

**Summary of Available Data for LOU 35
Truck Emptying/Dumping Site
Tronox Facility – Henderson, Nevada**

- Name of Facility:** Truck Emptying/Dumping Site
- Goal of Closure:**
- Closure for future commercial/industrial use.
- Site Investigation Area:**
- Size: Approximately 480 feet by 320 feet east-west (3.5 acres) and about four feet deep [Ref. 4].
 - Location: South-central portion of the Site, along the western boundary and south of Beta Ditch.
 - Current Status/Features: This area is no longer active. The area is currently vacant and consists of three soil surfaced basins.
- Description:**
- The site was used periodically between 1969 and 1991 [Ref. 4].
 - It consists of three approximately equal sized basins. Southern basin is not connected to central basin. Central and northern basins are interconnected [Ref. 2].
 - All three basins are unlined [Ref. 2].
 - The nature of wastes deposited is unknown, but reportedly included “inorganic wastes” [Ref. 1].
 - Trucks entered the southern area and deposited substances such as soda ash and lime [Ref. 4].
 - A 1979 aerial photograph indicates solid waste or debris in the southern one-third of the area [Ref. 4].
 - In 1991, an inspection indicated white discoloration and several piles of white material in the southern basin [Ref. 4].
 - Outer edges of the basin were graded into berms to prevent entry in 1991 [Ref. 4].
 - No evidence of waste disposal was observed in 2007 [Ref. 3].
 - A segment of the Acid Drain System (LOU 60) runs along the southern and eastern boundary of LOU 35. The acid drain system was operated from 1942 to 1976 and carried unknown waste from off-site facilities to the west.

Process Waste Streams Associated with LOU 35	Known or Potential Constituents Associated with LOU 35
Soda ash and lime [Ref. 4]	<ul style="list-style-type: none"> • Wet chemistry analytes

**Summary of Available Data for LOU 35
Truck Emptying/Dumping Site
Tronox Facility – Henderson, Nevada**

Process Waste Streams Associated with LOU 35	Known or Potential Constituents Associated with LOU 35
Unknown liquid and solid wastes associated with the truck dumping/emptying activities.	<ul style="list-style-type: none"> • Metals • Hexavalent chromium • Perchlorate • Chlorate • Ammonia • Wet chemistry analytes • VOCs • SVOCs • TPH-DRO/ORO • Organochlorine pesticides • Radionuclides
Process Waste Stream Associated with the Acid Drain System (LOU 60)	
Unknown liquids and solid wastes from off-site properties to the west.	<ul style="list-style-type: none"> • Metals • Hexavalent chromium • Perchlorate • Chlorate • Ammonia • Wet chemistry analytes • VOCs • SVOCs • TPH-DRO/ORO • Organochlorine pesticides • Radionuclides

Overlapping Adjacent LOUs:

The following LOUs overlap or are adjacent to LOU 35:

Overlapping LOUs

- LOU 60 (Acid Drain System) – Overlaps the southern (upgradient) and eastern (crossgradient) boundary of LOU 35.

Adjacent LOUs

- LOU 64 (Koch Materials Company Site) – East (crossgradient) of LOU 35.

LOU 64 is crossgradient and is not considered to affect LOU 35; therefore, no additional chemical classes have been added to the analytical plan for LOU 35. For detailed information on LOUs listed above, please refer to the specific LOU data package.

**Summary of Available Data for LOU 35
Truck Emptying/Dumping Site
Tronox Facility – Henderson, Nevada**

**LOUs Potentially Affecting Soils
in LOU 35:**

- LOU 60 – Acid Drain System: The Acid Drain System carried effluent from onsite and offsite sources to the acid effluent neutralization plant. The offsite line entered LOU 35 from the west and carried unknown process waste streams. Waste carried by the system from off site facilities to the west could potentially impact LOU 35 in case of leakage from the system. Known or potential chemical classes associated with LOU 60 are consistent with those listed for LOU 35; therefore, no additional chemical classes have been added to the Phase B Analytical Plan for LOU 35.

For detailed information please refer to the LOU 60 data package.

**Known or Potential Chemical
Classes:**

- Metals
- Hexavalent chromium
- Perchlorate
- Wet chemistry analytes
- VOCs
- SVOCs
- TPH-DRO/ORO
- Organochlorine pesticides

**Known or Potential Release
Mechanisms:**

- Potential infiltration to underlying soil and groundwater.
- Potential surface runoff if basins overflowed.
- Trucks emptied contents onto unlined basin surface.

Results of Historical Sampling:

- Eight soil borings drilled in southern basin in 1997 to test for EPA metals, pH, TPH, and VOCs. Analytical results are summarized: LOU 35 Table 6 (see attached) [Ref. 1].

