

**Summary of Available Data for LOU 41**  
**Unit 1 Tenant Stains and LOUs 65a to 65d Various Tenant Leaseholds**  
 Tronox Facility – Henderson, Nevada

- Name of Facility:**                    **LOU 41 – Unit 1 Tenant Stains**  
**LOU 65a – Ebony Construction Sites**  
**LOU 65b – Buckles Construction Company**  
**LOU 65c – Nevada Precast Concrete Products**  
**LOU 65d – Green Ventures International**
- Goal of Closure:**                    • Closure for future commercial/industrial use for the five LOUs listed above.
- Site Investigation Area:**            **LOU 41 – Unit 1 Tenant Stains**
- Size: Approximately 110 feet by 95 feet (0.24 acre).
  - Location: Northwest corner of the Unit 1 building.
  - Current Status/Features: LOU 41 is currently not active and the surface is unpaved.
- LOUs 65a, 65b, 65c, and 65d**
- LOU 65 consist of four separate areas, only two (LOUs 65a and 65b) of which are located in Area IV. LOUs 65c and 65d are located in Parcels F and G, respectively, and are being investigated by BRC independent of Tronox’s Phase B Source Area Investigation.
- **LOU 65a – Ebony Construction Sites**
    - Size: Approximately 100 feet by 70 feet (0.16 acre).
    - Location: North of the Unit 1 building.
  - **LOU 65b – Buckles Construction Company**
    - Size: Approximately 60 feet by 90 feet (0.12 acre).
    - Location: Located at northwest corner of the Unit 1 building on the first floor in the “crane bay” area [Ref. 4].
  - **LOU 65c – Nevada Precast Concrete Products**
    - Size: Approximately 90 feet by 70 feet (0.15 acre).
    - Location: Located in Parcel F approximately 300 feet west of the Chemstar Property.
  - **LOU 65d – Green Ventures International**
    - Size: Approximately 70 feet by 80 feet (0.13 acre).
    - Location: Located in Parcel G approximately 200 feet southwest of the Unit 1 building.
  - Current Status/Features: The four areas of LOU 65 are currently not active. The structures for LOU 65a and 65b remain part of the Unit 1 building and the structure for LOU 65d still remains. The structure for LOU 65c is no longer present.

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**Description:**

**LOU 41 – Unit 1 Tenant Stains**

- In 1997, the Phase II ECA field investigation at the Site identified soil stained with hydrocarbons from unspecified previous tenant operations [Ref. 1].
- In 1991, two stained areas 10 feet by 10 feet and two feet by 10 feet located approximately three to five feet north of the Unit 1 building were observed. [Ref. 4].
- An unspecified volume of stained soil was removed from LOU 41 and transported to the Environmental Technologies facility near Apex, Nevada [Ref. 2].
- Subsequent analysis indicated that remaining soils were still impacted with TPH [Ref. 1].
- Additional soil was manually excavated from an area with dimensions of six feet by eight feet by 0.2 foot deep and the soil was placed into a DOT-approved drum. A confirmatory soil sample (S9-1S) taken in April 1997 identified the presence of TPH [Ref. 1].
- An additional, unspecified volume of soil was removed and an additional soil sample (S9-1RE) was collected in April 1997. TPH-DRO concentrations in the sample were 100 mg/kg [Ref. 1].

**LOU 65a – Ebony Construction Sites**

- LOU 65a was leased by Ebony Construction Company in 1977 and 1978 for construction management and staging activities [Ref. 4].
- Activities were based on the first floor, center of the north side of Unit 1 and consisted of offices, storage space, and direct outside access [Ref. 4].
- Two soil stains were present immediately north of the large “garage door type” openings in the center of the Unit 1 building. These stains were thought to be the result of motor oil or diesel fuel dripping from parked vehicles possibly associated with tenant activities [Ref. 4].
  - One stain was approximately 10 feet by 10 feet and the second stain was approximately two feet by 10 feet. Both stains were located approximately three to five feet north of the Unit 1 building [Ref. 4].

**LOU 65b – Buckles Construction Company**

- Buckles Construction Company leased a portion of the Unit 1 building from August 1973 to June 1989 [Ref. 4].
- Activities included steel fabrication and equipment storage in the northwest corner of the Unit 1 building, on the first floor in the “crane bay” area [Ref. 4].

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- No documentation or evidence of hazardous material storage, fuel transfer, painting, or solvent use sometimes associated with steel fabrication activities was found [Ref. 4].

**LOU 65c – Nevada Precast Concrete Products**

- Nevada Precast Concrete Products utilized this area as office space from January 1973 to May 1978 [Ref. 4].
- No known environmental issues were identified in 1993 [Ref. 4].

**LOU 65d – Green Ventures International**

- Green Ventures International leased the S-3 Change House from August 1980 to September 1981 for use as a marketing office [Ref. 4].
- No known environmental issues were identified in 1993 [Ref. 4].

<b>Process Waste Streams Associated with LOU 41</b>	<b>Known or Potential Chemicals Associated with LOU 41</b>
Dripping of motor vehicle diesel fuel or motor oil from parked vehicles [Ref. 4]	<ul style="list-style-type: none"> <li>• TPH-DRO</li> <li>• TPH-ORO</li> </ul>
<b>Process Waste Streams Associated with LOUs 65a through 65d</b>	<b>Known or Potential Chemicals Associated with LOUs 65a through 65d</b>
LOU 65a – possible motor oil and diesel fuel stains from parked vehicles.	<ul style="list-style-type: none"> <li>• TPH-DRO/ORO</li> </ul>
LOU 65b – Waste such as scrap metals, paints, solvents, and fuel.	<ul style="list-style-type: none"> <li>• Metals</li> <li>• VOCs</li> <li>• SVOCs</li> <li>• TPH-DRO</li> </ul>
LOU 65c and 65d – Office use only, no waste streams identified	<ul style="list-style-type: none"> <li>• None identified</li> </ul>
<b>Process Waste Streams Associated with LOU 63</b>	<b>Known or Potential Constituents Associated with LOU 63</b>
Fluids containing petroleum hydrocarbons released during fueling of trucks, oil change and other maintenance activities and leaking USTs containing diesel and waste oil [Ref. 4].	<ul style="list-style-type: none"> <li>• TPH DRO/ORO</li> <li>• VOCs</li> <li>• SVOCs</li> </ul>

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Washwater from the washing of the exterior of trucks [Ref. 4].	<ul style="list-style-type: none"> <li>• Detergent</li> <li>• TPH</li> <li>• VOCs</li> <li>• SVOCs</li> </ul>
Rinsate from the washing of the interior of trucks [Ref. 4].	<ul style="list-style-type: none"> <li>• Metals (barite, magnesium)</li> <li>• Lime</li> <li>• Soda ash</li> <li>• Magnesium chloride brine</li> <li>• Dilute concentrations of ferric chloride, hydrochloric acid, sodium hydrosulfide, sodium hydroxide, and/or titanium tetrachloride [Ref. 4].</li> </ul>
Storm water run-on/run-off from the dumped dry residues of hauled materials.	<ul style="list-style-type: none"> <li>• Lime</li> <li>• Soda ash</li> </ul>

**Overlapping or Adjacent LOUs:**

LOU 65c and LOU 65d, located in Parcels F and G, respectively, will be investigated by the ongoing BRC Phase II assessment program to evaluate soils; therefore, they are not discussed in this section.

The following LOUs overlap or are adjacent to another LOU:

Overlapping LOUs

- LOU 59 (Storm Sewer System) and LOU 65b (Buckles Construction Company) overlap each other along the west boundary of LOU 65b.
- LOU 60 (Acid Drain System) is located in the southern portion of LOU 65b and also runs north-south along the western boundary of LOU 65a. Inlets to the Acid Drain System are located along the eastern boundary of LOU 65b.

Adjacent LOUs

- LOU 26 (Trash Storage Area) – Located east (cross-gradient) of LOU 65a. LOU 26 is cross-gradient to LOU 65a; therefore, it is not considered to affect LOU 65a.
- LOU 41 (Unit 1 Tenant Stains) – Located west (cross-gradient) of LOU 65a and north (downgradient) of LOU 65b.
- LOU 59 (Storm Sewer System) – A branch of LOU 59 runs adjacent to the western boundary LOU 41.
- LOU 60 (Acid drain System) – Branches of the Acid Drain System are located adjacent to the northern, southern, and eastern boundaries of LOU 41.

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- LOU 63 (J.B. Kelley, Inc., Trucking Site) – LOU 63 is west of LOU 65d.

The potential for impacts from LOUs 59 and 60 to LOUs 41, 65a, and 65b are considered to be minimal as there have been no reported leaks from these LOUs. The nature of the soil impacts in LOU 41 were very localized, have been remediated and are not considered to be a potential threat to LOU 65a or 65b. As a result, the addition of other chemical classes to the Phase B Analytical Plan for these LOUs is not required. For detailed information on these LOUs, please refer to the specific LOU data package.

