  - Hexavalent chromium
  - Perchlorate
  - Radionuclides

**Proposed Phase B Soil Gas Investigation/Rationale:**

- Three (3) soil gas sample will be collected to evaluate area conditions for the presence of vapor-phase VOCs in the vadose zone.
- SG47 will be located nearby Phase A boring SA02 to investigate the former SIs as potential sources and to assess VOCs from a groundwater source as indicated by Phase A sample GWSA02.
  - SG66 and SG67 will be located within the former eastern pond to investigate LOU 62 as a potential VOC source.

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, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. ENSR, 2005, Conceptual Site Model, Kerr-McGee Facility, Henderson, Nevada, ENSR, Camarillo, California, 04020-023-130, February 2005 and August 2005.

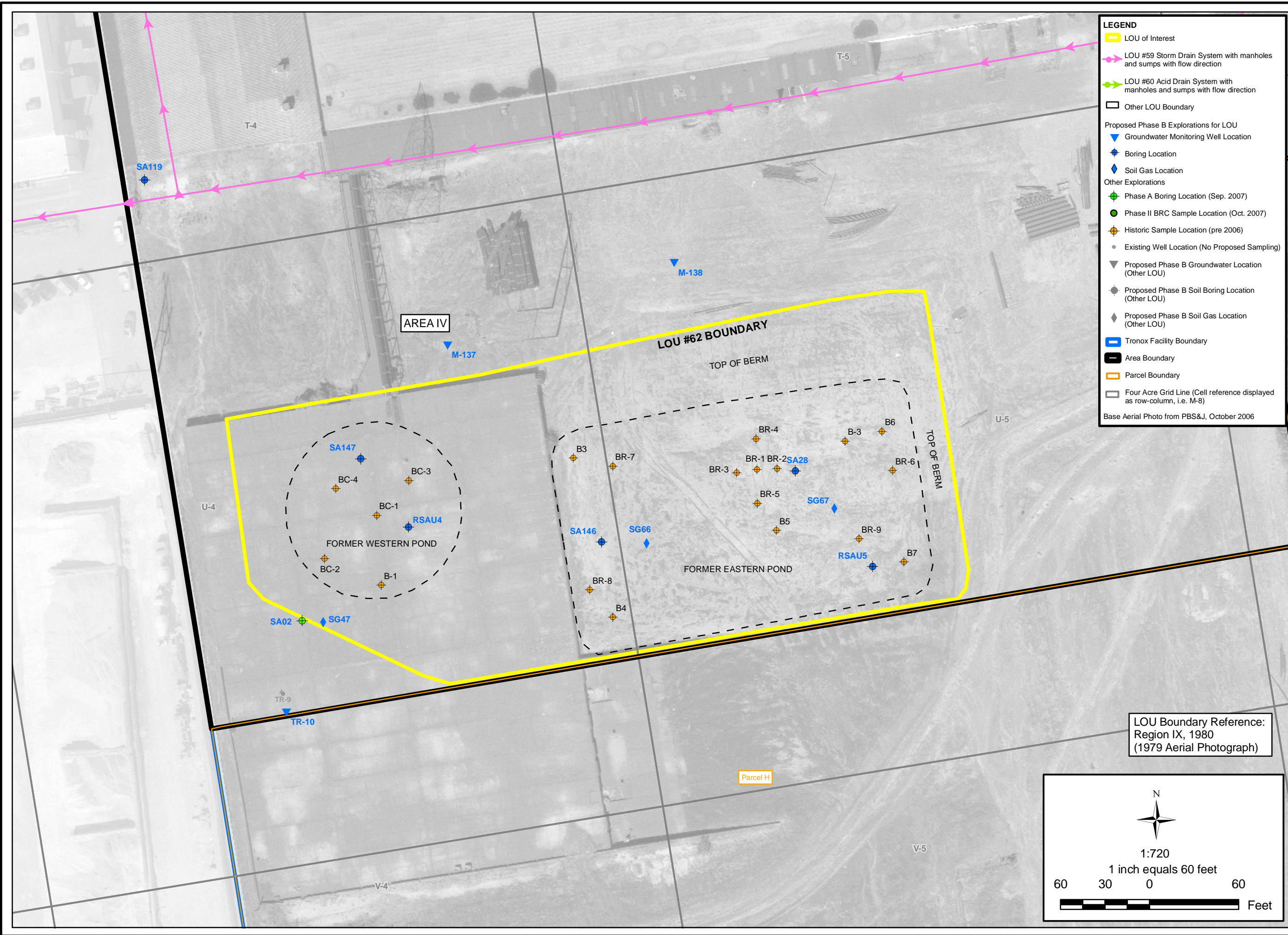
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3. Kerr-McGee, 1996b, Response to Letter of Understanding, Henderson, Nevada, October 1996.
4. Kleinfelder, 1993, Environmental Conditions Assessment, Kerr-McGee Chemical Corporation, Henderson, Nevada Facility, April 15, 1993 (Final).



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**LOU Figure**



**LEGEND**

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

Proposed Phase B Explorations for LOU

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

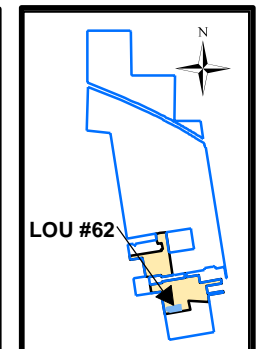
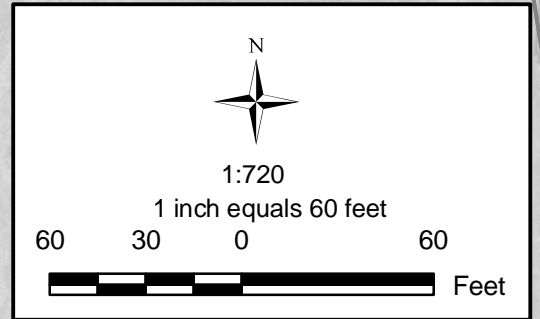
Other Explorations

- ◆ Phase A Boring Location (Sep. 2007)
- Phase II BRC Sample Location (Oct. 2007)
- ◆ Historic 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

LOU Boundary Reference:  
Region IX, 1980  
(1979 Aerial Photograph)



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DRAWN BY:	M. Scop
CHECKED BY:	G. Hels
APPROVED BY:	B. Ho

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<b>SAMPLE LOCATIONS FOR LOU #62</b>	
Phase B Area IV Source Area Investigation Tronox Facility Henderson, Nevada	
SCALE:	PROJECT NUMBER:
AS SHOWN	04020-023-430
DATE:	
5/14/2008	

FIGURE NUMBER:	<b>1</b>
SHEET NUMBER:	<b>X</b>

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**Sampling and Analytical Plans for LOU 62:**

Table A – Soil Sampling and Analytical Plan for LOU 62  
Table B – Groundwater Sampling and Analytical Plan for LOU 62

Grid Location	LOU Number	Phase B Boring No.	Sample ID Number	Sample Depths <sup>1</sup> (ft, bgs)	Perchlorate (EPA 314.0)	Metals (EPA 6020)	Hex Cr (EPA 7199)	TPH-DRO/ORO (EPA 8015B)	VOCs <sup>2</sup> (EPA 8260B)	Wet Chemistry <sup>3</sup>	Total Cyanide (EPA 9012A)	OCPs <sup>4</sup> (8081A)	SVOCS <sup>5</sup> (EPA 8270C)	Radio-nuclides <sup>6</sup>	Dioxins/Furans <sup>7</sup>	PCBs <sup>8</sup> (EPA 1668)	Asbestos <sup>9</sup> EPA/540/R-97/028	Geo-technical Tests <sup>10</sup>	Location Description and Characterized Area Rationale
<b>Borings are organized by grid location as shown on Plate A - Starting point is on grid T-6 and ending point on grid U-5.</b>																			
T-6	59, 62	SA119	SA119-0.0	0.0															Boring located to evaluate LOU 59 (Storm Sewer System) adjacent to former State Industries building (Building T-5) and LOU 62 (State Industries, Inc. Site).
T-6	59, 62		SA119-0.5	0.5	X	X	X	X	X	X	X	X	X	X			X		
T-6	59, 62		SA119-10	10	X	X	X	X	X	X	Hold	X	X						
T-6	59, 62		SA119-20	20	X	X	X	X	X	X	Hold	X	X						
T-6	59, 62		SA119-30	30	X	X	X	X	X	X	Hold	X	X						
T-6	59, 62		SA119-40	40	X	X	X	X	X	X	X	X	X						
U-4	62	RSAU4	RSAU4-0.0	0.0															Boring located to evaluate former western pond in LOU 62 (State Industries, Inc. Site).
U-4	62		RSAU4-0.5	0.5	X	X	X	X	X	X	X	X	X	X				X	
U-4	62		RSAU4-10	10	X	X	X	X	X	X	Hold	X	X						
U-4	62		RSAU4-20	20	X	X	X	X	X	X	Hold	X	X						
U-4	62		RSAU4-30	30	X	X	X	X	X	X	Hold	X	X						
U-4	62		RSAU4-40	40	X	X	X	X	X	X	Hold	X	X						
U-4	62		RSAU4-50	50	X	X	X	X	X	X	Hold	X	X						
U-4	62		RSAU4-60	60	X	X	X	X	X	X	X	X	X						
U-4	62	SA146	SA146-0.0	0.0															Boring located to evaluate former eastern pond in LOU 62 (State Industries, Inc. Site).
U-4	62		SA146-0.5	0.5	X	X	X	X	X	X	X	X	X	X				X	
U-4	62		SA146-10	10	X	X	X	X	X	X	Hold	X	X						
U-4	62		SA146-20	20	X	X	X	X	X	X	Hold	X	X						
U-4	62		SA146-30	30	X	X	X	X	X	X	Hold	X	X						
U-4	62		SA146-40	40	X	X	X	X	X	X	Hold	X	X						
U-4	62		SA146-50	50	X	X	X	X	X	X	Hold	X	X						
U-4	62		SA146-60	60	X	X	X	X	X	X	X	X	X						
U-4	62	SA147	SA147-0.0	0.0															Boring located to evaluate former western pond in LOU 62 (State Industries, Inc. Site).
U-4	62		SA147-0.5	0.5	X	X	X	X	X	X	X	X	X	X				X	
U-4	62		SA147-10	10	X	X	X	X	X	X	Hold	X	X						
U-4	62		SA147-20	20	X	X	X	X	X	X	Hold	X	X						
U-4	62		SA147-30	30	X	X	X	X	X	X	Hold	X	X						
U-4	62		SA147-40	40	X	X	X	X	X	X	Hold	X	X						
U-4	62		SA147-50	50	X	X	X	X	X	X	Hold	X	X						
U-4	62		SA147-60	60	X	X	X	X	X	X	X	X	X						
U-5	62	RSAU5	RSAU5-0.0	0.0															Boring located to evaluate former eastern pond in LOU 62 (State Industries, Inc. Site).
U-5	62		RSAU5-0.5	0.5	X	X	X	X	X	X	X	X	X	X				X	
U-5	62		RSAU5-10	10	X	X	X	X	X	X	Hold	X	X						
U-5	62		RSAU5-20	20	X	X	X	X	X	X	Hold	X	X						
U-5	62		RSAU5-30	30	X	X	X	X	X	X	Hold	X	X						
U-5	62		RSAU5-40	40	X	X	X	X	X	X	Hold	X	X						
U-5	62		RSAU5-50	50	X	X	X	X	X	X	Hold	X	X						
U-5	62		RSAU5-60	60	X	X	X	X	X	X	X	X	X						
U-5	62	SA28	SA28-0.0	0.0															Boring located to evaluate former eastern pond in LOU 62 (State Industries, Inc. Site).
U-5	62		SA28-0.5	0.5	X	X	X	X	X	X	X	X	X	X				X	
U-5	62		SA28-10	10	X	X	X	X	X	X	Hold	X	X						
U-5	62		SA28-20	20	X	X	X	X	X	X	Hold	X	X						
U-5	62		SA28-30	30	X	X	X	X	X	X	Hold	X	X						
U-5	62		SA28-40	40	X	X	X	X	X	X	Hold	X	X						
U-5	62		SA28-50	50	X	X	X	X	X	X	Hold	X	X						
U-5	62		SA28-60	60	X	X	X	X	X	X	X	X	X						
Number of Borings:		6																	
Number of Samples:		40																	
		40																	
		40																	
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		40																	
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		40																	
		12																	
		40																	
		40																	
		6																	
		0																	
		6																	
		0																	
<b>Notes:</b>																			
X Sample will be collected and analyzed.																			
No sample collected under Phase B sampling program.																			
TPH-DRO/ORO Total petroleum hydrocarbons - Diesel-Range Organics/Oil-Range Organics.																			
1. If area is paved, samples will be collected at 0.5 feet below, or 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 Thorium-230/232, Uranium 234/235, Uranium-238, and beta spec for Radium-226/228 (per NDEP).																			
7. Dioxins/furans: 90% will be tested by immunoassay, 10% analyzed by HRGC/HRMS in the laboratory.																			
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).																			