**Did Historical Samples Address
Potential Release?**

- Not completely. Historical borings were limited in depth and constituents tested, and were not representative of the full extent of LOU 35.

Summary of Phase A SAI:

Soil

- Phase A Investigation boring SA09 is located within LOU 35 and was specifically sampled to evaluate this LOU [Ref. 2].

**Summary of Available Data for LOU 35
Truck Emptying/Dumping Site
Tronox Facility – Henderson, Nevada**

Groundwater

- The closest groundwater sample (GWSA09) was collected from Phase A boring SA09 located within LOU 35 and was specifically sampled to evaluate this LOU [Ref. 2].

Chemical classes detected in Phase A soil boring SA09:

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

As a result of the Phase A data, the Phase B analytical plan for samples collected from LOU 35 will be expanded to include analyses for TPH-GRO, dioxins/furans, radionuclides, and asbestos.

- Analytical results for soil and groundwater from the Phase A sampling event are summarized: LOU 35 Tables 1 through 5 and 7 through 22 (see attached) [Ref. 2].

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

- Not completely. The Phase A sample location (SA09) was not representative of the full extent of LOU 35.

Is Phase B Investigation Recommended?

- Yes

Proposed Phase B Soil Investigation/Rationale:

- The Phase B investigation of LOU 35 consists of collecting soil samples from four (4) locations:
 - One (1) boring will be drilled in the northwest corner of the LOU;
 - One (1) boring will be drilled in the approximate center of the LOU;
 - One (1) boring will be drilled in the southwest quadrant of the LOU; and
 - One (1) boring will be drilled in the southeast quadrant of the LOU.

**Summary of Available Data for LOU 35
Truck Emptying/Dumping Site
Tronox Facility – Henderson, Nevada**

- All four borings along with the analytical program to evaluate soil samples from LOU 35 are listed on **Table A – Soil Sampling and Analytical Plan for LOU 35.**
- 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 35, based on the known process waste streams;
 - Three (3) sample locations (SA48, SA56 and SA166) are judgmental locations.
- Random sample locations:
 - Designed to assess whether unknown constituents associated with LOU 35 are present.
 - One (1) sample location (RSAO2) is a randomly-placed location.

Proposed Phase B Constituents List for Soils:

Both Judgmental and Random sample locations will be analyzed for the following constituents:

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

Proposed Phase B Groundwater Investigation/Rationale:

- The Phase B groundwater investigation of LOU 35 consists of collecting groundwater samples from one location to evaluate local groundwater conditions and as part of the Site-wide evaluation of constituent trends in groundwater.
 - One (1) well (M-123) within the boundaries of LOU 35 will be sampled.
 - The analytical program to evaluate groundwater samples associated with LOU 35 is listed on **Table B – Groundwater Sampling and Analytical Plan for LOU 35.**

**Summary of Available Data for LOU 35
Truck Emptying/Dumping Site
Tronox Facility – Henderson, Nevada**

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:

Soil gas samples will be collected from three (3) locations to evaluate area conditions for the presence of vapor-phase VOCs in the vadose zone.

- SG32 will be located adjacent to soil boring SA56 to investigate the former truck emptying/dumping area as a potential source and to assess VOCs from a groundwater source as indicated by the concentrations reported in Phase A Sample SA09 located within the LOU.
- SG61 will be located adjacent to soil boring RSAO2 to investigate the former truck emptying/dumping area as a potential source and to assess VOCs from a groundwater source as indicated by the concentrations reported in Phase A Sample SA09 located within the LOU.
- SG63 will be located adjacent to soil boring SA48 to investigate the former truck emptying and dumping area as a potential VOC source and to evaluate VOCs from a groundwater source as indicated by Phase A Sample SA09.
- SG83 will be located between well M-123 and Phase A boring SA09 to investigate the former truck emptying and dumping area as a potential VOC source and to evaluate VOCs from a groundwater source as indicated by Phase A Sample SA09.

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 Soil Gas Constituents List:

- VOCs (EPA TO-15)