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

- None

**Known or Potential Chemical Classes:**

**LOU 41**

- TPH-DRO/ORO

**LOUs 65a and 65b**

- Metals
- VOCs
- SVOCs
- TPH

**LOUs 65c and 65d**

- None identified

**Known or Potential Release Mechanisms:**

**LOU 41**

- Stained surface soils observed in 1991; presumably the result of motor oil or diesel fuel dripping from parked vehicles [Ref. 4].
- Potential Infiltration to subsurface soils and groundwater.

**LOUs 65a and 65b**

- LOU 65a – The nature of tenant operations that resulted in stained soil is unspecified; presumably the stained soil was a result of a surface spill or leak of vehicle-related fluids from parked vehicles.
- LOU 65b – The nature of tenant operations could have resulted in surface releases from stored equipment or processes.

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- For both LOUs, there is the potential for infiltration to subsurface soil.

**LOUs 65c and 65d**

- No known releases were identified in the documents reviewed.

**Results of Historical Sampling:**

**LOU 41**

Soil

- Soil samples S9-1S and S9-1RE were collected from the southwestern portion of LOU 41 after soil removal and tested for TPH fuel fingerprint. Both samples exhibited relatively low levels of TPH-DRO and/or TPH-ORO [Ref. 2].

Groundwater

- Two wells (M-92 and M-93) were sampled in 1993 to investigate potential groundwater TPH impacts from the stained areas. Both samples were non-detect for TPH and BTEX [Ref. 2].

Analytical results of historical sampling are summarized on LOU 41 and LOUs 65a to 65d Tables 22 and 23 (see attached) [Ref. 2].

**LOU 65a and 65b**

- No historical sampling was identified for LOUs 65a and 65b in the documents reviewed.

**LOU 65c and 65d**

- No historical sampling was identified for LOUs 65c and 65d in the documents reviewed; however, soil samples were collected near these LOUs as part of the BRC Phase II sampling for Parcels F and G [Ref. 1 and 2].

**Did Historical Samples Address Potential Release?**

- No. Historical borings were limited in depth and constituents, and were not representative of the full extent of these LOUs.

**Summary of Phase A SAI:**

Soil

- Phase A Source Area Investigation soil boring SA03 is located within LOU 41 and is the closest boring to LOUs 65a and 65b, and was specifically sampled to evaluate these LOUs [Ref. 3].

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- The closest Phase A soil boring to LOUs 65c and 65d is SA03, located north (downgradient) of LOU 65d and southwest (upgradient) of LOU 65c. The constituents detected in this boring are not considered representative of this LOUs 65c and 65d [Ref. 3].

Groundwater

- Well M-92 is the closest well to LOUs 41, 65a, 65b, 65c, and 65d. Well M-92 is located to the northeast (down-gradient) of LOUs 41, 65a, 65b, and 65d, and was specifically sampled to evaluate these LOUs [Ref. 3].

Chemical classes detected in Phase A soil borings SA03 include:

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

As a result of the Phase A data, the Phase B analytical plan for samples collected from LOUs 41, 65a, 65b, 65c, and 65d will be expanded to include analyses for metals, hexavalent chromium, perchlorate, wet chemistry analytes, VOCs, SVOCs, OCPs, dioxins/furans, radionuclides, and asbestos.

Analytical results for soil and groundwater from the Phase A sampling event are summarized in LOU 41 and LOUs 65a and 65b Tables 1 through 21[Ref. 3] (see attached).

**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 Source Area Investigation for LOUs 41, 65a through 65d consists of collecting soil samples from four locations. Shallow and deep soils will be investigated by BRC as part of the investigation of Parcels F and G.

- Four (4) soil borings will be drilled within the boundaries of LOUs 41, 65a, and 65b.
- All four borings along with the analytical program to evaluate soil samples from these LOUs are

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listed on **Table A – Soil Sampling and Analytical Plan for LOU 41 and LOUs 65a through 65d.**

- 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.
  - Three (3) of the seven soil sample locations are judgmental locations and include soil borings SA169, SA193, and SA192.
- Random sample grid locations:
  - Designed to assess whether unknown constituents associated with LOU are present.
  - One (1) of the four sample locations is a randomly-placed location and include soil borings RSAQ3.

**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
- Organochlorine pesticides
- Dioxins/furans
- Radionuclides
- Asbestos

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

The Phase B groundwater investigation for LOUs 41, 65a, 65b, 65c, and 65d consists of collecting groundwater samples from three (3) locations to evaluate local groundwater conditions and as part of the Site-wide evaluation of constituent trends in groundwater.

- Two (2) wells (M-92 and M-93) northeast (downgradient) of LOUs 41, 65a, 65b, and 65d will be sampled. Both wells are upgradient of LOU 65c.
- One (1) well (TR-8) southwest (upgradient) of LOUs 41, 65a, 65b, 65c, and 65d will be sampled.
- The three wells along with the analytical program to evaluate groundwater samples associated with



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LOUs 41, 65a, 65b, 65c, and 65d are listed on  
**Table B – Groundwater Sampling and  
Analytical Plan for LOU 41 and LOUs 65a to  
65d.**

**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

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

- None proposed specifically for this LOU.

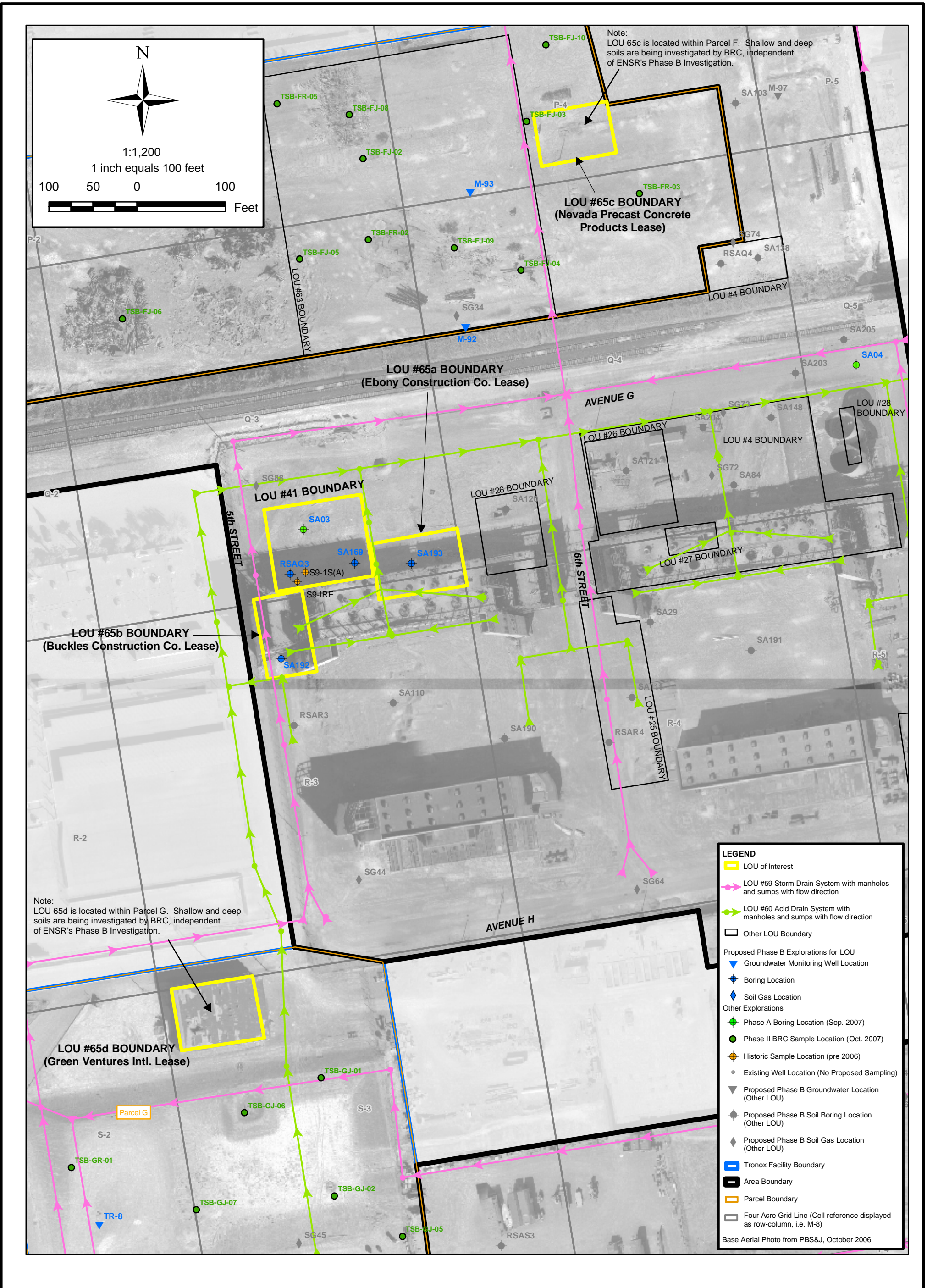
**References:**

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, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
4. Kleinfelder, 1993, Environmental Conditions Assessment, Kerr-McGee Chemical Corporation, Henderson, Nevada Facility, April 15, 1993 (Final)