Grid Location	Location Area	Monitoring Well No.	Sample ID Number	Screen Interval (ft bgs)	Soil Type Expected Across Screen Interval <sup>1</sup>	Well Sampled for Phase A? (y/n)	Perchlorate (EPA 314.0)	Hex Cr (EPA 7199)	Metals	VOCs <sup>2</sup> (EPA 8260)	Wet Chemistry (a)	Total Cyanide (EPA 9012A)	OCPs <sup>3</sup> (EPA 8081A)	SVOCs <sup>4</sup> (EPA 8270C)	Radio-nuclides <sup>5</sup>	Rationale
<b>Wells are organized by grid location as shown on Plate A - Starting point is on grid U-4 and ending point on grid U-5.</b>																
U-4	IV	TR-10	TR-10	80-100	MCcg1	no	X	X	X	X	X		X	X	X	Located to evaluate LOU 62 and for general Site coverage.
U-4	IV	M-137	M-137	TBD	TBD	new well	X	X	X	X	X	X	X	X	X	New well to be installed; located to serve as a downgradient stepout for LOU 62 (former State Industries western pond), and for general Site coverage.
U-5	IV	M-138	M-138	TBD	TBD	new well	X	X	X	X	X	X	X	X	X	Located to serve as a downgradient stepout for LOU 62 (former State Industries eastern pond) and for general Site coverage.
<b>Number of Field Samples:</b>							<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	

**Notes:**

- 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 Thorium-230/232, Uranium 234/235, Uranium-238, and beta spec for Radium-226/228 (per NDEP).
- (a) Complete list of wet chemistry parameters are shown on Table 1. All groundwater samples will have pH measured in the field.
- TBD To be determined when well is constructed
- MCfg1 Muddy Creek Formation - first fine-grained facies
- MCcg1 Muddy Creek Formation - first coarse-grained facies
- MCfg2 Muddy Creek Formation - second fine-grained facies

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**Soil and Groundwater Characterization Data**

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LOU-specific analytes identified include:

- Metals
- Cyanide
- Wet chemistry analytes
- SVOCs
- VOCs
- TPH-DRO/ORO

The tables in **BOLD** below present Phase A data associated with these LOU specific analytes.

**LOU 62 Table 1 – Soil Characterization Data – Wet Chemistry**

**LOU 62 Table 2 – Groundwater Characterization Data – Wet Chemistry**

LOU 62 Table 3 – Soil Characterization Data – Dioxins and Dibenzofurans

**LOU 62 Table 4 – Soil Characterization Data – Metals**

**LOU 62 Table 5 – Groundwater Characterization Data – Metals**

**LOU 62 Table 6 – Soil Characterization Data – Organochlorine Pesticides (OCPs)**

**LOU 62 Table 7 – Groundwater Characterization Data – Organochlorine Pesticides (OCPs)**

LOU 62 Table 8 – Soil Characterization Data – Organophosphorus Pesticides (OPPs)

LOU 62 Table 9 – Groundwater Characterization Data – Organophosphorus Pesticides (OPPs)

LOU 62 Table 10 – Soil Characterization Data – PCBs

LOU 62 Table 11 – Groundwater Characterization Data – PCBs

LOU 62 Table 12 – Soil Characterization Data – Perchlorate

LOU 62 Table 13 – Groundwater Characterization Data – Perchlorate

LOU 62 Table 14 – Soil Characterization Data – Radionuclides

LOU 62 Table 15 – Groundwater Characterization Data – Radionuclides

**LOU 62 Table 16 – Soil Characterization Data – SVOCs**

**LOU 62 Table 17 – Groundwater Characterization Data – SVOCs**

**LOU 62 Table 18 – Soil Characteristic Data - TPH and Fuel Alcohols**

**LOU 62 Table 19 – Soil Characterization Data – VOCs**

**LOU 62 Table 20 – Groundwater Characterization Data – VOCs**

LOU 62 Table 21 – Soil Characterization Data – Long Asbestos Fibers in Respirable Soil Fraction

LOU 62 Table 22 – Summary of Historical Groundwater Analytical Data

LOU 62 Tables 23a through 23d – Summary of Historical Soil Analytical Data

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

**LOU 62 Table 1**  
**Soil Characterization Data - Wet Chemistry**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.		SA2	SA2	SA2	SA2	SA2	SA2	SA2	
Sample ID		SA2-0.5	SA2-10	SA2-20	SA2-30	SA2-40	SA2-50	SA2-60	
Sample Depth (ft)		0.5	10	20	30	40	50	60	
Sample Date		11/03/2006	11/03/2006	11/03/2006	11/06/2006	11/06/2006	11/06/2006	11/06/2006	
Wet Chemistry Parameter	MSSL <sup>2</sup> mg/kg								Units
Percent moisture	--	6.0	19.4	14.7	15.3	33.1	32.1	18.4	percent
Alkalinity (as CaCO <sub>3</sub> )	--	140	251	281	274	166	73.6 U	61.3 U	mg/kg
Bicarbonate	--	505	2190	2700	978	521	73.6 U	136	mg/kg
Total Alkalinity	--	645	2440	2980	1250	687	74.4	136	mg/kg
Ammonia (as N)	--	5.3 U	6.2 U	5.9 U	5.9 U	5.7 J	1.0 J	0.80 J	mg/kg
Cyanide	1.37E+04	0.53 U	0.62 U	0.59 U	0.59 U	0.75 U	0.74 U	0.61 U	mg/kg
MBAS	--	4.8 U	4.8 U	4.8 U	5.5 U	4.9 U	5.3 U	5.9 U	mg/kg
pH (solid)	--	10	11.2	10.7	8.7	8.7	8.3	9.2	none
Bromide	--	2.7 U	3.1 U	2.9 U	3.0 U	2.6 J	1.7 J	3.1 U	mg/kg
Chlorate	--	5.3 UJ	6.2 UJ	5.9 UJ	1.4 J-	7.1 J-	8.9 J-	6.1 UJ	mg/kg
Chloride	--	2.1 U	29.7	4.4	24.7	795	689	14.6	mg/kg
Nitrate (as N)	--	0.18 J	3.3 J	0.21 J	2.8 J	13.6 J	5.6 J	0.85 J+	mg/kg
Nitrite	--	0.21 U	R	0.089 J-	R	0.17 J	5.4 J-	0.90	mg/kg
ortho-Phosphate	--	5.3 U	6.2 U	5.9 U	5.9 U	6.2 J	2.4 J	6.1 U	mg/kg
Sulfate	--	5.4	705	66.3	7330	691	277	99.3	mg/kg
Total Organic Carbon	--	7700	15100	9200	19800	6550	500 J	600 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).



**LOU 62 Table 2**  
**Groundwater Characterization Data - Wet Chemistry**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	
Well ID		SA2	
Sample ID		GWSA2	
Sample Date		11/06/2006	
Wet Chemistry Parameters	MCL <sup>2</sup> ug/L		Units
Total Dissolved Solids	5.00E+05 j	1660	mg/L
Total Suspended Solids	--	29400	mg/L
Alkalinity (as CaCO <sub>3</sub> )	--	5.0 U	mg/L
Bicarbonate	--	106	mg/L
Total Alkalinity	--	106	mg/L
Ammonia (as N)	--	50.0 U	ug/L
MBAS	--	0.20 U	mg/L
Cyanide	2.00E+02	5.0 UJ	ug/L
pH (liquid)	--	7.9 J	none
Specific Conductance	--	2260	umhos/cm
Bromide	--	0.65	mg/L
Chlorate	--	4.0 J	mg/L
Chloride	2.50E+05	170	mg/L
Nitrate (as N)	1.00E+04	5.4	mg/L
Nitrite	1.00E+03	0.020 U	mg/L
ortho-Phosphate	--	0.5 U	mg/L
Sulfate	2.50E+05 j	913	mg/L
Total Organic Carbon	--	4.1 J-	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.

**LOU 62 Table 3  
Soil Characterization Data - Dioxins and Dibenzofurans**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program				Ph A <sup>1</sup>
Boring No.				SA2
Sample ID				SA2-0.5
Sample Depth (ft)				0.5
Sample Date				11/03/2006
chemical_name:	Method	Unit	MSSL <sup>2</sup> mg/kg	
Dioxin 8290 SCREEN Total TEQ-ENSR Calculated (a) ng/kg		ng/kg	--	<b>2.57</b>
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	--	<b>2.58</b>
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	--	<b>7.825</b>
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	--	<b>3.279</b>
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	--	<b>3.275</b>
1,2,3,4,7,8,9-Heptachlorodibenzofuran	SW 846 8290	ng/kg	--	
1,2,3,4,7,8-Hexachlorodibenzofuran	8290 Screen	ng/kg	--	<b>4.792</b>
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	--	<b>0.096</b>
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	--	<b>2.661</b>
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	--	<b>0.328</b>
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	--	<b>0.289</b>
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	--	<b>0.324</b>
1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--	
1,2,3,7,8-Pentachlorodibenzofuran	8290 Screen	ng/kg	--	<b>3.224</b>
1,2,3,7,8-Pentachlorodibenzofuran	SW 846 8290	ng/kg	--	
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	<b>0.177</b>
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--	
2,3,4,6,7,8-Hexachlorodibenzofuran	8290 Screen	ng/kg	--	<b>1.635</b>
2,3,4,6,7,8-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--	
2,3,4,7,8-Pentachlorodibenzofuran	8290 Screen	ng/kg	--	<b>1.575</b>
2,3,4,7,8-Pentachlorodibenzofuran	SW 846 8290	ng/kg	--	
2,3,7,8-Tetrachlorodibenzofuran	8290 Screen	ng/kg	--	<b>6.586</b>
2,3,7,8-Tetrachlorodibenzofuran	SW 846 8290	ng/kg	--	
2,3,7,8-Tetrachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	1.80E-05 h,v	0.023 U
2,3,7,8-Tetrachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	1.80E-05 h,v	
Octachlorodibenzofuran	8290 Screen	ng/kg	--	<b>20.138</b>
Octachlorodibenzofuran	SW 846 8290	ng/kg	--	
Octachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	<b>17.723</b>

**LOU 62 Table 3 (continued)**  
**Soil Characterization Data - Dioxins and Dibenzofurans**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

<b>Sampling Program</b>				Ph A <sup>1</sup>
<b>Boring No.</b>				SA2
<b>Sample ID</b>				SA2-0.5
<b>Sample Depth (ft)</b>				0.5
<b>Sample Date</b>				11/03/2006
<b>chemical_name:</b>	<b>Method</b>	<b>Unit</b>	<b>MSSL<sup>2</sup></b> <b>mg/kg</b>	
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 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. Midpoint of the range of 0.005 to 0.02 mg/kg for commercial/industrial soils.