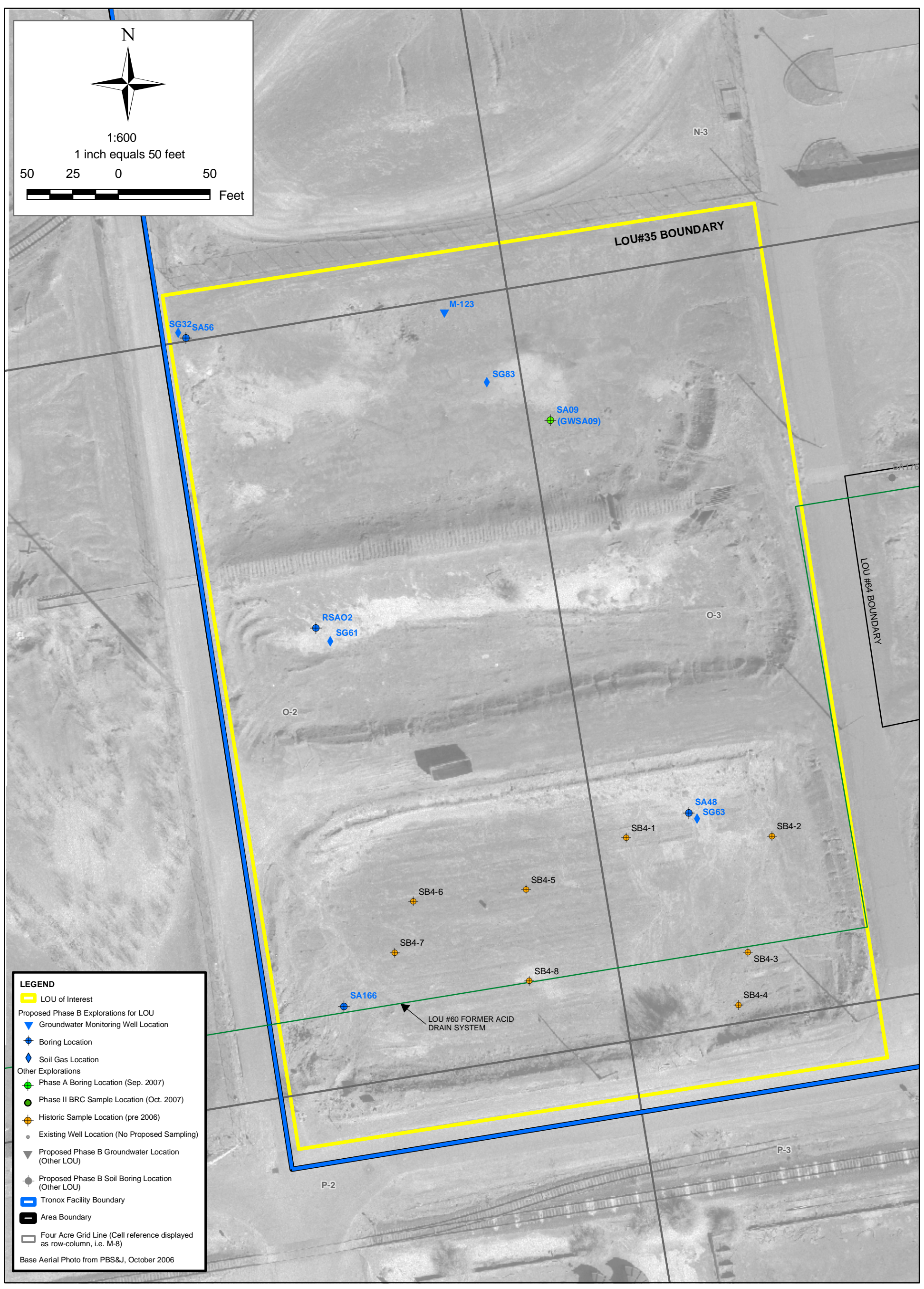
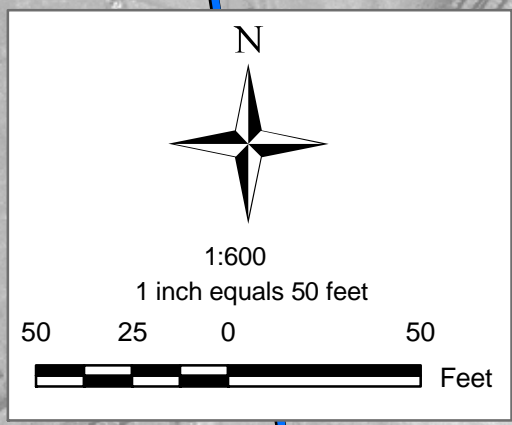
**Summary of Available Data for LOU 35
Truck Emptying/Dumping Site
Tronox Facility – Henderson, Nevada**

References:

1. ENSR, 2005, Conceptual Site Model, Kerr-McGee Facility, Henderson, Nevada, ENSR, Camarillo, California, 04020-023-130, February 2005 and August 2005.
2. ENSR 2006, Site observation, October 2006.
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).