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**LOU Figure**





SHEET NUMBER: X  
 FIGURE NUMBER: 1

**SAMPLE LOCATIONS FOR LOUs #41, #65a, #65b, #65c, and #65d**  
**UNIT 1 TENANT STAINS AND VARIOUS TENANTS**  
 Phase B Area IV Source Area Investigation  
 Tronox Facility  
 Henderson, Nevada

SCALE:	DATE:	PROJECT NUMBER:
AS SHOWN	5/15/2008	04020-023-430

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**Sampling and Analytical Plans for LOU 41 and LOUs 65a to 65d:**

Table A – Soil Sampling and Analytical Plan for LOU 41 and LOUs 65a and 65b  
Table B – Groundwater Sampling and Analytical Plan for LOU 41 and LOUs 65a  
to 65d



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 1688)	Asbestos <sup>9</sup> EPA/640/R-97/028	Geo-technical Tests <sup>10</sup>	Location Description and Characterized Area Rationale
Borings are organized by grid location as shown on Plate A - Starting point is on grid Q-3 and ending point on R-3.																			
Q-3	41	RSAQ3	RSAQ3-0.0	0.0		X	X	X	X	X		X	X	X	X		X		Boring located to evaluate LOU 41 (Tenant stains north of Unit 1).
Q-3	41		RSAQ3-0.5	0.5	X	X	X	X	X	X		X	X	X	X				
Q-3	41		RSAQ3-10	10	X	X	X	X	X	X		Hold	X	X					
Q-3	41		RSAQ3-20	20	X	X	X	X	X	X		Hold	X	X					
Q-3	41		RSAQ3-30	30	X	X	X	X	X	X		Hold	X	X					
Q-3	41		RSAQ3-40	40	X	X	X	X	X	X		X	X	X					
Q-3	41, 60	SA189	SA189-0.0	0.0		X	X	X	X	X		X	X	X	X		X		Boring located to evaluate LOU 41 (Tenant stains north of Unit 1) and a pipeline segment of LOU 60 (Acid Drain System).
Q-3	41, 60		SA189-0.5	0.5	X	X	X	X	X	X		X	X	X	X				
Q-3	41, 60		SA189-10	10	X	X	X	X	X	X		Hold	X	X					
Q-3	41, 60		SA189-20	20	X	X	X	X	X	X		Hold	X	X					
Q-3	41, 60		SA189-30	30	X	X	X	X	X	X		Hold	X	X					
Q-3	41, 60		SA189-40	40	X	X	X	X	X	X		X	X	X					
Q-3	65a	SA193	SA193-0.0	0.0		X	X	X	X	X		X	X	X	X		X		Boring located to evaluate LOU 65a (Ebony Construction Sites) and soils north (downgradient) of Unit 1.
Q-3	65a		SA193-0.5	0.5	X	X	X	X	X	X		X	X	X	X				
Q-3	65a		SA193-10	10	X	X	X	X	X	X		Hold	X	X					
Q-3	65a		SA193-20	20	X	X	X	X	X	X		Hold	X	X					
Q-3	65a		SA193-30	30	X	X	X	X	X	X		Hold	X	X					
Q-3	65a		SA193-40	40	X	X	X	X	X	X		X	X	X					
R-3	59, 65b, Unit1	SA192	SA192-0.0	0.0		X	X	X	X	X		X	X	X	X		X		Boring located to evaluate LOU 59 (Storm Sewer Drain), LOU 65b (former Buckles Construction Company Site) and Unit 1.
R-3	59, 65b, Unit1		SA192-0.5	0.5	X	X	X	X	X	X		X	X	X	X				
R-3	59, 65b, Unit1		SA192-10	10	X	X	X	X	X	X		Hold	X	X					
R-3	59, 65b, Unit1		SA192-20	20	X	X	X	X	X	X		Hold	X	X					
R-3	59, 65b, Unit1		SA192-30	30	X	X	X	X	X	X		Hold	X	X					
R-3	59, 65b, Unit1		SA192-40	40	X	X	X	X	X	X		X	X	X					
Number of Borings:		4																	
Number of Samples:		20 20 20 20 20 20 0 8 20 20 4 0 4 0																	

**Notes:**  
 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 P-4 and ending point on grid Q-4.</b>																
P-4	Parcel F	M-93	M-93	35.4 - 45.4	MCfg1	no	X	X	X	X	X		X	X	X	Located to serve as a downgradient stepout for LOUs 41 and 65; as an upgradient stepout for LOU 63; and for general Site coverage.
Q-4	Parcel F	M-92	M-92	34.9 - 44.9	MCfg1	yes	X	X	X	X	X		X	X	X	Located to serve as a downgradient stepout for LOUs 25, 41, 59, and 65; as an upgradient stepout for LOU 63; and for general Site coverage.
S-2	IV	TR-8	TR-8	63 - 93	MCcg1	no	X	X	X	X	X	X	X	X	X	Located to serve as an upgradient stepout for LOUs 41 and 65; to evaluate possible offsite sources to the west (particularly for VOCs); and for general Site coverage.
<b>Number of Field Samples:</b>							<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>2</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
- Hexavalent chromium
- Perchlorate
- Wet chemistry analytes
- VOCs
- SVOCs
- TPH-DRO/ORO
- Organochlorine pesticides
- Dioxins/furans
- Radionuclides
- Asbestos

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

**LOU 41 and LOUs 65a to 65b Table 1 - Soil Characterization Data - Wet Chemistry**

**LOU 41 and LOUs 65a to 65b Table 2 - Groundwater Characterization Data - Wet Chemistry**

**LOU 41 and LOUs 65a to 65b Table 3 - Soil Characterization Data - Dioxins and Dibenzofurans**

**LOU 41 and LOUs 65a to 65b Table 4 - Soil Characterization Data - Metals**

**LOU 41 and LOUs 65a to 65b Table 5 - Groundwater Characterization Data - Metals**

**LOU 41 and LOUs 65a to 65b Table 6 - Soil Characterization Data - Organochlorine Pesticides (OCPs)**

**LOU 41 and LOUs 65a to 65b Table 7 - Groundwater Characterization Data - Organochlorine Pesticides (OCPs)**

LOU 41 and LOUs 65a to 65b Table 8 - Soil Characterization Data - Organophosphorus Pesticides (OPPs)

LOU 41 and LOUs 65a to 65b Table 9 - Groundwater Characterization Data - Organophosphorus Pesticides (OPPs)

LOU 41 and LOUs 65a to 65b Table 10 - Soil Characterization Data – PCBs

LOU 41 and LOUs 65a to 65b Table 11 - Groundwater Characterization Data – PCBs

**LOU 41 and LOUs 65a to 65b Table 12 - Soil Characterization Data - Perchlorate**

**LOU 41 and LOUs 65a to 65b Table 13 - Groundwater Characterization Data - Perchlorate**

**LOU 41 and LOUs 65a to 65b Table 14 - Soil Characterization Data - Radionuclides**

**LOU 41 and LOUs 65a to 65b Table 15 - Groundwater Characterization Data – Radionuclides**

**LOU 41 and LOUs 65a to 65b Table 16 - Soil Characterization Data - SVOCs**

**LOU 41 and LOUs 65a to 65b Table 17 - Groundwater Characterization Data - SVOCs**

LOU 41 and LOUs 65a to 65b Table 18 - Soil Characteristic Data - TPH and Fuel Alcohols

**LOU 41 and LOUs 65a to 65b Table 19 - Soil Characterization Data - VOCs**



**Summary of Available Data for LOU 41  
Unit 1 Tenant Stains and LOUs 65a to 65d Various Tenant Leaseholds  
Tronox Facility – Henderson, Nevada**

**LOU 41 and LOUs 65a to 65b Table 20 - Groundwater Characterization Data - VOCs**

**LOU 41 and LOUs 65a to 65b Table 21 - Soil Characterization Data - Long Asbestos Fibers  
in Respirable Soil Fraction**

LOU 41 and LOUs 65a to 65b Table 22 - Summary of Historical Groundwater Analytical Data

LOU 41 and LOUs 65a to 65b Table 23 - Summary of Historical Soil Analytical Data

Notes for all Phase A data tables are presented at the end of the tables.