**LOU 62 Table 4  
Soil Characterization Data - Metals**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.		SA2	SA2	SA2	SA2	SA2	SA2	SA2	
Sample ID		SA2-0.5	SA2-10	SA2-20	SA2-30	SA2-40	SA2-50	SA2-60	
Sample Depth (ft)		0.5	10	20	30	40	50	60	
Sample Date		11/03/2006	11/03/2006	11/03/2006	11/06/2006	11/06/2006	11/06/2006	11/06/2006	
Metals	MSSL <sup>2</sup> mg/kg								Units
Aluminum	1.00E+05	5510 J	6510 J	5110 J	7410 J	16000 J	13200 J	10200 J	mg/kg
Antimony	4.50E+02	0.14 J-	0.15 J-	0.14 J-	0.12 J-	0.21 J-	0.23 J-	0.13 J-	mg/kg
Arsenic	2.80E+02	1.8	3.5	4.0	23.5	18.9	26.8	10.6	mg/kg
Barium	1.00E+05	136 J	113 J	110 J	452 J	84.2 J	101 J	118 J	mg/kg
Beryllium	2.20E+03	0.40	0.44	0.41	0.40	0.75	0.62	0.43	mg/kg
Boron	1.00E+05	3.1 UJ	6.3 UJ	6.4 UJ	20.6 J-	29.6 J-	22.7 J-	11.1 UJ	mg/kg
Cadmium	5.60E+02	0.10	0.062	0.11	0.14	0.084	0.069 J	0.046 J	mg/kg
Calcium	--	14700 J	19000 J	39900 J	138000	4620	3830	4560	mg/kg
Chromium (Total)	7.10E+01	6.5 J-	7.6 J-	6.7 J-	16.1 J-	20.2 J-	20.9 J-	19.2 J-	mg/kg
Chromium-hexavalent	5.00E+02	0.21 U	0.25 U	0.23 U	0.24 U	0.30 U	0.29 U	0.25 U	mg/kg
Cobalt	2.10E+03	6.4 J-	6.4 J-	6.3 J-	3.6 J-	5.9 J-	6.1 J-	5.5 J-	mg/kg
Copper	4.20E+04	15.2 J	12.6 J	10.0 J	8.9 J	13.9 J	12.8 J	12.4 J	mg/kg
Iron	1.00E+05	11300 J	10700 J	10800 J	6990 J	13500 J	12800 J	10900 J	mg/kg
Lead	8.00E+02	112	7.0	6.8	5.4	10.7	9.0	6.8	mg/kg
Magnesium	--	6320 J-	9330 J-	5080 J-	13900 J-	20100 J-	17500 J-	14200 J-	mg/kg
Manganese	3.50E+04	325 J+	305 J+	404 J+	185 J+	250 J+	196 J+	160 J+	mg/kg
Molybdenum	5.70E+03	0.54	0.49 J	0.80	0.86 J	0.93	0.67 J	0.70	mg/kg
Nickel	2.30E+04	12.9 J	12.6 J	12.1 J	11.5 J	20.9 J	17.5 J	20.2 J	mg/kg
Platinum	--	0.011 U	0.012 U	0.012 U	0.017 J	0.021 J	0.018 J	0.012 U	mg/kg
Potassium	--	1580 J	1190 J	1350 J	1660 J	3940 J	3220 J	2300 J	mg/kg
Selenium	5.70E+03	0.12 U	0.13 U	0.13 U	0.13 U	0.16 U	0.16 U	0.13 U	mg/kg
Silver	5.70E+03	0.11 J	0.092 J	0.088 J	0.12 J	0.18 J	0.23 J	0.15 J	mg/kg
Sodium	--	414 J-	517 J-	580 J-	1060 J-	1690 J-	1030 J-	1020 J-	mg/kg
Strontium	1.00E+05	116 J	224 J	171 J	266 J	124 J	110 J	104 J	mg/kg
Thallium	--	0.12 U	0.091 U	0.16 U	0.15 J	0.26 J	0.21 J	0.17 J	mg/kg
Tin	--	0.47	0.41	0.39	0.44	0.79	0.67	0.56	mg/kg
Titanium	--	437 J	380 J	332 J	403 J	616 J	616 J	645 J	mg/kg

**LOU 62 Table 4 (continued)**  
**Soil Characterization Data - Metals**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.		SA2	SA2	SA2	SA2	SA2	SA2	SA2	
Sample ID		SA2-0.5	SA2-10	SA2-20	SA2-30	SA2-40	SA2-50	SA2-60	
Sample Depth (ft)		0.5	10	20	30	40	50	60	
Sample Date		11/03/2006	11/03/2006	11/03/2006	11/06/2006	11/06/2006	11/06/2006	11/06/2006	
Metals	MSSL <sup>2</sup> mg/kg								Units
Tungsten	--	0.31 J-	0.44 J-	0.47 J-	0.77 J-	0.43 J-	0.46 J-	0.27 J-	mg/kg
Uranium	--	0.68	1.6	1.1	3.5	1.9	1.7	1.2	mg/kg
Vanadium	5.70E+03	26.6 J-	28.5 J-	24.3 J-	27.4 J-	36.1 J-	38.6 J-	30.2 J-	mg/kg
Zinc	1.00E+05	27.8 J-	26.5 J-	22.6 J-	22.1 UJ	37.7 J-	33.0 J-	34.3 J-	mg/kg
Mercury	3.41E+02 (t)	0.0071 U	0.0091 J	0.0078 UJ	0.0079 U	0.010 U	0.0098 U	0.0082 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).  
(oo) PRG is based on maximum (1E+05 mg/kg). Therefore, the risk-based value provided in the electronic backup to the PRG table was  
(t) Value for mercury and compounds.

**LOU 62 Table 5**  
**Groundwater Characterization Data - Metals**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program		PhA <sup>1</sup>	
Well ID:		SA2	
Sample ID		GWSA2	
Sample Date		11/06/2006	
Metals	MCL <sup>2</sup> ug/L		Unit
Aluminum	5.00E+01 j	13.6 J	ug/L
Antimony	6.00E+00	0.52 J-	ug/L
Arsenic	1.00E+01	223	ug/L
Barium	2.00E+03	28.9	ug/L
Beryllium	4.00E+00	0.088 UJ	ug/L
Boron	7.30E+03 c	2740 J-	ug/L
Cadmium	5.00E+00	0.23 J	ug/L
Calcium	--	87600 J	ug/L
Chromium (Total)	1.00E+02	18.8 J-	ug/L
Chromium-hexavalent	1.09E+02 c	25.3 J	ug/L
Cobalt	7.30E+02 c	4.0 J-	ug/L
Copper	1.30E+03 p	3.6 J-	ug/L
Iron	3.00E+02 j	9.4 UJ	ug/L
Lead	1.50E+01 u	9.8 U	ug/L
Magnesium	1.50E+05 a	38000 J	ug/L
Manganese	5.00E+01 j	18.7 J+	ug/L
Molybdenum	1.82E+02 c	97.9	ug/L
Nickel	7.30E+02 c	3.7 J	ug/L
Platinum	--	0.10 U	ug/L
Potassium	--	7240 J-	ug/L
Selenium	5.00E+01	3.5 J	ug/L
Silver	1.00E+02 j	0.20 U	ug/L
Sodium	--	368000 J	ug/L
Strontium	2.19E+04 c	1430 J+	ug/L
Thallium	2.00E+00	6.4 U	ug/L
Tin	2.19E+04 c	0.20 UJ	ug/L
Titanium	1.46E+05 c	4.6 J	ug/L
Tungsten	--	6.2 J-	ug/L
Uranium	3.00E+01	9.5 J	ug/L
Vanadium	3.65E+01 c	54.5 J-	ug/L
Zinc	5.00E+03 j	20.0 UJ	ug/L
Mercury	2.00E+00	0.093 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.
  - (j) Secondary Drinking Water Regulation value.
  - (c) Equal to the USEPA Region 9 Preliminary Remediation Goals (PRGs) for tapwater (October, 2004).
  - (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.

**LOU 62 Table 6**  
**Soil Characterization Data - Organochlorine Pesticides (OCP)**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	Ph A	Ph A	
Boring No.		SA2	SA2	SA2	
Sample ID		SA2-0.5	SA2-20	SA2-30	
Sample Depth (ft)		0.5	20	30	
Sample Date		11/03/2006	11/03/2006	11/06/2006	
Organochlorine Pesticides	MSSL <sup>2</sup> mg/kg				Unit
4,4'-DDD	1.10E+01	0.0018 U	0.0020 U	0.0020 U	mg/kg
4,4'-DDE	7.80E+00	0.0018 U	0.0020 U	0.0020 U	mg/kg
4,4'-DDT	7.80E+00	0.0018 U	0.0020 U	0.0020 U	mg/kg
Aldrin	1.10E-01	0.0018 U	0.0020 U	0.0020 U	mg/kg
Alpha-BHC	4.00E-01 (bbb)	0.0018 U	0.0020 U	0.0020 U	mg/kg
Alpha-chlordane	1.40E+00 (y)	0.0018 U	0.0020 U	0.0020 U	mg/kg
Beta-BHC	1.40E+00 (bbb)	0.0018 U	0.0020 U	0.0020 U	mg/kg
Delta-BHC	4.00E-01 (z)	0.0018 U	0.0020 U	0.0020 U	mg/kg
Dieldrin	1.20E-01	0.0018 U	0.0020 U	0.0020 U	mg/kg
Endosulfan I	4.10E+03 (aa)	0.0018 U	0.0020 U	0.0020 U	mg/kg
Endosulfan II	4.10E+03 (aa)	0.0018 U	0.0020 U	0.0020 U	mg/kg
Endosulfan Sulfate	4.10E+03 (aa)	0.0018 U	0.0020 U	0.0020 U	mg/kg
Endrin	2.10E+02	0.0018 U	0.0020 U	0.0020 U	mg/kg
Endrin Aldehyde	2.10E+02 (k)	0.0018 U	0.0020 U	0.0020 U	mg/kg
Endrin Ketone	2.10E+02 (k)	0.0018 U	0.0020 U	0.0020 U	mg/kg
Gamma-BHC (Lindane)	1.90E+00 (bbb)	0.0018 U	0.0020 U	0.0020 U	mg/kg
Gamma-Chlordane	1.40E+00 (y)	0.0018 U	0.0020 U	0.0020 U	mg/kg
Heptachlor	4.30E-01	0.0018 U	0.0020 U	0.0020 U	mg/kg
Heptachlor Epoxide	2.10E-01	0.0018 U	0.0020 U	0.0020 U	mg/kg
Methoxychlor	3.40E+03	0.0035 U	0.0039 U	0.0039 U	mg/kg
Tech-Chlordane	1.40E+00	0.011 U	0.012 U	0.012 U	mg/kg
Toxaphene	1.70E+00	0.053 U	0.059 U	0.059 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).
- (k) Value for endrin used as surrogate for endrin aldehyde and endrin ketone due  
(y) Value for chlordane (technical) used as surrogate for alpha-chlordane and gamma-chlordane based on structural similarities.  
(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  
(bbb) BHC listed as HCH in the PRG table.