**Summary of Available Data for LOU 35
Truck Emptying/Dumping Site
Tronox Facility – Henderson, Nevada**

LOU Map



LEGEND

- LOU of Interest
- 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)
- Tronox Facility Boundary
- Area Boundary
- Four Acre Grid Line (Cell reference displayed as row-column, i.e. M-8)

Base Aerial Photo from PBS&J, October 2006

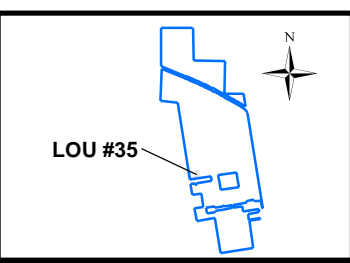
SHEET NUMBER: X	FIGURE NUMBER: 1
---------------------------	----------------------------

SAMPLE LOCATIONS FOR LOU #35 TRUCK EMPTYING/DUMPING SITE		
Phase B Source Area Investigation Tronox Facility Henderson, Nevada		
SCALE: AS SHOWN	DATE: 4/2/2008	PROJECT NUMBER: 04020-023-430

ENSR | AECOM

ENSR CORPORATION
 1220 AVENIDA ACASO
 CAMARILLO, CALIFORNIA 93012
 PHONE: (805) 388-3775
 FAX: (805) 388-3577
 WEB: [HTTP://WWW.ENSR.AECOM.COM](http://www.ensr.aecom.com)

DESIGNED BY: B. Ho
DRAWN BY: M. Scop
CHECKED BY: C. Schnell
APPROVED BY: B. Ho



**Summary of Available Data for LOU 35
Truck Emptying/Dumping Site
Tronox Facility – Henderson, Nevada**

Sampling and Analytical Plans for LOU 35:

- Table A – Soil Analytical Plan for LOU 35
- Table B – Groundwater Analytical Plan for LOU 35

Table A
Soil Sampling and Analytical Plan for LOU 35
Phase B Source Area Investigation Work Plan
Tronox Facility - Henderson, Nevada

Grid Location	LOU Number	Phase B Boring No.	Sample ID Number	Sample Depths (ft, bgs)	Perchlorate (EPA 314.0)	Metals (EPA 6020)	Hex Cr (EPA 7199)	TPH-DRO/ORO (EPA 8015B)	TPH-GRO (EPA 8015B)	VOCs ¹ (EPA 8260B)	Wet Chemistry ²	OCPs ³ (8081A)	SVOCs ⁴ (EPA 8270C)	Radio-nuclides ⁵	Dioxins/Furans ⁶	Formaldehyde Titrant (EPA 8315A)	Asbestos EPA/540/R-97/028	Location Description and Characterized Area Rationale
Borings are organized by grid location as shown on Plate A - Starting point is on the northwestern most grid in Area 1 (N-2) and ending with the southeastern most grid in Area I (O-3).																		
N-2	35	SA56	SA56-0.0	0.0													X	Boring located along western Site boundary to evaluate LOU 35 (former Truck Emptying/Dumping Site) and potential offsite VOC sources from the west. PCBs and TPH-G were detected in Phase A soil boring SA09.
N-2	35		SA56-0.5	0.5	X	X	X	X	X	X	X	X	X	X	X			
N-2	35		SA56-10	10	X	X	X	X	X	X	X	Hold	X	X				
N-2	35		SA56-20	20	X	X	X	X	X	X	X		X	X				
N-2	35		SA56-30	30	X	X	X	X	X	X	X		X	X				
N-2	35		SA56-40	40	X	X	X	X	X	X	X		X	X				
O-2	35	RSAO2	RSAO2-0.0	0.0													X	Boring located along western Site boundary to evaluate LOU 35 (former Truck Emptying/Dumping Site) and potential offsite VOC sources from the west. PCBs and TPH-GRO were detected in Phase A soil boring SA09.
O-2	35		RSAO2-0.5	0.5	X	X	X	X	X	X	X	X	X	X	X			
O-2	35		RSAO2-10	10	X	X	X	X	X	X	X	Hold	X	X				
O-2	35		RSAO2-20	20	X	X	X	X	X	X	X		X	X				
O-2	35		RSAO2-30	30	X	X	X	X	X	X	X		X	X				
O-2	35		RSAO2-40	40	X	X	X	X	X	X	X		X	X				
O-2	35	SA166	SA166-0.0	0.0													X	Boring located along west boundary of Site to evaluate LOU 35 (former Truck Emptying/Dumping Site), LOU 60 (Acid Drain System), and potential offsite VOC sources from the west. PCBs and TPH-GRO were detected in Phase A soil boring SA09.
O-2	35		SA166-0.5	0.5	X	X	X	X	X	X	X	X	X	X	X			
O-2	35		SA166-10	10	X	X	X	X	X	X	X	Hold	X	X				
O-2	35		SA166-20	20	X	X	X	X	X	X	X		X	X				
O-2	35		SA166-30	30	X	X	X	X	X	X	X		X	X				
O-2	35		SA166-40	40	X	X	X	X	X	X	X		X	X				
O-3	35	SA48	SA48-0.0	0.0													X	Boring located along western Site boundary to evaluate LOU 35 (former Truck Emptying/Dumping Site) and potential offsite VOC sources from the west. PCBs and TPH-GRO were detected in Phase A soil boring SA09.
O-3	35		SA48-0.5	0.5	X	X	X	X	X	X	X	X	X	X	X			
O-3	35		SA48-10	10	X	X	X	X	X	X	X	Hold	X	X				
O-3	35		SA48-20	20	X	X	X	X	X	X	X		X	X				
O-3	35		SA48-30	30	X	X	X	X	X	X	X		X	X				
O-3	35		SA48-37	37	X	X	X	X	X	X	X		X	X				
Number of Borings:		4	--	--														
Number of Samples:			--	--	20	20	20	20	20	20	20	4	20	20	4	0	4	