**LOU 41 and LOUs 65a to 65d Table 1  
Soil Characterization Data - Wet Chemistry**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.		SA3	SA3	SA3	SA3	SA3	SA3	
Sample ID		SA3-0.5	SA3-0.5D	SA3-10	SA3-20	SA3-30	SA3-40	
Sample Depth (ft)		0.5	0.5	10	20	30	40	
Sample Date		11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	
Wet Chemistry Param	MSSL <sup>2</sup> mg/kg							Units
Percent moisture	--	6.4	6.3	6.3	8.9	22.4	32.1	percent
Alkalinity (as CaCO <sub>3</sub> )	--	324	269	162	134	64.4 U	451	mg/kg
Bicarbonate	--	675	296	916	476	139	1670	mg/kg
Total Alkalinity	--	999	566	1080	611	139	2120	mg/kg
Ammonia (as N)	--	5.3 UJ	5.3 UJ	5.3 UJ	5.5 UJ	6.4 UJ	7.4 UJ	mg/kg
Cyanide	1.37E+04	R	R	R	R	R	R	mg/kg
MBAS	--	2.2 U	2.2 U	2.1 U	2.2 U	2.8 U	3.1 U	mg/kg
pH (solid)	--	8.8	8.8	8.6	8.8	7.7	8.5	none
Bromide	--	2.7 U	2.7 U	2.7 U	2.7 U	3.4	3.7 U	mg/kg
Chlorate	--	5.3 U	5.3 U	5.3 U	17.6 J-	6.4 UJ	7.4 UJ	mg/kg
Chloride	--	0.90 J	1.0 J	13.2	130	1240	120	mg/kg
Nitrate (as N)	--	0.21 U	0.21 U	2.6	8.2	12.7	1.6	mg/kg
Nitrite	--	0.21 U	0.21 U	0.21 U	1.7 J	11.9	29.5 U	mg/kg
ortho-Phosphate	--	5.3 U	5.3 U	1.4 J	5.5 U	6.4 U	7.4 U	mg/kg
Sulfate	--	7.2	8.6	156	267	573	325	mg/kg
Total Organic Carbon	--	2780	2680	3720	8300	15900	6600	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 41 and LOUs 65a to 65d Table 2  
Groundwater Characterization Data - Wet Chemistry**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	
Well ID		M-92	
Sample ID		M-92	
Sample Date		11/29/2006	
Wet Chemistry Parameters	MCL <sup>2</sup> ug/L		Units
Total Dissolved Solids	5.00E+05 j	1850	mg/L
Total Suspended Solids	--	22.0 J	mg/L
Alkalinity (as CaCO <sub>3</sub> )	--	5.0 U	mg/L
Bicarbonate	--	80.0	mg/L
Total Alkalinity	--	80.0	mg/L
Ammonia (as N)	--	50.0 U	ug/L
MBAS	--	0.20 U	mg/L
Cyanide	2.00E+02	R	ug/L
pH (liquid)	--	7.4 J	none
Specific Conductance	--	1930	umhos/cm
Bromide	--	0.21 J	mg/L
Chlorate	--	3.2 J	mg/L
Chloride	2.50E+05	192	mg/L
Nitrate (as N)	1.00E+04	4.0	mg/L
Nitrite	1.00E+03	0.020 U	mg/L
ortho-Phosphate	--	5.0 U	mg/L
Sulfate	2.50E+05 j	992	mg/L
Total Organic Carbon	--	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.

**LOU 41 and LOUs 65a to 65d Table 3  
Soil Characterization Data - Dioxins and Dibenzofurans**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program				Ph A <sup>1</sup>	Ph A
Boring No.				SA3	SA3
Sample ID				SA3-0.5	SA3-0.5D
Sample Depth (ft)				0.5	0.5
Sample Date				11/13/2006	11/13/2006
chemical_name:	Method	Unit	MSSL <sup>2</sup> mg/kg		
Dioxin 8290 SCREEN Total TEQ-ENSR Calculated (a) ng/kg		ng/kg	--	<b>149.01</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>149.01</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>669.842</b>	<b>849.298</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>53.366</b>	<b>71.721</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>269.014</b>	<b>344.266</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>281.567</b>	<b>356.494</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>6.265</b>	<b>8.512</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>157.518</b>	<b>196.405</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>13.496</b>	<b>17.014</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>45.354</b>	<b>27.487</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>15.276</b>	<b>19.467</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>117.401</b>	<b>143.365</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>11.897</b>	<b>13.508</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>50.697</b>	<b>60.179</b>
2,3,4,6,7,8-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--		
2,3,4,7,8-Pentachlorodibenzofuran	8290 Screen	ng/kg	--	<b>57.175</b>	<b>65.924</b>
2,3,4,7,8-Pentachlorodibenzofuran	SW 846 8290	ng/kg	--		
2,3,7,8-Tetrachlorodibenzofuran	8290 Screen	ng/kg	--	<b>298.648</b>	<b>320.832</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	<b>8.039</b>	<b>8.466</b>
2,3,7,8-Tetrachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	1.80E-05 h,v		
Octachlorodibenzofuran	8290 Screen	ng/kg	--	<b>1674.507</b>	<b>2372.145</b>
Octachlorodibenzofuran	SW 846 8290	ng/kg	--		
Octachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	<b>57.568</b>	<b>90.351</b>

**LOU 41 and LOUs 65a to 65d Table 3 (continued)  
Soil Characterization Data - Dioxins and Dibenzofurans**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program				Ph A <sup>1</sup>	Ph A
Boring No.				SA3	SA3
Sample ID				SA3-0.5	SA3-0.5D
Sample Depth (ft)				0.5	0.5
Sample Date				11/13/2006	11/13/2006
chemical_name:	Method	Unit	MSSL <sup>2</sup> mg/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 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 41 and LOUs 65a to 65d Table 4  
Soil Characterization Data - Metals**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.		SA3	SA3	SA3	SA3	SA3	SA3	
Sample ID		SA3-0.5	SA3-0.5D	SA3-10	SA3-20	SA3-30	SA3-40	
Sample Depth (ft)		0.5	0.5	10	20	30	40	
Sample Date		11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	
Metals	MSSL <sup>2</sup> mg/kg							Units
Aluminum	1.00E+05	7000	6820	6130	6960	7760	13500	mg/kg
Antimony	4.50E+02	0.17 J-	0.16 J-	0.17 J-	0.094 J-	0.13 J-	0.23 J-	mg/kg
Arsenic	2.80E+02	3.5	2.9	3.0	3.5	61.6	27.7	mg/kg
Barium	1.00E+05	181 J+	144 J+	161 J+	188 J+	667 J	43.6 J	mg/kg
Beryllium	2.20E+03	0.52	0.47	0.46	0.46	0.40 J	0.81	mg/kg
Boron	1.00E+05	5.7 UJ	5.0 UJ	3.7 UJ	5.8 UJ	25.6 UJ	24.2 UJ	mg/kg
Cadmium	5.60E+02	0.15	0.13	0.084	0.077	0.077	0.099	mg/kg
Calcium	--	40900 J	19800 J	19300 J	30200 J	120000 J	30000 J	mg/kg
Chromium (Total)	7.10E+01	10.7	9.6	9.4	7.0	18.5 J-	34.6 J-	mg/kg
Chromium-hexavalent	5.00E+02	0.11 J	0.21 U	0.21 U	0.22 U	0.26 U	0.29 U	mg/kg
Cobalt	2.10E+03	6.5	6.3 J-	5.9 J-	6.9 J-	4.0 J-	5.1 J-	mg/kg
Copper	4.20E+04	12.3 J-	13.3 J-	12.0 J-	10.3 J-	9.9 J	11.7 J	mg/kg
Iron	1.00E+05	12000 J-	11300	12000	8290	6880	11900	mg/kg
Lead	8.00E+02	12.4	12.1	8.0	7.7	4.6	8.3	mg/kg
Magnesium	--	7260 J-	6640 J-	5890 J-	10100 J-	45900 J-	40800 J-	mg/kg
Manganese	3.50E+04	329 J	369 J	264 J	289 J	119	160	mg/kg
Molybdenum	5.70E+03	0.49 J	0.57	0.52 J	0.31 J	0.44 J	0.80	mg/kg
Nickel	2.30E+04	13.5 J-	12.0 J-	11.5 J-	11.0 J-	10.2 J-	12.5 J-	mg/kg
Platinum	--	0.019 J	0.016 J	0.016 J	0.015 J	0.019 J	0.023 J	mg/kg
Potassium	--	1890 J-	1830 J-	1600 J-	1480 J-	1570	3260	mg/kg
Selenium	5.70E+03	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.14 UJ	0.16 UJ	mg/kg
Silver	5.70E+03	0.14 J	0.13 J	0.12 J	0.11 J	0.15 J	0.18 J	mg/kg
Sodium	--	383 J-	344 J-	317 J-	756 J-	1620 J-	669 J-	mg/kg
Strontium	1.00E+05	226 J+	152 J+	154 J+	228 J+	299 J	119 J	mg/kg
Thallium	--	0.10 U	0.15 U	0.082 U	0.12 U	0.09 U	0.18 U	mg/kg
Tin	--	0.54	0.52	0.48	0.36	0.36	0.66	mg/kg
Titanium	--	527	498	504	353	363	581	mg/kg
Tungsten	--	0.38 UJ	0.32 UJ	0.30 UJ	0.19 UJ	0.49 UJ	0.33 UJ	mg/kg
Uranium	--	1.3	0.89	0.91	1.4	10.6	3.7	mg/kg
Vanadium	5.70E+03	32.6 J-	29.9 J-	33.9 J-	23.9 J-	36.2 J-	33.7 J-	mg/kg
Zinc	1.00E+05	27.6 J-	29.0 J-	24.8 J-	22.9 J-	29.5 UJ	49.2 UJ	mg/kg
Mercury	3.41E+02 (t)	0.013 J-	0.019 J-	0.013 J-	0.0073 UJ	0.0086 UJ	0.0098 UJ	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.