**LOU 62 Table 7**  
**Groundwater Characterization Data - Organochlorine Pesticides (OCP)**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	
Well ID		SA2	
Sample ID		GWSA2	
Sample Date		11/06/2006	
Organochlorine Pesticides	MCL <sup>2</sup> ug/L		Unit
4,4'-DDD	2.80E-01 c	0.050 U	ug/L
4,4'-DDE	1.98E-01 c	0.050 U	ug/L
4,4'-DDT	1.98E-01 c	0.050 U	ug/L
Aldrin	4.00E-03 c	0.050 U	ug/L
Alpha-BHC	1.10E-02 c, (bbb)	0.050 U	ug/L
Alpha-chlordane	2.00E+00 (l)	0.050 U	ug/L
Beta-BHC	3.74E-02 c, (bbb)	0.050 U	ug/L
Delta-BHC	1.10E-02 c, (z)	0.050 U	ug/L
Dieldrin	4.20E-03 c, (z)	0.050 U	ug/L
Endosulfan I	2.19E+02 c, (aa)	0.050 U	ug/L
Endosulfan II	2.19E+02 c, (aa)	0.050 U	ug/L
Endosulfan Sulfate	2.19E+02 c, (aa)	0.050 U	ug/L
Endrin	2.00E+00	0.050 U	ug/L
Endrin Aldehyde	1.09E+01 c, (k)	0.050 U	ug/L
Endrin Ketone	1.09E+01 c, (k)	0.050 U	ug/L
Gamma-BHC (Lindane)	2.00E-01	0.050 U	ug/L
Gamma-Chlordane	2.00E+00 (l)	0.050 U	ug/L
Heptachlor	4.00E-01	0.050 U	ug/L
Heptachlor Epoxide	2.00E-01	0.050 U	ug/L
Methoxychlor	4.00E+01	0.10 UJ	ug/L
Tech-Chlordane	2.00E+00 (l)	0.50 U	ug/L
Toxaphene	3.00E+00	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.
  - (c) Equal to the USEPA Region 9 Preliminary Remediation Goals (PRGs) for tapwater (October, 2004).
  - (bbb) BHC listed as HCH in the PRG table.
  - (l) Value for chlordane used as surrogate for alpha-chlordane, chlordane (technical) and gamma-chlordane due to structural similarities.
  - (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.



**LOU 62 Table 8**  
**Soil Characterization Data - Organophosphorus Pesticides (OPPs)**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	
Boring No.		SA2	
Sample ID		SA2-0.5	
Sample Depth (ft)		0.5	
Sample Date		11/03/2006	
OPPs	MSSL <sup>2</sup> mg/kg		Unit
Azinphos-methyl	--	0.014 U	mg/kg
Bolstar	--	0.014 U	mg/kg
Chlorpyrifos	2.10E+03	0.021 U	mg/kg
Coumaphos	--	0.014 U	mg/kg
Demeton-O	--	0.041 UJ	mg/kg
Demeton-S	--	0.016 UJ	mg/kg
Diazinon	6.20E+02	0.023 UJ	mg/kg
Dichlorvos	6.60E+00	0.024 U	mg/kg
Dimethoate	--	0.023 U	mg/kg
Disulfoton	2.70E+01	0.051 U	mg/kg
EPN	--	0.014 UJ	mg/kg
Ethoprop	--	0.016 U	mg/kg
Ethyl Parathion	4.10E+03	0.019 U	mg/kg
Famphur	--	0.014 U	mg/kg
Fensulfothion	--	0.014 U	mg/kg
Fenthion	1.70E+02 (ff)	0.035 U	mg/kg
Malathion	1.40E+04	0.016 U	mg/kg
Merphos	--	0.032 U	mg/kg
Methyl parathion	1.70E+02	0.021 U	mg/kg
Mevinphos	--	0.016 U	mg/kg
Naled	1.40E+03	0.035 UJ	mg/kg
Phorate	--	0.021 U	mg/kg
Ronnel	3.40E+04	0.019 UJ	mg/kg
Stirphos	--	0.016 U	mg/kg
Sulfotep	--	0.021 U	mg/kg
Thionazin	--	0.019 U	mg/kg
Tokuthion	--	0.021 U	mg/kg
Trichloronate	--	0.021 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.

**LOU 62 Table 9**  
**Groundwater Characterization Data - Organophosphorus Pesticides (OPPs)**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	
Well ID		SA2	
Sample ID		GWSA2	
Sample Date		11/06/2006	
OPPs	MCL <sup>2</sup> ug/L		Unit
Azinphos-methyl	--	2.5 U	ug/L
Bolstar	--	1.0 U	ug/L
Chlorpyrifos	1.09E+02 c	1.0 U	ug/L
Coumaphos	--	1.0 U	ug/L
Demeton-O	1.46E+00 c,(cc)	1.0 U	ug/L
Demeton-S	1.46E+00 c,(cc)	1.0 UJ	ug/L
Diazinon	3.28E+01	1.0 U	ug/L
Dichlorvos	2.32E-01	1.0 U	ug/L
Dimethoate	7.30E+00	1.0 U	ug/L
Disulfoton	1.46E+00	0.50 U	ug/L
EPN	3.65E-01	1.2 UJ	ug/L
Ethoprop	--	0.50 U	ug/L
Ethyl Parathion	9.12E+00 c,(tt)	1.0 U	ug/L
Famphur	--	1.0 U	ug/L
Fensulfothion	--	2.5 U	ug/L
Fenthion	9.10E+00 c,(ff)	2.5 U	ug/L
Malathion	7.30E+02	1.2 U	ug/L
Merphos	1.09E+00	5.0 U	ug/L
Methyl parathion	9.12E+00	4.0 U	ug/L
Mevinphos	--	6.2 U	ug/L
Naled	7.30E+01	1.0 UJ	ug/L
Phorate	7.30E+00	1.2 U	ug/L
Ronnel	1.82E+03	10 U	ug/L
Stirphos	--	3.5 U	ug/L
Sulfotep	1.82E+01	1.5 U	ug/L
Thionazin	--	1.0 U	ug/L
Tokuthion	--	1.6 U	ug/L
Trichloronate	--	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.
  - (c) Equal to the USEPA Region 9 Preliminary Remediation Goals (PRGs) for tapwater (October, 2004).
  - (cc) Value for demeton used as surrogate for demeton-o and demeton-s based on structural similarities.
  - (tt) Value for parathion-methyl used as surrogate for parathion-ethyl due to structural similarities.
  - (ff) Value for methyl parathion used as surrogate for fenthion based on structural similarities.

**LOU 62 Table 10**  
**Soil Characterization Data - PCBs**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring ID		SA2	SA2	SA2	SA2	SA2	SA2	SA2	
Sample ID		SA2-0.5	SA2-10	SA2-20	SA2-30	SA2-40	SA2-50	SA2-60	
Sample Depth (ft)		0.5	10	20	30	40	50	60	
Sample Date		11/03/2006	11/03/2006	11/03/2006	11/06/2006	11/06/2006	11/06/2006	11/06/2006	
PCBs	MSSL <sup>2</sup> mg/kg								Unit
Aroclor-1016	2.40E+01 (i)	0.035 U	0.041 U	0.039 U	0.039 U	0.049 U	0.049 U	0.040 U	mg/kg
Aroclor-1221	8.30E-01 (i)	0.035 U	0.041 U	0.039 U	0.039 U	0.049 U	0.049 U	0.040 U	mg/kg
Aroclor-1232	8.30E-01 (i)	0.035 U	0.041 U	0.039 U	0.039 U	0.049 U	0.049 U	0.040 U	mg/kg
Aroclor-1242	8.30E-01 (i)	0.035 U	0.041 U	0.039 U	0.039 U	0.049 U	0.049 U	0.040 U	mg/kg
Aroclor-1248	8.30E-01 (i)	0.035 U	0.041 U	0.039 U	0.039 U	0.049 U	0.049 U	0.040 U	mg/kg
Aroclor-1254	8.30E-01 (i)	0.035 U	0.041 U	0.039 U	0.039 U	0.049 U	0.049 U	0.040 U	mg/kg
Aroclor-1260	8.30E-01 (i)	0.035 U	0.041 U	0.039 U	0.039 U	0.049 U	0.049 U	0.040 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).

**LOU 62 Table 11  
Groundwater Characterization Data - PCBs**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	
Well ID		SA2	
Sample ID		GWSA2	
Sample Date		11/06/2006	
PCBs	MCL <sup>2</sup> ug/L		Unit
Aroclor-1016	5.00E-01 (bb)	0.10 UJ	ug/L
Aroclor-1221	5.00E-01 (bb)	0.10 UJ	ug/L
Aroclor-1232	5.00E-01 (bb)	0.10 UJ	ug/L
Aroclor-1242	5.00E-01 (bb)	0.10 UJ	ug/L
Aroclor-1248	5.00E-01 (bb)	0.10 UJ	ug/L
Aroclor-1254	5.00E-01 (bb)	0.10 UJ	ug/L
Aroclor-1260	5.00E-01 (bb)	0.10 UJ	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.

**LOU 62 Table 12**  
**Soil Characterization Data - Perchlorate**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Boring ID	Sample ID	Sample Depth (ft)	Sample Date	Perchlorate ug/kg	MSSL <sup>1</sup> mg/kg	Sampling Program
SA2	SA2-0.5	0.5	11/03/2006	35.7 J	7.95E+02	Ph A <sup>2</sup>
SA2	SA2-10	10	11/03/2006	451	7.95E+02	Ph A
SA2	SA2-20	20	11/03/2006	77.8	7.95E+02	Ph A
SA2	SA2-30	30	11/06/2006	655	7.95E+02	Ph A
SA2	SA2-40	40	11/06/2006	2270	7.95E+02	Ph A
SA2	SA2-50	50	11/06/2006	406	7.95E+02	Ph A
SA2	SA2-60	60	11/06/2006	49.0 U	7.95E+02	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.

**LOU 62 Table 13**  
**Groundwater Characterization Data - Perchlorate**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Well ID Number	Sample ID	Sample Date	Perchlorate	Units	MCL <sup>1</sup> ug/L	Sampling Program
SA2	GWSA2	11/06/2006	393	ug/L	1.80E+01 a,(m)	Ph A <sup>2</sup>

**Notes:**

1. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
  2. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
- (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](http://ndep.nv.gov/bca/perchlorate02_05.htm)].

**LOU 62 Table 14  
Soil Characterization Data - Radionuclides**

State Industries Inc. Site  
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	
			PRG <sup>1</sup>	2.60E-02	1.50E-01	2.55E-01	2.02E+01	1.90E+01	3.24E+01	3.98E-01	1.80E+00	
Boring ID Number	Sample ID	Sample Depth (ft)	Date									Sampling Program
SA2	SA2-0.5	0.5	11/03/2006	1.02 J	1.97	1.12	0.798 J	0.994 J	0.26 J	0.035 J-	0.196 J	Ph A <sup>2</sup>
SA2	SA2-10	10	11/03/2006	1.17 J	1.56							Ph A
SA2	SA2-20	20	11/03/2006	1.15 J	1.95							Ph A
SA2	SA2-30	30	11/06/2006	3.39	1.01 U							Ph A
SA2	SA2-40	40	11/06/2006	1.34 J	1.72							Ph A
SA2	SA2-50	50	11/06/2006	1.3 J	1.39							Ph A
SA2	SA2-60	60	11/06/2006	2.64	1.54							Ph A

**Notes:**

- USEPA, 2004. Radionuclide Toxicity and Preliminary Remediation Goals (PRGs) for Superfund. <http://epa-prgs.ornl.gov/radionuclides/download.shtml>. August 4, 2004. Soil values are the outdoor worker values; water values are the tapwater values. For radionuclides with decay chains, the PRG for the decay chain was used.
- ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.