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. Samples for VOC analysis will be preserved in the field using sodium bisulfate (or DI water) and methanol preservatives per EPA Method 5035.
- 2. Includes wet chemistry parameters listed on Table 1 of the Phase B Source Area Work Plan.
- 3. Organochlorine Pesticides (includes analysis for hexachlorobenzene).
- 4. 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).
- 6. Dioxins/furans: 90% will be tested by immunoassay, 10% analyzed by HRGC/HRMS in the laboratory.

Table B
Groundwater Sampling and Analysis Plan for LOU 35
Phase B Source Area Investigation Area I Work Plan
Tronox Facility - Henderson, Nevada

Grid Location	Location Area	Monitoring Well No.	Screen Interval (ft bgs)	Well Sampled for Phase A? (y/n)	Perchlorate (EPA 314.0)	Hex Cr (EPA 7199)	Metals	VOCs1 (EPA 8260)	Wet Chemistry2	OCPs3 (EPA 8081A)	SVOCs4 (EPA 8270C)	Radio-nuclides5	Rationale
Wells are organized by grid location (O-2) as shown on Plate A													
O-2	1	M-123	TBD	new well	X	X	X	X	X	X	X	X	New monitoring well located to evaluate LOU 35; as an upgradient stepout for LOUs 38 and 54; to evaluate potential offsite sources to the west; and for general site coverage.
Number of Field Samples:					1	1	1	1	1	1	1	1	
Notes:													
X	Sample will be collected and analyzed.												
1	Volatile organic compounds- samples for VOC analysis will be preserved in the field using sodium bisulfate(or DI water) and methanol preservatives per EPA method 5035												
2	Includes wet chemistry parameters listed on table 1. of the Phase B Source Area Work Plan.												
3	Organochlorine pesticides(includes analysis for hexachlorobenzene).												
4	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)												
TBD	To Be Determined when well is constructed.												

**Summary of Available Data for LOU 35
Truck Emptying/Dumping Site
Tronox Facility – Henderson, Nevada**

Soil and Groundwater Characterization Data

**Summary of Available Data for LOU 35
Truck Emptying/Dumping Site
Tronox Facility – Henderson, Nevada**

LOU-specific analytes identified include:

- Wet chemistry analytes
- Dioxins/furans
- Metals
- Organochlorine pesticides
- Perchlorate
- Radionuclides
- SVOCs
- TPH
- VOCs
- Asbestos

The tables in **BOLD** below present Phase A data associated with the LOU-specific analytes listed above.

LOU 35 Table 1 – Soil Characterization Data – Wet Chemistry

LOU 35 Table 2 – Groundwater Characterization Data – Wet Chemistry

LOU 35 Table 3 – Soil and Groundwater Characterization Data – Dioxins and Dibenzofurans

LOU 35 Table 4 – Soil Characterization Data – Metals

LOU 35 Table 5 – Groundwater Characterization Data – Metals

LOU 35 Table 6 – Summary of Historical Soil Analytical Data

LOU 35 Table 7 – Soil Characterization Data – Organochlorine Pesticides (OCPs)

LOU 35 Table 8 – Groundwater Characterization Data – Organochlorine Pesticides (OCPs)

LOU 35 Table 9 – Soil Characterization Data – Organochlorine Pesticides (OPPs)

LOU 35 Table 10 – Groundwater Characterization Data – Organophosphorus Pesticides (OPPs)

LOU 35 Table 11 – Soil Characterization Data – PCBs

LOU 35 Table 12 – Groundwater Characterization Data – PCBs

LOU 35 Table 13 – Soil Characterization Data – Perchlorate

LOU 35 Table 14 – Groundwater Characterization Data – Perchlorate

LOU 35 Table 15 – Soil Characterization Data – Radionuclides

LOU 35 Table 16 – Groundwater Characterization Data – Radionuclides

LOU 35 Table 17 – Soil Characterization Data – SVOCs

LOU 35 Table 18 – Groundwater Characterization Data – SVOCs

LOU 35 Table 19 – Soil Characterization Data – TPH and Fuel Alcohols

LOU 35 Table 20 – Soil Characterization Data – VOCs

LOU 35 Table 21 – Groundwater Characterization Data – VOCs

LOU 35 Table 22 – Soil Characterization Data – Long Asbestos Fibers in Respirable Soil Fraction

Notes for all tables presented at the end of the tables.