**LOU 41 and LOUs 65a to 65d Table 5  
Groundwater Characterization Data - Metals**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>
Well ID:		M-92
Sample ID		M-92-Z
Sample Date		05/08/2007
Metals	MCL <sup>2</sup> ug/L	
Aluminum	5.00E+01 j	32.6 U
Antimony	6.00E+00	0.50 U
Arsenic	1.00E+01	95.7
Barium	2.00E+03	18.2 U
Beryllium	4.00E+00	1.8 U
Boron	7.30E+03 c	1820
Cadmium	5.00E+00	0.057 U
Calcium	--	155000
Chromium (Total)	1.00E+02	15.1 J-
Chromium-hexavalent	1.09E+02 c	15.9 J
Cobalt	7.30E+02 c	0.32 J-
Copper	1.30E+03 p	2.4 U
Iron	3.00E+02 j	188 UJ
Lead	1.50E+01 u	0.49 U
Magnesium	1.50E+05 a	83500
Manganese	5.00E+01 j	6.8 U
Molybdenum	1.82E+02 c	18.7
Nickel	7.30E+02 c	10.3 UJ
Platinum	--	0.10 U
Potassium	--	9650
Selenium	5.00E+01	2.3 J
Silver	1.00E+02 j	0.20 U
Sodium	--	373000
Strontium	2.19E+04 c	2760
Thallium	2.00E+00	1.0 U
Tin	2.19E+04 c	0.23 J
Titanium	1.46E+05 c	4.9 U
Tungsten	--	1.8 UJ
Uranium	3.00E+01	8.3 J+
Vanadium	3.65E+01 c	32.0 U
Zinc	5.00E+03 j	2.0 UJ
Mercury	2.00E+00	0.093 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.

(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. 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.

**LOU 41 and LOUs 65a to 65d Table 6  
Soil Characterization Data - Organochlorine Pesticides (OCPs)**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	Ph A	
Boring No.		SA3	SA3	
Sample ID		SA3-0.5	SA3-0.5D	
Sample Depth (ft)		0.5	0.5	
Sample Date		11/13/2006	11/13/2006	
Organochlorine Pesticides	MSSL <sup>2</sup> mg/kg			Unit
4,4'-DDD	1.10E+01	0.0018 U	0.0018 U	mg/kg
4,4'-DDE	7.80E+00	0.0018 U	<b>0.0020</b>	mg/kg
4,4'-DDT	7.80E+00	0.0018 U	0.0018 U	mg/kg
Aldrin	1.10E-01	0.0018 U	0.0018 U	mg/kg
Alpha-BHC	4.00E-01 (bbb)	0.0018 U	0.0018 U	mg/kg
Alpha-chlordane	1.40E+00 (y)	0.0018 U	0.0018 U	mg/kg
Beta-BHC	1.40E+00 (bbb)	0.0018 U	0.0018 U	mg/kg
Delta-BHC	--	0.0018 U	0.0018 U	mg/kg
Dieldrin	1.20E-01	0.0018 U	0.0018 U	mg/kg
Endosulfan I	4.10E+03 (aa)	0.0018 U	0.0018 U	mg/kg
Endosulfan II	4.10E+03 (aa)	0.0018 U	0.0018 U	mg/kg
Endosulfan Sulfate	4.10E+03 (aa)	0.0018 U	0.0018 U	mg/kg
Endrin	2.10E+02	0.0018 U	0.0018 U	mg/kg
Endrin Aldehyde	2.10E+02 (k)	0.0018 U	0.0018 U	mg/kg
Endrin Ketone	2.10E+02 (k)	0.0018 U	0.0018 U	mg/kg
Gamma-BHC (Lindane)	1.90E+00 (bbb)	0.0018 U	0.0018 U	mg/kg
Gamma-Chlordane	1.40E+00 (y)	0.0018 U	0.0018 U	mg/kg
Heptachlor	4.30E-01	0.0018 U	0.0018 U	mg/kg
Heptachlor Epoxide	2.10E-01	0.0018 U	0.0018 U	mg/kg
Methoxychlor	3.40E+03	0.0035 UJ	0.0035 UJ	mg/kg
Tech-Chlordane	1.40E+00	0.011 U	0.011 U	mg/kg
Toxaphene	1.70E+00	0.053 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)
- (k) Value for endrin used as surrogate for endrin aldehyde and endrin  
(y) Value for chlordane (technical) used as surrogate for alpha-chlordane  
(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  
(bbb) BHC listed as HCH in the MSSL table.



**LOU 41 and LOUs 65a to 65d Table 7  
Groundwater Characterization Data - Organochlorine  
Pesticides (OCPs)**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>
Well ID		M-92
Sample ID		M-92
Sample Date		11/29/2006
Organochlorine Pesticides	MCL <sup>2</sup> ug/L	ug/L
4,4'-DDD	2.80E-01 c	0.050 U
4,4'-DDE	1.98E-01 c	0.050 U
4,4'-DDT	1.98E-01 c	0.050 U
Aldrin	4.00E-03 c	0.050 U
Alpha-BHC	1.10E-02 c, (bbb)	0.050 U
Alpha-chlordane	2.00E+00 (l)	0.050 U
Beta-BHC	3.74E-02 c, (bbb)	0.050 U
Delta-BHC	1.10E-02 c, (z)	0.050 U
Dieldrin	4.20E-03 c, (z)	0.050 U
Endosulfan I	2.19E+02 c, (aa)	0.050 U
Endosulfan II	2.19E+02 c, (aa)	0.050 U
Endosulfan Sulfate	2.19E+02 c, (aa)	0.050 U
Endrin	2.00E+00	0.050 U
Endrin Aldehyde	1.09E+01 c, (k)	0.050 U
Endrin Ketone	1.09E+01 c, (k)	0.050 U
Gamma-BHC (Lindane)	2.00E-01	0.050 U
Gamma-Chlordane	2.00E+00 (l)	0.050 U
Heptachlor	4.00E-01	0.050 U
Heptachlor Epoxide	2.00E-01	0.050 U
Methoxychlor	4.00E+01	0.10 U
Tech-Chlordane	2.00E+00 (l)	0.50 U
Toxaphene	3.00E+00	2.0 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.
  - (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 41 and LOUs 65a to 65d Table 8  
Soil Characterization Data - Organophosphorus Pesticides (OPPs)**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	Ph A
Boring No.		SA3	SA3
Sample ID		SA3-0.5	SA3-0.5D
Sample Depth (ft)		0.5	0.5
Sample Date		11/13/2006	11/13/2006
OPPs	MSSL <sup>2</sup> mg/kg	mg/kg	mg/kg
Azinphos-methyl	--	0.014 U	0.014 U
Bolstar	--	0.014 U	0.014 U
Chlorpyrifos	2.10E+03	0.021 U	0.021 U
Coumaphos	--	0.014 U	0.014 U
Demeton-O	--	0.042 U	0.042 U
Demeton-S	--	0.016 U	0.016 U
Diazinon	6.20E+02	0.024 U	0.023 U
Dichlorvos	6.60E+00	0.025 U	0.025 U
Dimethoate	--	0.024 U	0.023 U
Disulfoton	2.70E+01	0.051 U	0.051 U
EPN	--	0.014 UJ	0.014 UJ
Ethoprop	--	0.016 U	0.016 U
Ethyl Parathion	4.10E+03	0.019 UJ	0.019 UJ
Famphur	--	0.014 U	0.014 U
Fensulfothion	--	0.014 U	0.014 U
Fenthion	1.70E+02 (ff)	0.035 U	0.035 U
Malathion	1.40E+04	0.016 U	0.016 U
Merphos	--	0.032 U	0.032 U
Methyl parathion	1.70E+02	0.021 U	0.021 U
Mevinphos	--	0.016 U	0.016 U
Naled	1.40E+03	0.035 UJ	0.035 UJ
Phorate	--	0.021 U	0.021 U
Ronnel	3.40E+04	0.019 U	0.019 U
Stirphos	--	0.016 U	0.016 U
Sulfotep	--	0.021 U	0.021 U
Thionazin	--	0.019 U	0.019 U
Tokuthion	--	0.021 U	0.021 U
Trichloronate	--	0.021 U	0.021 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)
- (ff) Value for methyl parathion used as surrogate for fenthion based on structural similarities.