**LOU 62 Table 15**  
**Groundwater Characterization Data - Radionuclides**

State Industries Inc. Site  
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	
		TW PRG <sup>1,2</sup>	8.16E-04	4.58E-02	1.59E-01	5.23E-01	4.71E-01	6.74E-01	6.63E-01	5.47E-01	
Well ID Number	Sample ID	Date									Sampling Program
SA2	GWSA2	11/06/2006	10.9 J-	5.82 J-	8.15	13	9.14	15.5	0.348 J+	11.2	Ph A <sup>3</sup>

**Notes:**

1. Equal to the USEPA Region 9 Preliminary Remediation Goals (PRGs) for tapwater (October, 2004).
2. USEPA, 2004. Radionuclide Toxicity and Preliminary Remediation Goals (PRGs) for Superfund. <http://epa-prgs.onml.gov/radionuclides/download.shtml>. August 4, 2004. Soil values are the outdoor worker values; water values are the tapwater values. For radionuclides with decay chains, the PRG for the decay chain was used.
3. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.



**LOU 62 Table 16**  
**Soil Characterization Data - SVOCs**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program			Ph A <sup>1</sup>	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.			SA 2	SA 2	SA 2	SA 2	SA 2	SA 2	SA 2
Sample ID			SA2-0.5	SA2-10	SA2-20	SA2-30	SA2-40	SA2-50	SA2-60
Sample Depth (ft)			0.5	10	20	30	40	50	60
Sample Date			11/03/2006	11/03/2006	11/03/2006	11/06/2006	11/06/2006	11/06/2006	11/06/2006
SVOC	Analytical Method	MSSL <sup>2</sup> mg/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,4-Dioxane	non-SIM	1.70E+02	70 U	410 U	390 U	390 U	490 U	490 U	400 U
2-Methylnaphthalene	non-SIM	2.10E+02 (jj)	350 U	410 U	390 U	390 U	490 U	490 U	400 U
2-Methylnaphthalene	SIM	2.10E+02 (jj)	7.0 U						
Acenaphthene	non-SIM	3.30E+04	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Acenaphthene	SIM	3.30E+04	7.0 U						
Acenaphthylene	non-SIM	3.30E+04 (pp)	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Acenaphthylene	SIM	3.30E+04 (pp)	7.0 U						
Anthracene	non-SIM	1.00E+05	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Anthracene	SIM	1.00E+05	7.0 U						
Benz(a)anthracene	non-SIM	2.30E+00	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Benz(a)anthracene	SIM	2.30E+00	7.0 U						
Benzo(a)pyrene	non-SIM	2.30E-01	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Benzo(a)pyrene	SIM	2.30E-01	7.0 U						
Benzo(b)fluoranthene	non-SIM	2.30E+00	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Benzo(b)fluoranthene	SIM	2.30E+00	7.0 U						
Benzo(g,h,i)perylene	non-SIM	3.20E+04 (w)	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Benzo(g,h,i)perylene	SIM	3.20E+04 (w)	7.0 U						
Benzo(k)fluoranthene	non-SIM	2.30E+01	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Benzo(k)fluoranthene	SIM	2.30E+01	7.0 U						
bis(2-Ethylhexyl)phthalate	non-SIM	1.40E+02	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Butyl benzyl phthalate	non-SIM	2.40E+02	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Chrysene	non-SIM	2.30E+02	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Chrysene	SIM	2.30E+02	7.0 U						
Dibenz(a,h)anthracene	non-SIM	2.30E-01	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Dibenz(a,h)anthracene	SIM	2.30E-01	7.0 U						
Diethyl phthalate	non-SIM	1.00E+05	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Dimethyl phthalate	non-SIM	1.00E+05	350 U	410 U	390 U	390 U	490 U	490 U	400 U

**LOU 62 Table 16 (continued)  
Soil Characterization Data - SVOCs**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program			Ph A <sup>1</sup>	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.			SA 2	SA 2	SA 2	SA 2	SA 2	SA 2	SA 2
Sample ID			SA2-0.5	SA2-10	SA2-20	SA2-30	SA2-40	SA2-50	SA2-60
Sample Depth (ft)			0.5	10	20	30	40	50	60
Sample Date			11/03/2006	11/03/2006	11/03/2006	11/06/2006	11/06/2006	11/06/2006	11/06/2006
SVOC	Analytical Method	MSSL <sup>2</sup> mg/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Di-N-Butyl phthalate	non-SIM	6.80E+04	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Di-N-Octyl phthalate	non-SIM	--	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Fluoranthene	non-SIM	2.40E+04	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Fluoranthene	SIM	2.40E+04	7.0 U						
Fluorene	non-SIM	2.60E+04	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Fluorene	SIM	2.60E+04	7.0 U						
Hexachlorobenzene	non-SIM	1.20E+00	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Hexachlorobenzene	SIM	1.20E+00	7.0 U						
Indeno(1,2,3-cd)pyrene	non-SIM	2.30E+00	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Indeno(1,2,3-cd)pyrene	SIM	2.30E+00	7.0 U						
Naphthalene	non-SIM	2.10E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Naphthalene	non-SIM	2.10E+02	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Naphthalene	SIM	2.10E+02	7.0 U						
Nitrobenzene	non-SIM	1.10E+02	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Octachlorostyrene	non-SIM	--	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Phenanthrene	non-SIM	1.00E+05 (n)	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Phenanthrene	SIM	1.00E+05 (n)	7.0 U						
Pyrene	non-SIM	3.20E+04	350 U	410 U	390 U	390 U	490 U	490 U	400 U
Pyrene	SIM	3.20E+04	7.0 U						
Pyridine	non-SIM	6.80E+02	1700 U	2000 U	1900 U	1900 U	2400 U	2400 U	2000 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).  
(j) Value for naphthalene used as surrogate for 2-methylnaphthalene based on structural similarities.  
(pp) Value for acenaphthene used as surrogate for acenaphthylene 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.

**LOU 62 Table 17**  
**Groundwater Characterization Data - SVOCs**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program			Ph A <sup>1</sup>
Well No.			SA2
Sample ID			GWSA2
Sample Date			11/06/2006
SVOCs	Analytic Method	MCL <sup>2</sup> ug/L	ug/L
1,4-Dioxane	non-SIM	6.11E+00 c	10 UJ
2-Methylnaphthalene	non-SIM	6.20E+00 c,(jj)	10 UJ
2-Methylnaphthalene	SIM	6.20E+00 c,(jj)	
Acenaphthene	non-SIM	3.65E+02 c	10 UJ
Acenaphthene	SIM	3.65E+02 c	
Acenaphthylene	non-SIM	3.65E+02 c,(pp)	10 UJ
Acenaphthylene	SIM	3.65E+02 c,(pp)	
Anthracene	non-SIM	1.83E+03 c	10 UJ
Anthracene	SIM	1.83E+03 c	
Benz(a)anthracene	non-SIM	9.21E-02 c	10 UJ
Benz(a)anthracene	SIM	9.21E-02 c	
Benzo(a)pyrene	non-SIM	2.00E-01	10 UJ
Benzo(a)pyrene	SIM	2.00E-01	
Benzo(b)fluoranthene	non-SIM	9.21E-02 c	10 UJ
Benzo(b)fluoranthene	SIM	9.21E-02 c	
Benzo(g,h,i)perylene	non-SIM	1.83E+02 c,(w)	10 UJ
Benzo(g,h,i)perylene	SIM	1.83E+02 c,(w)	
Benzo(k)fluoranthene	non-SIM	9.21E-01 c	10 UJ
Benzo(k)fluoranthene	SIM	9.21E-01 c	
bis(2-Ethylhexyl)phthalate	non-SIM	6.00E+00	17 J
Butyl benzyl phthalate	non-SIM	7.30E+03 c	10 UJ
Chrysene	non-SIM	9.21E+00 c	10 UJ
Chrysene	SIM	9.21E+00 c	
Dibenz(a,h)anthracene	non-SIM	9.21E-03 c	10 UJ
Dibenz(a,h)anthracene	SIM	9.21E-03 c	
Diethyl phthalate	non-SIM	2.92E+04 c	10 UJ
Dimethyl phthalate	non-SIM	3.65E+05 c	10 UJ
Di-N-Butyl phthalate	non-SIM	3.65E+03 c	1.0 J
Di-N-Octyl phthalate	non-SIM	1.46E+03 c	10 UJ
Fluoranthene	non-SIM	1.46E+03 c	10 UJ
Fluoranthene	SIM	1.46E+03 c	
Fluorene	non-SIM	2.43E+02 c	10 UJ
Fluorene	SIM	2.43E+02 c	
Hexachlorobenzene	non-SIM	1.00E+00	10 UJ
Hexachlorobenzene	SIM	1.00E+00	
Indeno(1,2,3-cd)pyrene	non-SIM	9.21E-02 c	10 UJ
Indeno(1,2,3-cd)pyrene	SIM	9.21E-02 c	
Naphthalene	non-SIM	6.20E+00 c	5.0 U
Naphthalene	non-SIM	6.20E+00 c	10 UJ
Naphthalene	SIM	6.20E+00 c	
Nitrobenzene	non-SIM	3.40E+00 c	10 UJ
Octachlorostyrene	non-SIM	-- c	10 UJ

**LOU 62 Table 17 (continued)**  
**Groundwater Characterization Data - SVOCs**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program			Ph A <sup>1</sup>
Well No.			SA2
Sample ID			GWSA2
Sample Date			11/06/2006
SVOCs	Analytic Method	MCL <sup>2</sup> ug/L	ug/L
Phenanthrene	non-SIM	1.80E+03 (n)	10 UJ
Phenanthrene	SIM	1.80E+03 (n)	
Pyrene	non-SIM	1.83E+02 c	10 UJ
Pyrene	SIM	1.83E+02 c	
Pyridine	non-SIM	3.65E+01 c	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.
  - (c) Equal to the USEPA Region 9 Preliminary Remediation Goals (PRGs) for tapwater (October, 2004).
  - (jj) Value for naphthalene used as surrogate for 2-methylnaphthalene based on structural similarities.
  - (pp) Value for acenaphthene used as surrogate for acenaphthylene 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.

**LOU 27 Table 18**  
**Soil Characteristic Data - TPH and Fuel Alcohols**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

				Fuel Alcohols			Total Petroleum Hydrocarbons			
				Ethanol	Ethylene glycol	Methanol	TPH - ORO	TPH - DRO	TPH - GRO	
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
			<b>MSSL<sup>1</sup></b> <b>mg/kg</b>	--	1.00E+05	1.00E+05	1.00E+02 w	1.00E+02 w	1.00E+02 w	
Boring No.	Sample ID.	Sample Depth (ft)	Sample Date							Sampling Program
SA 2	SA2-0.5	0.5	11/03/2006				27 U	27 U	0.11 U	Ph A <sup>2</sup>
SA 2	SA2-10	10	11/03/2006				31 U	31 U	0.12 U	Ph A
SA 2	SA2-20	20	11/03/2006				29 U	29 U	0.12 U	Ph A
SA 2	SA2-30	30	11/06/2006				30 U	30 U	0.12 U	Ph A
SA 2	SA2-40	40	11/06/2006				37 U	37 U	0.15 U	Ph A
SA 2	SA2-50	50	11/06/2006				37 U	37 U	0.15 U	Ph A
SA 2	SA2-60	60	11/06/2006				31 U	31 U	0.12 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.
- (vv) Nevada Administrative Code 445A.2272. Contamination of soil: Establishment of action levels. NAC 445A.2272.1.b.