LOU 35 Table 1
Soil Characterization Data - Wet Chemistry

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.		SA9	SA9	SA9	SA9	SA9	SA9	
Sample ID		SA9-0.5	SA9-10	SA9-10D	SA9-20	SA9-30	SA9-40	
Sample Depth (ft)		0.5	10	10	20	30	40	
Sample Date		11/06/2006	11/06/2006	11/06/2006	11/07/2006	11/07/2006	11/07/2006	
Wet Chemistry Parameter	PRG ² mg/kg							Units
Percent moisture	--	16.8	16.0	10.9	8.3	39.1	27.6	percent
Alkalinity (as CaCO ₃)	--	121	192	90.7	54.5 U	82.1 U	69.0 U	mg/kg
Bicarbonate	--	728	397	550	226	274	153	mg/kg
Total Alkalinity	--	849	589	640	226	340	153	mg/kg
Ammonia (as N)	--	1.3 J	6.0 U	5.6 U	R	R	R	mg/kg
Cyanide	1.20E+04	0.60 U	0.60 U	0.56 U	0.55 U	0.82 U	0.69 U	mg/kg
MBAS	--	4.9 U	4.3 U	4.3 U	4.5 U	6.4 U	5.9 U	mg/kg
pH (solid)	--	8.4	9.2	9.2	8.2	8.4	8.5	none
Bromide	--	3.0 U	3.0 U	2.8 U	2.7 U	4.1 U	3.5 U	mg/kg
Chlorate	--	6.0 UJ	6.0 UJ	5.6 UJ	5.5 UJ	4.0 J-	6.9 UJ	mg/kg
Chloride	--	45.9 J	3.4 J+	3.1 J+	2.2 U	283	1940	mg/kg
Nitrate (as N)	--	4.7 J	0.24 U	0.45 J+	0.27 J	1.3 J+	0.65 J+	mg/kg
Nitrite	--	R	0.18 J	0.30	0.15 J	0.33 U	0.28 U	mg/kg
ortho-Phosphate	--	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U	mg/kg
Sulfate	--	37.0	17.8	20.7	7640	1450	1050	mg/kg
Total Organic Carbon	--	3400	13100 J	7780 J	11200	10200	6300	mg/kg

Notes:

1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA, Region 9, Preliminary Remediation Goals (PRGs) for industrial soil (October, 2004).

LOU 35 Table 2
Groundwater Characterization Data - Wet Chemistry

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	
Well ID		SA9	
Sample ID		GWSA9	
Sample Date		11/07/2006	
Wet Chemistry Parameters	MCL ² ug/L		Units
Total Dissolved Solids	5.00E+05 j	12900	mg/L
Total Suspended Solids	--	648	mg/L
Alkalinity (as CaCO3)	--	5.0 U	mg/L
Bicarbonate	--	99.0	mg/L
Total Alkalinity	--	99.0	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)	--	7.6 J	none
Specific Conductance	--	15900	umhos/cm
Bromide	--	2.5 U	mg/L
Chlorate	--	5.0 U	mg/L
Chloride	2.50E+05	6390 J	mg/L
Nitrate (as N)	1.00E+04	3.3	mg/L
Nitrite	1.00E+03	0.020 U	mg/L
ortho-Phosphate	--	5.0 U	mg/L
Sulfate	2.50E+05 j	2520	mg/L
Total Organic Carbon	--	6.5 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 35 Table 3
Soil and Groundwater Characterization Data - Dioxins and Dibenzofurans