**LOU 41 and LOUs 65a to 65d Table 9**  
**Groundwater Characterization Data - Organophosphorus Pesticides**  
**(OPPs)**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>
Well ID		M-92
Sample ID		M-92
Sample Date		11/29/2006
OPPs	MCL <sup>2</sup> ug/L	ug/L
Azinphos-methyl	--	2.5 UJ
Bolstar	--	1.0 U
Chlorpyrifos	1.09E+02 c	1.0 U
Coumaphos	--	1.0 U
Demeton-O	1.46E+00 c,(cc)	1.0 U
Demeton-S	1.46E+00 c,(cc)	1.0 U
Diazinon	3.28E+01	1.0 U
Dichlorvos	2.32E-01	1.0 U
Dimethoate	7.30E+00	1.0 U
Disulfoton	1.46E+00	0.50 U
EPN	3.65E-01	1.2 U
Ethoprop	--	0.50 U
Ethyl Parathion	9.12E+00 c,(tt)	1.0 U
Famphur	--	1.0 U
Fensulfothion	--	2.5 U
Fenthion	9.10E+00 c,(ff)	2.5 U
Malathion	7.30E+02	1.2 U
Merphos	1.09E+00	5.0 U
Methyl parathion	9.12E+00	4.0 U
Mevinphos	--	6.2 U
Naled	7.30E+01	1.0 UJ
Phorate	7.30E+00	1.2 U
Ronnel	1.82E+03	10 U
Stirphos	--	3.5 U
Sulfotep	1.82E+01	1.5 U
Thionazin	--	1.0 U
Tokuthion	--	1.6 U
Trichloronate	--	0.50 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.

(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 41 and LOUs 65a to 65d Table 10  
Soil Characterization Data - PCBs**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	Ph A	Ph A	Ph A	Ph A	Ph A
Boring ID		SA3	SA3	SA3	SA3	SA3	SA3
Sample ID		SA3-0.5	SA3-0.5D	SA3-10	SA3-20	SA3-30	SA3-40
Sample Depth (ft)		0.5	0.5	10	20	30	40
Sample Date		11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006
PCBs	MSSL <sup>2</sup> mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aroclor-1016	2.40E+01 (i)	0.035 U	0.035 U	0.035 U	0.036 U	0.043 U	0.049 U
Aroclor-1221	8.30E-01 (i)	0.035 U	0.035 U	0.035 U	0.036 U	0.043 U	0.049 U
Aroclor-1232	8.30E-01 (i)	0.035 U	0.035 U	0.035 U	0.036 U	0.043 U	0.049 U
Aroclor-1242	8.30E-01 (i)	0.035 U	0.035 U	0.035 U	0.036 U	0.043 U	0.049 U
Aroclor-1248	8.30E-01 (i)	0.035 U	0.035 U	0.035 U	0.036 U	0.043 U	0.049 U
Aroclor-1254	8.30E-01 (i)	0.035 U	0.035 U	0.035 U	0.036 U	0.043 U	0.049 U
Aroclor-1260	8.30E-01 (i)	0.035 U	0.035 U	0.035 U	0.036 U	0.043 U	0.049 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)
- (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 41 and LOUs 65a to 65d Table 11  
Groundwater Characterization Data - PCBs**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	
Well ID		M-92	
Sample ID		M-92	
Sample Date		11/29/2006	
PCBs	MCL <sup>2</sup> ug/L		Unit
Aroclor-1016	5.00E-01 (bb)	0.10 U	ug/L
Aroclor-1221	5.00E-01 (bb)	0.10 U	ug/L
Aroclor-1232	5.00E-01 (bb)	0.10 U	ug/L
Aroclor-1242	5.00E-01 (bb)	0.10 U	ug/L
Aroclor-1248	5.00E-01 (bb)	0.10 U	ug/L
Aroclor-1254	5.00E-01 (bb)	0.10 U	ug/L
Aroclor-1260	5.00E-01 (bb)	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.

**LOU 41 and LOUs 65a to 65d Table 12  
Soil Characterization Data - Perchlorate**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Boring ID	Sample ID	Sample Depth (ft)	Sample Date	Perchlorate ug/kg	MSSL <sup>1</sup> mg/kg	Sampling Program
SA3	SA3-0.5	0.5	11/13/2006	1880	7.95E+02	Ph A <sup>2</sup>
SA3	SA3-0.5D	0.5	11/13/2006	1540	7.95E+02	Ph A
SA3	SA3-10	10	11/13/2006	10200	7.95E+02	Ph A
SA3	SA3-20	20	11/13/2006	6100	7.95E+02	Ph A
SA3	SA3-30	30	11/13/2006	974	7.95E+02	Ph A
SA3	SA3-40	40	11/13/2006	86.7	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 41 and LOUs 65a to 65d Table 13  
Groundwater Characterization Data - Perchlorate**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Well ID Number	Sample ID	Sample Date	Perchlorate	Units	MCL <sup>1</sup> ug/L	Sampling Program
M-92	M-92	11/29/2006	610	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 41 and LOUs 65a to 65d Table 14  
Soil Characterization Data - Radionuclides**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
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
SA3	SA3-0.5	0.5	11/13/2006	0.997 J	1.81							Ph A <sup>2</sup>
SA3	SA3-0.5D	0.5	11/13/2006	1.13 J	2.21 U							Ph A
SA3	SA3-10	10	11/13/2006	1.01 J	1.65	0.691 J	0.554 J	0.601 J	0.427 J-	0.0123 UJ	0.292 J-	Ph A
SA3	SA3-20	20	11/13/2006	1.19 J	1.66							Ph A
SA3	SA3-30	30	11/13/2006	1.59 J	0.357 U							Ph A
SA3	SA3-40	40	11/13/2006	2.34	0.913 U							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 41 and LOUs 65a to 65d Table 15  
Groundwater Characterization Data - Radionuclides**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
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	
		<b>TW PRG</b> <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
M-92	M-92-Z	05/08/2007	<b>0.241 J</b>	<b>0.736 J-</b>	0.00575 U	<b>0.0354 B</b>	0.0198 U	<b>3.01</b>	<b>0.0466 J</b>	<b>1.94</b>	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.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.
3. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.

**LOU 41 and LOUs 65a to 65d Table 16  
Soil Characterization Data - SVOC**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program			Ph A <sup>1</sup>	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.			SA3	SA3	SA3	SA3	SA3	SA3
Sample ID			SA3-0.5	SA3-0.5D	SA3-10	SA3-20	SA3-30	SA3-40
Sample Depth (ft)			0.5	0.5	10	20	30	40
Sample Date			11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006
SVOC	Analytical Method	MSSL <sup>2</sup> mg/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,4-Dioxane	non-SIM	1.70E+02	71 U	70 U	350 U	360 U	430 U	490 U
2-Methylnaphthalene	non-SIM	2.10E+02 (jj)	350 U	350 U	350 U	360 U	430 U	490 U
2-Methylnaphthalene	SIM	2.10E+02 (jj)	7.1 U	7.0 U				
Acenaphthene	non-SIM	3.30E+04	350 U	350 U	350 U	360 U	430 U	490 U
Acenaphthene	SIM	3.30E+04	7.1 U	7.0 U				
Acenaphthylene	non-SIM	3.30E+04 (pp)	350 U	350 U	350 U	360 U	430 U	490 U
Acenaphthylene	SIM	3.30E+04 (pp)	7.1 U	7.0 U				
Anthracene	non-SIM	1.00E+05	350 U	350 U	350 U	360 U	430 U	490 U
Anthracene	SIM	1.00E+05	7.1 U	7.0 U				
Benz(a)anthracene	non-SIM	2.30E+00	350 U	350 U	350 U	360 U	430 U	490 U
Benz(a)anthracene	SIM	2.30E+00	7.1 U	7.0 U				
Benzo(a)pyrene	non-SIM	2.30E-01	350 U	350 U	350 U	360 U	430 U	490 U
Benzo(a)pyrene	SIM	2.30E-01	7.1 U	7.0 U				
Benzo(b)fluoranthene	non-SIM	2.30E+00	350 U	350 U	350 U	360 U	430 U	490 U
Benzo(b)fluoranthene	SIM	2.30E+00	7.1 U	7.0 U				
Benzo(g,h,i)perylene	non-SIM	3.20E+04 (w)	350 U	350 U	350 U	360 U	430 U	490 U
Benzo(g,h,i)perylene	SIM	3.20E+04 (w)	7.1 U	7.0 U				
Benzo(k)fluoranthene	non-SIM	2.30E+01	350 U	350 U	350 U	360 U	430 U	490 U
Benzo(k)fluoranthene	SIM	2.30E+01	7.1 U	7.0 U				
bis(2-Ethylhexyl)phthalate	non-SIM	1.40E+02	350 U	350 U	350 U	360 U	430 U	490 U
Butyl benzyl phthalate	non-SIM	2.40E+02	350 U	350 U	350 U	360 U	430 U	490 U
Chrysene	non-SIM	2.30E+02	350 U	350 U	350 U	360 U	430 U	490 U
Chrysene	SIM	2.30E+02	7.1 U	7.0 U				
Dibenz(a,h)anthracene	non-SIM	2.30E-01	350 U	350 U	350 U	360 U	430 U	490 U
Dibenz(a,h)anthracene	SIM	2.30E-01	7.1 U	7.0 U				
Diethyl phthalate	non-SIM	1.00E+05	350 U	350 U	350 U	360 U	430 U	490 U
Dimethyl phthalate	non-SIM	1.00E+05	350 U	350 U	350 U	360 U	430 U	490 U
Di-N-Butyl phthalate	non-SIM	6.80E+04	350 U	350 U	350 U	360 U	430 U	490 U
Di-N-Octyl phthalate	non-SIM	--	350 U	350 U	350 U	360 U	430 U	490 U