**LOU 62 Table 19**  
**Soil Characterization Data - VOCs**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program	Ph A <sup>1</sup>	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.	SA 2	SA 2	SA 2	SA 2	SA 2	SA 2	SA 2	
Sample ID	SA2-0.5	SA2-10	SA2-20	SA2-30	SA2-40	SA2-50	SA2-60	
Sample Depth (ft)	0.5	10	20	30	40	50	60	
Sample Date	11/03/2006	11/03/2006	11/03/2006	11/06/2006	11/06/2006	11/06/2006	11/06/2006	
VOCs	MSSL <sup>2</sup> mg/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	
Naphthalene	2.10E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,1,1,2-Tetrachloroethane	7.60E+00	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,1,1-Trichloroethane	1.40E+03	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,1,2,2-Tetrachloroethane	9.70E-01	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,1,2-Trichloroethane	2.10E+00	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,1-Dichloroethane	2.30E+03	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,1-Dichloroethene	4.70E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,1-Dichloropropene	1.75E+00 (gg)	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,2,3-Trichlorobenzene	2.60E+02 (hh)	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,2,3-Trichloropropane	1.60E+00	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,2,4-Trichlorobenzene	2.60E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,2,4-Trimethylbenzene	2.20E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,2-Dibromo-3-chloropropane	2.00E-02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,2-Dichlorobenzene	3.70E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,2-Dichloroethane	8.40E-01	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,2-Dichloropropane	8.50E-01	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,3,5-Trimethylbenzene	7.80E+01	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,3-Dichlorobenzene	1.40E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,3-Dichloropropane	4.10E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
1,4-Dichlorobenzene	8.10E+00	5.3 U	6.2 U	5.9 U	1.3 J	2.2 J	1.5 J	1.2 J
2,2-Dichloropropane	8.50E-01 (ii)	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
2-Butanone	3.40E+04	11 U	12 U	12 U	12 U	15 U	15 U	12 U
2-Chlorotoluene	5.10E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
2-Hexanone	1.72E+04 (nn)	11 UJ	12 UJ	12 UJ	12 UJ	15 UJ	15 UJ	12 UJ
2-Methoxy-2-methyl-butane	--	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
4-Chlorotoluene	5.10E+02 (ww)	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
4-Isopropyltoluene	--	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
4-Methyl-2-pentanone	1.70E+04	11 U	12 U	12 U	12 U	15 U	15 U	12 U
Acetone	6.00E+04	11 U	12 U	12 U	12 U	15 U	15 U	12 U
Benzene	1.60E+00	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Bromobenzene	1.20E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Bromochloromethane	1.75E+00 (qq)	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Bromodichloromethane	2.60E+00	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Bromoform	2.40E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Bromomethane	1.50E+01	11 U	12 U	12 U	12 U	15 U	15 U	12 U
Carbon tetrachloride	5.80E-01	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Chlorobenzene	5.00E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Chloroethane	7.20E+00	5.3 UJ	6.2 UJ	5.9 UJ	5.9 UJ	7.5 UJ	7.4 UJ	6.1 UJ
Chloroform	5.80E-01	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Chloromethane	1.70E+02	5.3 UJ	6.2 UJ	5.9 UJ	5.9 UJ	7.5 UJ	7.4 UJ	6.1 UJ
cis-1,2-Dichloroethene	1.60E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
cis-1,3-Dichloropropene	1.75E+00 (gg)	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Dibromochloromethane	2.60E+00	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Dibromomethane	5.90E+02 (xx)	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Dichlorodifluoromethane	3.40E+02	5.3 UJ	6.2 UJ	5.9 UJ	5.9 UJ	7.5 UJ	7.4 UJ	6.1 UJ
Ethyl t-butyl ether	7.90E+01 (kk)	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Ethylbenzene	2.30E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Ethylene dibromide	7.00E-02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Hexachlorobutadiene	2.50E+01	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U

**LOU 62 Table 19 (continued)  
Soil Characterization Data - VOCs**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.		SA 2	SA 2	SA 2	SA 2	SA 2	SA 2	SA 2
Sample ID		SA2-0.5	SA2-10	SA2-20	SA2-30	SA2-40	SA2-50	SA2-60
Sample Depth (ft)		0.5	10	20	30	40	50	60
Sample Date		11/03/2006	11/03/2006	11/03/2006	11/06/2006	11/06/2006	11/06/2006	11/06/2006
VOCs	MSSL <sup>2</sup> mg/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
isopropyl ether	--	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Isopropylbenzene	5.80E+02 (zz)	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Methyl tert butyl ether	7.90E+01	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Methylene chloride	2.20E+01	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
N-Butylbenzene	2.40E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
N-Propylbenzene	2.40E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
sec-Butylbenzene	2.20E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Styrene	1.70E+03	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
t-Butyl alcohol	--	11 UJ	12 UJ	12 UJ	12 UJ	15 UJ	15 UJ	12 UJ
tert-Butylbenzene	3.90E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Tetrachloroethene	1.70E+00	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Toluene	5.20E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
trans-1,2-Dichloroethylene	2.00E+02	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
trans-1,3-Dichloropropene	1.75E+00 (gg)	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Trichloroethene	1.00E-01	5.3 U	6.2 U	5.9 U	5.9 U	6.5 J	1.7 J	4.3 J
Trichlorofluoromethane	1.40E+03	5.3 UJ	6.2 UJ	5.9 UJ	5.9 UJ	7.5 UJ	7.4 UJ	6.1 UJ
Vinylchloride	8.60E-01	5.3 U	6.2 U	5.9 U	5.9 U	7.5 U	7.4 U	6.1 U
Xylene (Total)	2.10E+02	11 U	12 U	12 U	12 U	15 U	15 U	12 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.
- (zz) Isopropyl benzene is listed as cumene (isopropylbenzene) in the MSSL table.

**LOU 62 Table 20**  
**Groundwater Characteristic Data - VOCs**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>
Well ID		GWSA2
Sample ID		GWSA2
Sample Date		11/06/2006
VOCs	MCL <sup>2</sup> ug/L	ug/L
Naphthalene	6.20E+00 c	5.0 U
1,1,1,2-Tetrachloroethane	4.32E-01 c	5.0 U
1,1,1-Trichloroethane	2.00E+02	5.0 U
1,1,2,2-Tetrachloroethane	5.00E+00	5.0 U
1,1,2-Trichloroethane	5.00E+00	5.0 U
1,1-Dichloroethane	8.11E+02 c	5.0 U
1,1-Dichloroethene	7.00E+00	5.0 U
1,1-Dichloropropene	3.95E-01 c,gg	5.0 U
1,2,3-Trichlorobenzene	7.16E+00 c,hh	5.0 U
1,2,3-Trichloropropane	5.60E-03 c,yy	5.0 U
1,2,4-Trichlorobenzene	7.00E+01	5.0 U
1,2,4-Trimethylbenzene	1.23E+01	5.0 U
1,2-Dibromo-3-chloropropane	2.00E-01	5.0 U
1,2-Dichlorobenzene	6.00E+02	5.0 U
1,2-Dichloroethane	5.00E+00	5.0 U
1,2-Dichloropropane	5.00E+00	5.0 U
1,3,5-Trimethylbenzene	1.23E+01 c	5.0 U
1,3-Dichlorobenzene	1.83E+02 c	5.0 U
1,3-Dichloropropane	1.22E+02 c	5.0 U
1,4-Dichlorobenzene	7.50E+01	5.0 U
2,2-Dichloropropane	1.65E-01 c,ii	5.0 U
2-Butanone	6.97E+03 c	10 U
2-Chlorotoluene	1.22E+02 c	5.0 U
2-Hexanone	2.00E+03 c,nn	10 UJ
2-Methoxy-2-methyl-butane	--	5.0 U
4-Chlorotoluene	1.22E+02 c,ww	5.0 U
4-Isopropyltoluene	--	5.0 U
4-Methyl-2-pentanone	1.99E+03 c	10 U
Acetone	5.48E+03 c	10 U
Benzene	5.00E+00	5.0 U
Bromobenzene	2.03E+01 c	5.0 U
Bromochloromethane	1.81E-01 c,qq	5.0 U
Bromodichloromethane	8.00E+01 r	5.0 U
Bromoform	8.00E+01 r	5.0 U
Bromomethane	8.66E+00 c	10 U
Carbon tetrachloride	5.00E+00	5.0 U
Chlorobenzene	1.00E+02 c,o	5.0 U
Chloroethane	4.64E+00	5.0 UJ
Chloroform	8.00E+01 r	5.0 U
Chloromethane	1.58E+02 c	5.0 UJ
cis-1,2-Dichloroethene	7.00E+01	5.0 U
cis-1,3-Dichloropropene	3.95E-01 c,gg	5.0 U
Dibromochloromethane	8.00E+01 r	5.0 U
Dibromomethane	6.08E+01 c,xx	5.0 U
Dichlorodifluoromethane	3.95E+02 c	5.0 UJ
Ethyl t-butyl ether	1.10E+01 c,kk	5.0 U
Ethylbenzene	7.00E+02	5.0 U
Ethylene dibromide	--	5.0 U
Hexachlorobutadiene	8.62E-01 c	5.0 U



**LOU 62 Table 20 (continued)  
Groundwater Characteristic Data - VOCs**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>
Well ID		GWSA2
Sample ID		GWSA2
Sample Date		11/06/2006
VOCs	MCL <sup>2</sup> ug/L	ug/L
isopropyl ether	--	5.0 U
Isopropylbenzene	6.58E+02 c,zz	5.0 U
Methyl tert butyl ether	2.00E+01 a,uu	5.0 U
Methylene chloride	5.00E+00	5.0 U
N-Butylbenzene	2.43E+02 c	5.0 U
N-Propylbenzene	2.43E+02 c	5.0 U
sec-Butylbenzene	2.43E+02 c	5.0 U
Styrene	1.00E+02	5.0 U
t-Butyl alcohol	--	10 UJ
tert-Butylbenzene	2.43E+02 c	5.0 U
Tetrachloroethene	5.00E+00	5.0 U
Toluene	1.00E+03	5 U
trans-1,2-Dichloroethylene	1.00E+02	5.0 U
trans-1,3-Dichloropropene	--	5.0 U
Trichloroethene	5.00E+00	8.6
Trichlorofluoromethane	--	5.0 UJ
Vinylchloride	2.00E+00	5.0 U
Xylene (Total)	1.00E+04	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.

(yy) PRG table (c) lists both cancer and non-cancer endpoint-based values. The cancer endpoint-based values were selected, as the cancer endpoint-based values are lower than the noncancer endpoint-based values.

(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.

(zz) Isopropyl benzene is listed as cumene (isopropylbenzene) in the PRG table.

(uu) NDEP, 1998. Oxygenated Fuel Corrective Action Guidance. Draft. October, 12 1998. URL [http://ndep.nv.gov/bca/mtbe\_doc.htm].