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

				Sampling Program	Ph A ¹
				Boring No.	SA9
				Sample ID	SA9-0.5
				Sample Depth (ft)	0.5
				Sample Date	11/06/2006
chemical_name:	Method	Unit	PRG ² mg/kg		
Dioxin 8290 SCREEN Total TEQ-ENSR Calculated (a) ng/kg		ng/kg	--		7.18
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	--		7.18
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	--		28.002
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	--		13.045
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	--		13.264
1,2,3,4,7,8,9-Heptachlorodibenzofuran	SW 846 8290	ng/kg	--		
1,2,3,4,7,8-Hexachlorodibenzofuran	8290 Screen	ng/kg	--		15.202
1,2,3,4,7,8-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--		
1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--		0.306
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	--		7.588
1,2,3,6,7,8-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--		
1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--		0.919
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	--		1.078
1,2,3,7,8,9-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--		
1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--		0.867
1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--		
1,2,3,7,8-Pentachlorodibenzofuran	8290 Screen	ng/kg	--		8.336
1,2,3,7,8-Pentachlorodibenzofuran	SW 846 8290	ng/kg	--		
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--		0.534
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--		
2,3,4,6,7,8-Hexachlorodibenzofuran	8290 Screen	ng/kg	--		4.070
2,3,4,6,7,8-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--		
2,3,4,7,8-Pentachlorodibenzofuran	8290 Screen	ng/kg	--		3.524
2,3,4,7,8-Pentachlorodibenzofuran	SW 846 8290	ng/kg	--		
2,3,7,8-Tetrachlorodibenzofuran	8290 Screen	ng/kg	--		14.619
2,3,7,8-Tetrachlorodibenzofuran	SW 846 8290	ng/kg	--		
2,3,7,8-Tetrachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	1.00E+04 h,v		0.265
2,3,7,8-Tetrachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	1.00E+04 h,v		
Octachlorodibenzofuran	8290 Screen	ng/kg	--		124.382
Octachlorodibenzofuran	SW 846 8290	ng/kg	--		
Octachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--		88.963
Octachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--		

LOU 35 Table 3 (continued)
Soil and Groundwater Characterization Data - Dioxins and Dibenzofurans

Tronox Facility - Henderson, Nevada
 Truck Emptying/Dumping Site

Sampling Program				Ph A ¹
Boring No.				SA9
Sample ID				SA9-0.5
Sample Depth (ft)				0.5
Sample Date				11/06/2006
chemical_name:	Method	Unit	PRG²	mg/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 9, Preliminary Remediation Goals (PRGs) for industrial soil (October, 2004).
 - (a) Calculated assuming 0 for non-detected congeners and 2006 toxic equivalency factors (TEFs).
 - (b) Calculated assuming 1/2 detection limit as proxy for non-detected congeners and 2006 TEFs.
 - (h) Dioxins and furans were expressed as 2,3,7,8- TCDD TEQ (toxic equivalents), calculated using the TEFs (Toxic Equivalency Factors) published by Van den Berg et al., 2006.
 - (v) USEPA, 1998. Approach for Addressing Dioxin in Soil at CERCLA and RCRA Sites. OSWER Directive 9200.4-26. April, 1998. Midpoint of the range of 0.005 to 0.02 mg/kg for commercial/industrial soils.