**LOU 41 and LOUs 65a to 65d Table 16 (continued)**  
**Soil Characterization Data - SVOC**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program			Ph A <sup>1</sup>	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.			SA3	SA3	SA3	SA3	SA3	SA3
Sample ID			SA3-0.5	SA3-0.5D	SA3-10	SA3-20	SA3-30	SA3-40
Sample Depth (ft)			0.5	0.5	10	20	30	40
Sample Date			11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006
SVOC	Analytical Method	MSSL <sup>2</sup> mg/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Fluoranthene	non-SIM	2.40E+04	350 U	350 U	350 U	360 U	430 U	490 U
Fluoranthene	SIM	2.40E+04	7.1 U	7.0 U				
Fluorene	non-SIM	2.60E+04	350 U	350 U	350 U	360 U	430 U	490 U
Fluorene	SIM	2.60E+04	7.1 U	7.0 U				
Hexachlorobenzene	non-SIM	1.20E+00	350 U	350 U	350 U	360 U	430 U	490 U
Hexachlorobenzene	SIM	1.20E+00	7.1 U	10				
Indeno(1,2,3-cd)pyrene	non-SIM	2.30E+00	350 U	350 U	350 U	360 U	430 U	490 U
Indeno(1,2,3-cd)pyrene	SIM	2.30E+00	7.1 U	7.0 U				
Naphthalene	non-SIM	2.10E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Naphthalene	non-SIM	2.10E+02	350 U	350 U	350 U	360 U	430 U	490 U
Naphthalene	SIM	2.10E+02	7.1 U	7.0 U				
Nitrobenzene	non-SIM	1.10E+02	350 U	350 U	350 U	360 U	430 U	490 U
Octachlorostyrene	non-SIM	--	350 U	350 U	350 U	360 U	430 U	490 U
Phenanthrene	non-SIM	1.00E+05 (n)	350 U	350 U	350 U	360 U	430 U	490 U
Phenanthrene	SIM	1.00E+05 (n)	7.1 U	7.0 U				
Pyrene	non-SIM	3.20E+04	350 U	350 U	350 U	360 U	430 U	490 U
Pyrene	SIM	3.20E+04	7.0 J	7.0 U				
Pyridine	non-SIM	6.80E+02	1700 U	1700 U	1700 U	1800 U	2100 U	2400 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 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 41 and LOUs 65a to 65d Table 17  
Groundwater Characterization Data - SVOCs**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program				Ph A <sup>1</sup>
Well No.				M-92
Sample ID				M-92
Sample Date				11/29/2006
SVOCs	Analytic Method	MCL <sup>2</sup> ug/L		ug/L
1,4-Dioxane	non-SIM	6.11E+00	c	10 U
2-Methylnaphthalene	non-SIM	6.20E+00	c,(jj)	10 U
2-Methylnaphthalene	SIM	6.20E+00	c,(jj)	
Acenaphthene	non-SIM	3.65E+02	c	10 U
Acenaphthene	SIM	3.65E+02	c	
Acenaphthylene	non-SIM	3.65E+02	c,(pp)	10 U
Acenaphthylene	SIM	3.65E+02	c,(pp)	
Anthracene	non-SIM	1.83E+03	c	10 U
Anthracene	SIM	1.83E+03	c	
Benz(a)anthracene	non-SIM	9.21E-02	c	10 U
Benz(a)anthracene	SIM	9.21E-02	c	
Benzo(a)pyrene	non-SIM	2.00E-01		10 U
Benzo(a)pyrene	SIM	2.00E-01		
Benzo(b)fluoranthene	non-SIM	9.21E-02	c	10 U
Benzo(b)fluoranthene	SIM	9.21E-02	c	
Benzo(g,h,i)perylene	non-SIM	1.83E+02	c,(w)	10 U
Benzo(g,h,i)perylene	SIM	1.83E+02	c,(w)	
Benzo(k)fluoranthene	non-SIM	9.21E-01	c	10 U
Benzo(k)fluoranthene	SIM	9.21E-01	c	
bis(2-Ethylhexyl)phthalate	non-SIM	6.00E+00		<b>3.2 J</b>
Butyl benzyl phthalate	non-SIM	7.30E+03	c	10 U
Chrysene	non-SIM	9.21E+00	c	10 U
Chrysene	SIM	9.21E+00	c	
Dibenz(a,h)anthracene	non-SIM	9.21E-03	c	10 U
Dibenz(a,h)anthracene	SIM	9.21E-03	c	
Diethyl phthalate	non-SIM	2.92E+04	c	10 U
Dimethyl phthalate	non-SIM	3.65E+05	c	10 U
Di-N-Butyl phthalate	non-SIM	3.65E+03	c	10 U
Di-N-Octyl phthalate	non-SIM	1.46E+03	c	10 U
Fluoranthene	non-SIM	1.46E+03	c	10 U
Fluoranthene	SIM	1.46E+03	c	
Fluorene	non-SIM	2.43E+02	c	10 U
Fluorene	SIM	2.43E+02	c	
Hexachlorobenzene	non-SIM	1.00E+00		10 U
Hexachlorobenzene	SIM	1.00E+00		
Indeno(1,2,3-cd)pyrene	non-SIM	9.21E-02	c	10 U
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 U
Naphthalene	SIM	6.20E+00	c	
Nitrobenzene	non-SIM	3.40E+00	c	10 U
Octachlorostyrene	non-SIM	--	c	10 U

**LOU 41 and LOUs 65a to 65d Table 17 (continued)  
Groundwater Characterization Data - SVOCs**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program			Ph A <sup>1</sup>
Well No.			M-92
Sample ID			M-92
Sample Date			11/29/2006
SVOCs	Analytic Method	MCL <sup>2</sup> ug/L	ug/L
Phenanthrene	non-SIM	1.80E+03 (n)	10 U
Phenanthrene	SIM	1.80E+03 (n)	
Pyrene	non-SIM	1.83E+02 c	10 U
Pyrene	SIM	1.83E+02 c	
Pyridine	non-SIM	3.65E+01 c	20 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.