**LÖU 62 Table 21**  
**Soil Characterization Data - Long Asbestos Fibers in Respirable Soil Fraction**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

			Long Amphibole Protocol Structures	Long Amphibole Protocol Structures	Long Chrysotile Protocol Structures	Long Chrysotile Protocol Structures	Sampling Program
No.	Sample ID	Sample Date	s/gPM10	(structures/samples)	s/gPM10	(structures/samples)	
SA2	SA2	12/07/2006	2989000 U	0	2989000 U	0	Ph A <sup>1</sup>

**Notes:**

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

**LOU 62 Table 22**  
**Summary of Historical Groundwater Analytical Data**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

**Groundwater Characterization for Perchlorate**

Sample Date	1/13/00	2/2/01	2/25/02	2/19/03	2/3/04	2/18/05	2/2/06	3/20/06	1/17-18/07
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Well Name	TR-9	24	<4	7.7	4.7	5.3	7.6	5.5	<4
	TR-10	1190	1200	1100	1000	1000	1000	880	920
MCL <sup>1</sup> (ug/L)	1.80E+01 a,m	1.80E+01 a,m	1.80E+01 a,m	1.80E+01 a,m	1.80E+01 a,m	1.80E+01 a,m	1.80E+01 a,m	1.80E+01 a,m	1.80E+01 a,m

WELL #	Sample Date	Total Depth (ft bgs)	Depth to Water (ft TOC)	Mn (ppm)	pH (Lab)	EC (Lab, µmho/cm)	Cr <sub>6</sub> (ppm)	Cr-total (ppm)	ClO <sub>4</sub> (ppm)	LAB
TR-9	10/9/99	250.00	60.50	0.04	7.8	1,378	---	---	<0.004	MW
TR-10	10/9/99	100.00	57.35	0.01	7.9	2,190	---	---	1.12	MW

**Notes:**

µmho/cm = micromhos per centimeter  
ppm = parts per million  
ft bgs = feet below ground surface  
ft TOC = feet from Top of Casing  
ND = Not determined

EC: Electrical Conductivity  
Cr<sup>+6</sup>: Hexavalent Chromium  
Cr-total: Total Chromium  
Mn = Manganese  
ClO<sub>4</sub>: Perchlorate

mg/l = milligrams/liter

ND<0.15 = Not determined, not detected above the designated detection limit, i.e. 0.15

--- = Either no data was obtained or was not analyzed for the respective constituent.

ClO<sub>4</sub> by IC by Montgomery-Watson Laboratories

1. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.

2. Difference between Anion Sum and Cation Sum. Acceptance criteria of up to +/- 2% for Anion Sum between 3 and 10 and up to +/- 5% for Anion Sum between 10 and 800

**Labs:**

KMC Kerr-McGee Corporation  
KMCLLC Kerr-McGee Corporation, LLC  
KMG Kerr-McGee

MW Montgomery Watson  
NEL Nevada Environmental Laboratory  
SNWA Southern Nevada Water Authority

**Source:** Kerr-McGee Chemical LLC Company, Mother-hen Database.

**LOU 62 Table 23a**  
**Summary of Historical Soil Analytical Data**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

**Sample Matrix: Soil**

Sample Analysis by: Atlas Chemical Testing Laboratories, Las Vegas Nevada

Samples taken from Pond Area

Boring/ Sample Number	Date	Sample Depth (ft bgs)	Sodium (%)	Sulfate (%)	Total Available Water Soluble Sodium Sulfate (%)	pH
B1*	11/8/1995	2	0.01	0.02	0.03	8.6
	11/8/1995	5	0.02	0.04	0.06	9.2
	11/8/1995	9	0.03	0.04	0.06	8.4
B2*	11/8/1995	3	0.02	0.03	0.05	8.5
	11/8/1995	6	0.03	0.04	0.06	8.9
	11/8/1995	9	0.03	0.03	0.05	8.5
	11/8/1995	14	0.03	0.04	0.06	8.5
B3	11/8/1995	3	0.08	0.91	0.24	8.48
	11/8/1995	5	0.08	0.88	0.25	6.29
	11/8/1995	4	0.1	0.92	0.31	5.85
	11/8/1995	7	0.07	0.86	0.22	7.28
	11/8/1995	14	0.07	0.93	0.22	7.5
B4	11/8/1995	2	0.11	1.05	0.33	7.77
	11/8/1995	4	0.09	0.96	0.29	6.49
	11/8/1995	6	0.03	0.12	0.09	8.34
	11/8/1995	9	0.02	0.03	0.05	8.53
	11/8/1995	14	0.02	0.03	0.05	8.84
B5	11/8/1995	2	0.13	1.39	0.42	7.96
	11/8/1995	5	0.08	1.05	0.25	8.03
	11/8/1995	7	0.03	0.18	0.1	8.41
B6	11/8/1995	3	0.02	0.05	0.06	8.74
	11/8/1995	7	0.03	0.11	0.08	8.66
B7	11/8/1995	2	0.03	1.08	0.1	4.35
	11/8/1995	4	0.03	0.84	0.09	5.2
	11/8/1995	6	0.03	0.95	0.08	3.61

**Notes:**

As\* = Arsenic, EPA Method 7060A    Co = Cobalt    Mo = Molybdenum    Zn = Zinc  
Ba = Barium    Cu = Copper    Ni = Nickel  
Be = Beryllium    Hg\* = Mercury, EPA Method 7471A    Ag = Silver  
Cr = Chromium    Pb\* = Lead, EPA Method 7420    V = Vanadium

VOCs = Volatile organic compounds    -- = Data was detected below the Reporting limit.  
ND = Not determined    J = Estimated quantitation due to a probable matrix effect.  
1, 1, 1-TCA = 1, 1, 1-Trichloroethane (TCA)    µg/kg = micrograms per kilogram  
TCE = Trichloroethene (TCE)    mg/kg = milligrams per kilogram  
PCE = Tetrachloroethene (PCE)    \* Refer to Plate A for location of borings

**Metals** analyzed at 1:500 dilution due to matrix effect (As, Cr, Cu, Mo, Ni, V, Zn)  
Water Soluble Salt Analysis in Soil 1:5 (soil:water) Aqueous Extraction, ASTM D 1428, D 516.

**NOTE:** As indicated on analysis, the results for each constituent denote the percentage of that analyte, soluble in water at a 1:5 (soil: water) extraction ratio, which is present in the soil. Sodium was determined by flame photometry, sulfate turbidimetrically, and sodium sulfate by calculation.

**Sources:** (1) ETEC, 1995, Geotechnical Investigation Report, Administration/ Office Building Between Lake Mead Drive and KMCC Plant Henderson, Nevada, November 20, 1995.

(2) Western Technologies, 1996a, Subsurface Soil Evaluation Former Evaporative Ponds Sites, Former State Industries Facility, BMI Industrial Complex, Henderson, Nevada; On behalf of State Industries, Inc., February 20, 1996.

(3) Kerr-McGee, 1996b, Response to LOU Comments.

**LOU 62 Table 23b  
Summary of Historical Soil Analytical Data**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

**Sample Matrix: Soil**                      Samples taken by State Industries, expired holding times.  
Sample Analysis by: Nevada Environmental Laboratory, Las Vegas, Nevada  
Samples taken from Rectangular and Circular Evaporative Pond Areas (Samples BR and BC, respectively). Background sample taken (BB-1).

Sample Number	Date	Depth (ft bgs)	CAM 17 METALS (mg/kg). EPA Method 6010													pH EPA Method 150.0
			As*	Ba	Be	Cr	Co	Cu	Pb *	Hg*	Mo	Ni	Ag	V	Zn	
BR-1-4	1/3/1996	4	3.6	170	0.47	11	8.3	11	15	<0.1	1.8	11	<0.75	23	26	6.64
BR-2-4	1/3/1996	4	3.4	210	<0.25	20	13	6.7	15	0.21	7.5	11	<5	10	81	2.79
BR-3-3.5	1/3/1996	3.5	3.2	150	0.28	54	13	13	16	<0.1	6.8	16	<0.75	20	83	3.19
BR-4-3.5	1/3/1996	3.5	3.0	120	0.52	10	20	13	<12.5	<0.1	<5	18	<0.75	23	95	3.92
BR-5-3.5	1/3/1996	3.5	4.0	280	<0.25	18	14	<5	27	0.23	15	11	5.4	8	60	2.57
BR-6-3.5	1/3/1996	3.5	3.7	190	0.43	27	13	14	31	0.16	9.9	<20	<0.75	24	71	7.03
BR-6-5	1/3/1996	5	2.4	230	0.62	7.4	7.6	12	<12.5	<0.1	<5	12	<0.75	22	26	8.38
BR-7-3.5	1/3/1996	3.5	2.2	140	0.54	6.7	7.4	11	<12.5	<0.1	<5	11	<0.75	20	26	7.92
BR-8-3	1/3/1996	3	2.7	120	0.3	23	11	25	15	<0.1	<5	12	<0.75	20	70	3.78
BR-8-4	1/3/1996	4	3.0	30	0.73	8.3	34	11	<12.5	<0.1	<5	28	<0.75	24	100	7.1
BR-9-4	1/3/1996	4	3.3	170	0.38	26	18	12	21	<0.1	5.9	22	<0.75	21	66	5.12
BC-1-5	1/3/1996	5	2.4	180	0.57	10	11	14	16	<0.1	<0.5	17	<0.75	22	43	7.97
BC-1-10	1/3/1996	10	4.8	90	<0.25	37	5.7	25	14	<0.1	6.2	7.4	<0.75	21	23	4.45
BC-2-10	1/3/1996	10	3.4	150	0.54	8.2	8.8	11	<12.5	<0.1	<0.5	13	<0.75	22	26	7.59
BC-3-8.5	1/4/1996	8.5	7.6	63	0.52	110	7.2	29	15	<0.1	<5	12	<0.75	36	50	7.01
BC-4-7	1/4/1996	7	4.0	440	<0.25	20	58	42	21	0.13	2.6	120	<0.75	19	260	7.67
BB-1-5*	1/4/1996	5	2.9	160	0.59	6.7	7.4	12	<12.5	<0.1	<5	11	<0.75	19	26	8.75
<b>Reporting Limit</b>			1	0.25	0.25	0.5	0.5	5	12.5	0.1	5	2	0.75	2.5	5	NA

**Notes:**

As\* = Arsenic, EPA Method 7060A      Cr = Chromium                      Hg\* = Mercury, EPA Method 7471A                      Ni - Nickel  
Ba = Barium                                      Co = Cobalt                                      Pb\* = Lead, EPA Method 7420                                      Ag = Silver  
Be = Beryllium                                      Cu = Copper                                      Mo = Molybdenum                                      V = Vanadium

VOCs = Volatile organic compounds                      -- = Data was detected below the Reporting limit.  
ND = Not determined    J = Estimated quantitation due to a probable matrix effect.  
1, 1, 1-TCA = 1, 1, 1-Trichloroethane (TCA)                      µg/kg = micrograms per kilogram  
TCE = Trichloroethene (TCE)                                      mg/kg = milligrams per kilogram  
PCE = Tetrachloroethene (PCE)                                      \* Refer to Plate A for location of borings

Metals analyzed at 1:500 dilution due to matrix effect (As, Cr, Cu, Mo, Ni, V, Zn)  
Water Soluble Salt Analysis in Soil 1:5 (soil:water) Aqueous Extraction, ASTM D 1428, D 516.

**NOTE:** As indicated on analysis, the results for each constituent denote the percentage of that analyte, soluble in water at a 1:5 (soil: water) extraction ratio, which is present in the soil. Sodium was determined by flame photometry, sulfate turbidimetrically, and sodium sulfate by calculation.

**Sources:** (1) ETEC, 1995, Geotechnical Investigation Report, Administration/ Office Building Between Lake Mead Drive and KMCC Plant Henderson, Nevada, November 20, 1995.