(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 41 and LOUs 65a to 65d Table 18  
Soil Characteristic Data - TPH and Fuel Alcohols**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
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> mg/kg</b>	--	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
SA3	SA3-0.5	0.5	11/13/2006	53 UJ	92 UJ	53 UJ	27 U	27 U	0.11 U	Ph A <sup>2</sup>
SA3	SA3-0.5D	0.5	11/13/2006	53 UJ	87 UJ	53 UJ	27 U	27 U	0.11 U	Ph A
SA3	SA3-10	10	11/13/2006	53 UJ	79 UJ	53 UJ	27 U	27 U	0.11 U	Ph A
SA3	SA3-20	20	11/13/2006	55 UJ	89 UJ	55 UJ	27 U	27 U	0.11 U	Ph A
SA3	SA3-30	30	11/13/2006	64 UJ	118 UJ	64 UJ	32 U	32 U	0.13 U	Ph A
SA3	SA3-40	40	11/13/2006	74 UJ	115 UJ	74 UJ	37 U	37 U	0.15 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 41 and LOUs 65a to 65d Table 19  
Soil Characterization Data - VOCs**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program	Ph A <sup>1</sup>	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.	SA3	SA3	SA3	SA3	SA3	SA3	
Sample ID	SA3-0.5	SA3-0.5D	SA3-10	SA3-20	SA3-30	SA3-40	
Sample Depth (ft)	0.5	0.5	10	20	30	40	
Sample Date	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	
VOCs	MSSL <sup>2</sup> mg/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	
Naphthalene	2.10E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,1,1,2-Tetrachloroethane	7.60E+00	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,1,1-Trichloroethane	1.40E+03	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,1,2,2-Tetrachloroethane	9.70E-01	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,1,2-Trichloroethane	2.10E+00	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,1-Dichloroethane	2.30E+03	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,1-Dichloroethene	4.70E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,1-Dichloropropene	1.75E+00 (gg)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,2,3-Trichlorobenzene	2.60E+02 (hh)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,2,3-Trichloropropane	1.60E+00	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,2,4-Trichlorobenzene	2.60E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,2,4-Trimethylbenzene	2.20E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,2-Dibromo-3-chloropropane	2.00E-02	5.3 UJ	5.3 UJ	5.3 UJ	5.5 UJ	6.4 UJ	7.4 UJ
1,2-Dichlorobenzene	3.70E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,2-Dichloroethane	8.40E-01	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,2-Dichloropropane	8.50E-01	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,3,5-Trimethylbenzene	7.80E+01	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,3-Dichlorobenzene	1.40E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,3-Dichloropropane	4.10E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
1,4-Dichlorobenzene	8.10E+00	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
2,2-Dichloropropane	8.50E-01 (ii)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
2-Butanone	3.40E+04	11 U	11 U	11 U	11 U	13 U	15 UJ
2-Chlorotoluene	5.10E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
2-Hexanone	1.72E+04 (nn)	11 UJ	11 UJ	11 UJ	11 UJ	13 UJ	15 UJ
2-Methoxy-2-methyl-butane	--	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
4-Chlorotoluene	5.10E+02 (ww)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
4-Isopropyltoluene	--	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
4-Methyl-2-pentanone	1.70E+04	11 UJ	11 UJ	11 UJ	11 UJ	13 UJ	15 UJ
Acetone	6.00E+04	11 U	11 U	11 U	11 U	13 U	15 UJ
Benzene	1.60E+00	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Bromobenzene	1.20E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Bromochloromethane	1.75E+00 (qq)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Bromodichloromethane	2.60E+00	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Bromoform	2.40E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Bromomethane	1.50E+01	11 U	11 U	11 U	11 U	13 U	15 UJ
Carbon tetrachloride	5.80E-01	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Chlorobenzene	5.00E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Chloroethane	7.20E+00	5.3 UJ	5.3 UJ	5.3 UJ	5.5 UJ	6.4 UJ	7.4 UJ
Chloroform	5.80E-01	5.3 U	5.3 U	5.3 U	5.5 U	1.0 J	3.9 J
Chloromethane	1.70E+02	5.3 UJ	5.3 UJ	5.3 UJ	5.5 UJ	6.4 UJ	7.4 UJ
cis-1,2-Dichloroethene	1.60E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
cis-1,3-Dichloropropene	1.75E+00 (gg)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Dibromochloromethane	2.60E+00	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Dibromomethane	5.90E+02 (xx)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ

**LOU 41 and LOUs 65a to 65d Table 19 (continued)  
Soil Characterization Data - VOCs**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.		SA3	SA3	SA3	SA3	SA3	SA3
Sample ID		SA3-0.5	SA3-0.5D	SA3-10	SA3-20	SA3-30	SA3-40
Sample Depth (ft)		0.5	0.5	10	20	30	40
Sample Date		11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006
VOCs	MSSL <sup>2</sup> mg/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	3.40E+02	5.3 UJ	5.3 UJ	5.3 UJ	5.5 UJ	6.4 UJ	7.4 UJ
Ethyl t-butyl ether	7.90E+01 (kk)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Ethylbenzene	2.30E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Ethylene dibromide	7.00E-02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Hexachlorobutadiene	2.50E+01	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
isopropyl ether	--	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Isopropylbenzene	5.80E+02 (zz)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Methyl tert butyl ether	7.90E+01	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Methylene chloride	2.20E+01	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
N-Butylbenzene	2.40E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
N-Propylbenzene	2.40E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
sec-Butylbenzene	2.20E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Styrene	1.70E+03	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
t-Butyl alcohol	--	11 UJ	11 UJ	11 UJ	11 UJ	13 UJ	15 UJ
tert-Butylbenzene	3.90E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Tetrachloroethene	1.70E+00	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Toluene	5.20E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
trans-1,2-Dichloroethylene	2.00E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
trans-1,3-Dichloropropene	1.75E+00 (gg)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Trichloroethene	1.00E-01	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Trichlorofluoromethane	1.40E+03	5.3 UJ	5.3 UJ	5.3 UJ	5.5 UJ	6.4 UJ	7.4 UJ
Vinylchloride	8.60E-01	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ
Xylene (Total)	2.10E+02	11 U	11 U	11 U	11 U	13 U	15 UJ

**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 PRG table.



**LOU 41 and LOUs 65a to 65d Table 20  
Groundwater Characterization Data - VOCs**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>
Well ID		M-92
Sample ID		M-92
Sample Date		11/29/2006
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	14
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	0.76 J
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 UJ
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	30
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
isopropyl ether	--	5.0 U
Isopropylbenzene	6.58E+02 c,zz	5.0 U

**LOU 41 and LOUs 65a to 65d Table 20 (continued)  
Groundwater Characterization Data - VOCs**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A <sup>1</sup>
Well ID		M-92
Sample ID		M-92
Sample Date		11/29/2006
VOCs	MCL <sup>2</sup> ug/L	ug/L
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	5.0 U
trans-1,2-Dichloroethylene	1.00E+02	5.0 U
trans-1,3-Dichloropropene	--	5.0 U
Trichloroethene	5.00E+00	3.8 J
Trichlorofluoromethane	--	5.0 UJ
Vinylchloride	2.00E+00	5.0 UJ
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.

(c) Equal to the USEPA Region 9 Preliminary Remediation Goals (PRGs) for tapwater (October, 2004).

(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](http://ndep.nv.gov/bca/mtbe_doc.htm)].

**LOU 41 and LOUs 65a to 65d Table 21**  
**Soil Characterization Data - Long Asbestos Fibers in Respirable Soil Fraction**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

			<b>Long Amphibole Protocol Structures</b>	<b>Long Amphibole Protocol Structures</b>	<b>Long Chrysotile Protocol Structures</b>	<b>Long Chrysotile Protocol Structures</b>	<b>Sampling Program</b>
<b>No.</b>	<b>Sample ID</b>	<b>Sample Date</b>	s/gPM10	(structures/samples)	s/gPM10	(structures/samples)	
SA3	SA3	12/02/2006	<b>7970000</b>	<b>1</b>	<b>7970000</b>	<b>0</b>	Ph A <sup>1</sup>

**Notes:**

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

**LOU 41 and LOUs 65a to 65d Table 22  
Summary of Historical Groundwater Analytical Data**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

Sample Matrix: <b>Groundwater</b>						
Analysis by: Alpha Analytical, Inc., Sparks, Nevada						
WELL #	Date	TPH (mg/l) EPA 8015	BTEX (µg/l) by EPA Method 8240			
			Benzene	Toluene	Ethyl- benzene	Total Xylenes
M-92	5/6/1993	<0.5	< 1.0	< 1.0	< 1.0	< 1.0
M-93	5/6/1993	<0.5	< 1.0	< 1.0	< 1.0	< 1.0
<b>Detection Limit</b>		0.5	1	1	1	1
<b>MCL<sup>1</sup> ug/L</b>		--	5.00E+00	1.00E+03	7.00E+02	1.00E+04

**Notes:**

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

mg/l = milligrams per liter

µg/l = micrograms per liter

TPH = Total Petroleum Hydrocarbons

BTEX = Benzene, Toluene, Ethylbenzene, and Total Xylenes

< = not detected above the method detection limit.

**Source:** ENSR, 1997, Phase II ECA.

**LOU 41 and LOUs 65a to 65d Table 23  
Summary of Historical Soil Analytical Data**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
Tronox Facility - Henderson, Nevada

<b>Unit 1 Tenant Stains, Stained Soil</b>					
Sample Analyzed for:		TPH-8015M			
Sample Matrix:		Soil			
Sample Analysis by:		LAS Laboratories			
<b>SAMPLE #</b>	<b>Date</b>	<b>TPH Constituent</b>	<b>Result (mg/kg)</b>	<b>PQL (mg/kg)</b>	<b>Action Level (mg/kg)</b>
S9-1S	4/8/1997	Diesel*	73	29	1.00E+02 (vv)
S9-1S	4/8/1997	Gasoline*	<29	29	1.00E+02 (vv)
S9-1S	4/8/1997	Motor Oil	250	29	1.00E+02 (vv)
S9-1RE	4/10/1997	Diesel*	100	32	1.00E+02 (vv)

**Notes:**

1. U.S. EPA, Region 9, Preliminary Remediation Goals (PRGs) for industrial soil (October, 2004).

(vv) Nevada Administrative Code 445A.2272. Contamination of soil: Establishment of action levels.

NAC 445A.2272.1.b.

TPH = Total Petroleum Hydrocarbons

mg/kg = milligrams per kilogram

PQL = Practical Quantitation Limit

\* =Range Organics

< = not detected above the designated method reporting limit.

**Source:** ENSR, 1997, Phase II ECA.

**LOU 41 and LOUs 65a to 65d Table 24  
Notes for Phase A Data Tables**

Unit 1 Tenant Stains and Various Tenant Leaseholds  
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.
--	PRG not established