(2) ENSR, February 2005, Site Conceptual Model, Kerr-McGee Facility, Henderson, Nevada, Document Number 04020-023-100.

(3) Kerr-McGee, 1996b, Response to LOU Comments.

(4) Western Technologies, 1996a, Subsurface Soil Evaluation Former Evaporative Ponds Sites, Former State Industries Facility, BMI Industrial Complex, Henderson, Nevada; On behalf of State Industries, Inc., February 20, 1996.

**LOU 62 Table 23c  
Summary of Historical Soil Analytical Data**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

**Sample Matrix: Soil**                      Samples taken by State Industries, expired holding times.  
Sample Analysis by: Nevada Environmental Laboratory, Las Vegas, Nevada  
Samples taken from Rectangular and Circular Evaporative Pond Areas (Samples BR and BC, respectively). Background sample taken (BB-1).

Sample Number	Date	Depth (ft bgs)	VOCs (µg/kg) EPA Method 8260A									
			Acetone	2-Butanone	Ethylbenzene	2-Hexanone	PCE	Toluene	TCE	m, p-Xylene	o-Xylene	All Others
BR-1-4	1/3/1996	4	<25	<25	<5	<25	28 J	<5	<5	<5	<5	ND
BR-2-4	1/3/1996	4	360	30	<5	<25	130J	<5	10	27J	20J	ND
BR-3-3.5	1/3/1996	3.5	<25	<25	<5	<25	130J	<5	5J	6J	8J	ND
BR-4-3.5	1/3/1996	3.5	<25	<25	<5	<25	<5	<5	<5	<5	<5	ND
BR-5-3.5	1/3/1996	3.5	99J	<25	10J	<25	230J	6J	14J	57J	32J	ND
BR-6-3.5	1/3/1996	3.5	<25	<25	<5	<25	<5	7J	<5	<5	<5	ND
BR-6-5	1/3/1996	5	<25	<25	<5	<25	<5	<5	<5	<5	<5	ND
BR-7-3.5	1/3/1996	3.5	<25	<25	<5	<25	<5	<5	<5	<5	<5	ND
BR-8-3	1/3/1996	3	<25	27	<5	44	8J	<5	<5	<5	<5	ND
BR-8-4	1/3/1996	4	<25	<25	<5	<25	<5	<5	<5	<5	<5	ND
BR-9-4	1/3/1996	4	<25	<25	<5	<25	<5	<5	<5	<5	<5	ND
BC-1-5	1/3/1996	5	<25	<25	<5	<25	<5	<5	<5	<5	<5	ND
BC-1-10	1/3/1996	10	<25	<25	<5	<25	<5	<5	<5	<5	<5	ND
BC-2-10	1/3/1996	10	<25	<25	<5	<25	<5	<5	<5	<5	<5	ND
BC-3-8.5	1/4/1996	8.5	<25	<25	<5	<25	<5	<5	<5	<5	<5	ND
BC-4-7	1/4/1996	7	<25	<25	<5	<25	9J	<5	<5	<5	<5	ND
BB-1-5*	1/4/1996	5	<25	<25	<5	<25	<5	<5	<5	<5	<5	ND
<b>Reporting Limit</b>			25	25	5	25	5	5	5	5	5	varied

**LOU 62 Table 23c (continued)  
Summary of Historical Soil Analytical Data**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

**Notes:**

As* = Arsenic, EPA Method 7060A	Co = Cobalt	Mo = Molybdenum	Zn = Zinc
Ba = Barium	Cu = Copper	Ni = Nickel	--' = Data was detected below the Reporting limit.
Be = Beryllium	Hg* = Mercury, EPA Method 7471A	Ag = Silver	J = Estimated quantitation due to a probable matrix effect.
Cr = Chromium	Pb* = Lead, EPA Method 7420	V = Vanadium	µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram		1, 1, 1-TCA = 1, 1, 1-Trichloroethane (TCA)	
VOCs = Volatile organic compounds		TCE = Trichloroethene (TCE)	
ND = Not determined		PCE = Tetrachloroethene (PCE)	

\* Refer to Plate A for location of borings

**Metals** analyzed at 1:500 dilution due to matrix effect (As, Cr, Cu, Mo, Ni, V, Zn)

**Sources:** (1) Western Technologies, 1996a, Subsurface Soil Evaluation Former Evaporative Ponds Sites, Former State Industries Facility, BMI Industrial Complex, Henderson, Nevada; On behalf of State Industries, Inc., February 20, 1996. (2) Kerr-McGee, 1996b, Response to LOU Comments.

**\* Analytes and detection limits for VOC's that were non-detect (µg/kg):**

Analyte	Reporting Limit (RL)	Analyte	RL	Analyte	RL
Acetone	1200	1, 1-Dichloroethane (1,1-D	120	1,1,2,2-Tetrachloroethane	120
Benzene	120	1,2-Dichloroethane (1,2-D	120	Toluene	120
Bromodichloromethane	120	1, 1-Dichloroethene (1,1-D	120	1,1,1-Trichloroethane (1,1,	120
Bromoform	120	cis-1,2-Dichloroethene	120	1,1,2-Trichloroethane	120
Bromomethane	120	trans-1,2-Dichloroethene	120	Trichloroethene (TCE)	120
2-Butanone	620	1,2-Dichloropropane	120	Vinyl Acetate	120
Carbon Disulfide	120	cis-1,3-Dichloropropene	120	Vinyl Chloride	120
Carbon Tetrachloride	120	trans-1,3-Dichloropropene	120	m, p-Xylene	120
Chlorobenzene	120	Ethyl benzene	120	o-Xylene	120
Chloroethane	120	2-Hexanone	620	1,3-Dichlorobenzene	120
Chloroform	120	Methylene Chloride	620	1,4-Dichlorobenzene	120
Chloromethane	120	4-Methyl-2-Pentanone	620	1,2-Dichlorobenzene	120
2-Chloroethylvinyl ether	120	Styrene	120		
Dibromochloromethane	120	Tetrachloroethene (PCE)	120		

**LOU 62 Table 23d  
Summary of Historical Soil Analytical Data**

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

**Sample Matrix: Soil**      Samples (taken by KMCC) are splits of samples taken by State Industries (above) with expired holding times.      Samples taken from Pond Area  
Sample Analysis by: Southwest Laboratories of Oklahoma, Broken Arrow, Oklahoma

Boring/ Sample Number	Date	SVOCs (µg/kg) EPA 8270					VOCs (µg/kg) EPA Method 8240									
		All	Methylene Chloride	Acetone	1, 1-Dichloroethene	1, 1-Dichloroethane	Chloroform	2-Butanone	1, 1, 1- Trichloroethane (TCA)	Trichloroethene (TCE)	2-Hexanone	Tetrachloroethene (PCE)	Toluene	Ethylbenzene	Xylene (total)	All Others
Volatile # 2	1/3/1996	ND	6 J	130	<7	<7	<7	17	8	54	<14	22	3 J	2 J	15	ND
Volatile # 3	1/3/1996	ND	8	210	2J	3J	1J	240	120	66	<12	140	3 J	<6	12	ND
Volatile # 3-D	1/3/1996	ND	5 J	140	1	2	<7	120	62	26	<12	64	2 J	<6	6	ND
Volatile # 4	1/3/1996	ND	6	48	<6	<6	<6	68	15	52	94	29	2J	<6	4 J	ND
Volatile # 4-D	1/3/1996	ND	7	34	<6	<6	<6	40	16	48	64	43	3 J	<6	7	ND
Volatile # 5	1/3/1996	ND	9	92	<7	2J	<7	<14	71	73	<14	72	5 J	5 J	37	ND
Volatile # 5-D	1/3/1996	ND	9	89	<7	2 J	<7	<14	66	42	<14	89	5 J	6 J	45	ND
<b>Quantitation Limit</b>		various	6	12	6 (or 7)	6 (or 7)	6 (or 7)	14	6	6	12 (or 14)	6	6	6	6	varied

**Notes:**

< = not detected above the respective PQL.

J = Estimated Value: Concentration below limit of quantitation

Source: Internal Correspondence, Kerr-McGee Chemical LLC Facility, February 20, 1996.

VOCs = Volatile organic compounds

µg/kg = micrograms per kilogram

ND = Not determined

**\* Analytes and detection limits for groundwater VOC's that were non-detect (µg/kg):**

Analyte	Reporting Limit (RL)	Analyte	RL	Analyte	RL	Analyte	RL	Analyte	RL
Chloromethane	14	1, 1-Dichloroethene	7	Carbon Tetrachloride	7	1,1,2-Trichloroethane	7	Tetrachloroethene (PCE)	7
Bromomethane	14	1,1-Dichloroethane	7	Bromodichloromethane	14	Benzene	7	Toluene	7
Vinyl Chloride	14	1,2-Dichloroethene	7	1,1,2,2-Tetrachloroethane	7	cis-1,3-Dichloropropene	7	Chlorobenzene	7
Chloroethane	14	Chloroform	7	1,2-Dichloropropane	7	2-Chloroethylvinyl ether	14	Ethyl benzene	7
Methylene Chloride	7	1,2-Dichloroethane	7	trans-1,3-Dichloropropene	7	Bromoform	7	Styrene	7
Acetone	14	2-Butanone	14	Trichloroethene (TCE)	7	2-Hexanone	7	Total Xylenes	7
Carbon Disulfide	7	1,1,1-Trichloroethane	7	Dibromochloromethane	7	4-Methyl-2-Pentanone	14		

**\* Analytes and detection limits for groundwater SVOC's that were non-detect (µg/kg):**

Analyte	RL	Analyte	RL	Analyte	RL	Analyte	RL
Phenol	330	Isophorone	330	Dibenzofuran	330	Anthracene	330
Bis (2-chloroethyl) ether	330	2-Nitrophenol	330	2,4-Dinitrotoluene	330	Di-n-butyl phthalate	330
2-Chlorophenol	330	2,4-Dimethylphenol	330	2,6-Dinitrotoluene	330	Fluoranthene	330
1,3-Dichlorobenzene	330	Benzoic Acid	1600	Diethyl phthalate	330	Pyrene	330
1,4-Dichlorobenzene	330	Bis (2-chloroethoxy) methane	330	4-Chlorophenyl phenyl ether	330	Butylbenzylphthalate	330
Benzyl alcohol	330	2,4-Dichlorophenol	1600	Fluorene	1600	3,3-Dichlorobenzidine	660
1,2-Dichlorobenzene	330	1,2,4-Trichlorobenzene	1600	4-Nitroaniline	1600	Benz (a) anthracene	330
2-Methylphenol	330	Naphthalene	330	4,6-Dinitro-2-methylphenol	1600	4-Chloro-3-methylphenol	330
Bis (2-chloroisopropyl) ether	330	4-Chloroaniline	330	N-Nitrosodimethylamine	330	2-Methylnaphthalene	330
4-Methylphenol	330	Hexachlorobutadiene	330	4-Bromophenyl phenyl ether	330	Hexachlorocyclopentadiene	330
N-Nitroso-di-N-propylamine	330	Acenaphthene	330	Hexachlorobenzene	330	2,4,6-Trichlorophenol	330
Hexachloroethane	330	2,4-Dinitrophenol	330	Pentachlorophenol	1600	2,4,5-Trichlorophenol	330
Nitrobenzene	330	4-Nitrophenol	330	Phenanthrene	330	2-Chloronaphthalene	330



## Notes for Phase A Data Tables

State Industries Inc. Site  
Tronox Facility - Henderson, Nevada

Blank	Not analyzed.
<b>Bold</b>	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 Metals
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	Soluble 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.
--	MSSL or PRG not established