**LOU 35 Table 4
Soil Characterization Data - Metals**

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.		SA9	SA9	SA9	SA9	SA9	SA9	
Sample ID		SA9-0.5	SA9-10	SA9-10D	SA9-20	SA9-30	SA9-40	
Sample Depth (ft)		0.5	10	10	20	30	40	
Sample Date		11/06/2006	11/06/2006	11/06/2006	11/07/2006	11/07/2006	11/07/2006	
Metals	PRG ² mg/kg							Units
Aluminum	9.21E+05 (oo)	7060 J	6580 J	8090 J	8920 J	18800 J	14500 J	mg/kg
Antimony	4.09E+02	6.5 J-	0.14 J-	0.20 J-	0.19 J-	0.31 J-	0.23 J-	mg/kg
Arsenic	1.59E+00	17.0	3.0	4.3	18.0	24.7 J	17.1	mg/kg
Barium	6.66E+04	1200 J	200 J	212 J	146 J	72.0 J	265 J	mg/kg
Beryllium	1.94E+03	0.61	0.39	0.45	0.53	0.83	0.71 J	mg/kg
Boron	2.00E+05 (oo)	5.1 UJ	4.8 UJ	5.7 UJ	10.1 UJ	25.7 J-	18.0 J-	mg/kg
Cadmium	4.50E+02	0.26	0.074	0.079	0.064	0.14	0.13 J	mg/kg
Calcium	--	34600	17000	25300	27900 U	16200 U	17100 U	mg/kg
Chromium (Total)	4.48E+02	9.4 J-	6.4 J-	10.4 J-	12.3 J-	32.8 J-	27.7 J-	mg/kg
Chromium-hexavalent	6.40E+01	0.24 U	0.24 U	0.22 U	0.22 U	0.33 U	0.28 U	mg/kg
Cobalt	1.92E+03	8.9 J-	6.0 J-	6.3 J-	5.0 J-	6.6 J-	5.3 J-	mg/kg
Copper	4.09E+04	26.0 J	14.6 J	13.7 J	13.1 J	20.4 J	13.2 J	mg/kg
Iron	3.00E+05 (oo)	13000 J	11900 J	13200 J	12800 J	19800 J	13000 J	mg/kg
Lead	8.00E+02	305	7.7	7.3	7.6	10.2	9.9	mg/kg
Magnesium	--	9240 J-	7340 J-	9370 J-	18200 UJ	43800 J-	26000 J-	mg/kg
Manganese	1.95E+04	6660 J+	247 J+	314 J+	219 J+	357	284 J+	mg/kg
Molybdenum	5.11E+03	5.3	0.58 J	0.62	0.52 U	1.0 U	1.2 U	mg/kg
Nickel	2.04E+04	30.4 J	13.7 J	14.0 J	12.6 J	20.5 J-	12.0 J	mg/kg
Platinum	--	0.012 U	0.012 U	0.012 J	0.016 J	0.023 J	0.020 J	mg/kg
Potassium	--	1620 J	1350 J	1680 J	1900 UJ	3950 UJ	3530 UJ	mg/kg
Selenium	5.11E+03	0.13 U	0.13 U	0.12 U	0.12 U	0.18 U	0.15 U	mg/kg
Silver	5.11E+03	0.30 J	0.13 J	0.15 J	0.18 J	0.24 J	0.26 J	mg/kg
Sodium	--	587 J-	376 J-	440 J-	479 UJ	1050 UJ	2760 UJ	mg/kg
Strontium	6.12E+05 (oo)	250 J	207 J	251 J	651 J	173 UJ	121 UJ	mg/kg
Thallium	6.75E+01	2.9	0.092 J	0.11 J	0.11 J	0.28 J	0.25 J	mg/kg
Tin	6.12E+05 (oo)	0.50	0.59	0.54	0.55	0.80	0.77	mg/kg
Titanium	3.80E+06 (oo)	677 J	654 J	648 J	649 J	663 J	745 J	mg/kg
Tungsten	--	11.4 J-	0.29 J-	0.39 J-	0.35 J-	0.43 J-	0.60 J-	mg/kg
Uranium	2.04E+02	0.90	0.98	1.2	3.7	4.5	2.7	mg/kg
Vanadium	1.02E+03	49.2 J-	30.6 J-	35.9 J-	40.6 J-	50.4 J-	28.5 J-	mg/kg
Zinc	3.10E+05 (oo)	72.6 J-	27.7 J-	28.9 J-	27.0 J-	63.9 J-	35.5 J-	mg/kg
Mercury	3.10E+02 (t)	0.0080 U	0.0080 U	0.0075 U	0.0073 U	0.011 U	0.0092 U	mg/kg

- Notes:**
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
 2. U.S. EPA, Region 9, Preliminary Remediation Goals (PRGs) for industrial soil (October, 2004).
- (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 use
(t) Value for mercury and compounds.

**LOU 35 Table 5
Groundwater Characterization Data - Metals**

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	
Well ID:		SA9	
Sample ID		GWSA9	
Sample Date		11/07/2006	
Metals	MCL ² ug/L		Unit
Aluminum	5.00E+01 j	157 UJ	ug/L
Antimony	6.00E+00	0.93 J-	ug/L
Arsenic	1.00E+01	51.7	ug/L
Barium	2.00E+03	42.1	ug/L
Beryllium	4.00E+00	1.8 UJ	ug/L
Boron	7.30E+03 c	1650 J-	ug/L
Cadmium	5.00E+00	0.057 U	ug/L
Calcium	--	452000 J	ug/L
Chromium (Total)	1.00E+02	56.0 UJ	ug/L
Chromium-hexavalent	1.09E+02 c	0.20 UJ	ug/L
Cobalt	7.30E+02 c	6.3 UJ	ug/L
Copper	1.30E+03 p	6.8 J-	ug/L
Iron	3.00E+02 j	188 UJ	ug/L
Lead	1.50E+01 u	9.8 U	ug/L
Magnesium	1.50E+05 a	278000 J	ug/L
Manganese	5.00E+01 j	34.2 J+	ug/L
Molybdenum	1.82E+02 c	8.3	ug/L
Nickel	7.30E+02 c	18.4 J-	ug/L
Platinum	--	0.10 U	ug/L
Potassium	--	31100 J-	ug/L
Selenium	5.00E+01	1.4 J	ug/L
Silver	1.00E+02 j	0.20 U	ug/L
Sodium	--	78800 J-	ug/L
Strontium	2.19E+04 c	14100 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	7.1 J	ug/L
Tungsten	--	0.70 J-	ug/L
Uranium	3.00E+01	33.7	ug/L
Vanadium	3.65E+01 c	12.1 J-	ug/L
Zinc	5.00E+03 j	25.7 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. Groundwater grab sample taken from open borehole.
- (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 35 Table 6
Summary of Historical Soil Analytical Data**

Truck Emptying/Dumping Site
Tronex Facility - Henderson, Nevada

			Metals EPA Method 6010 (mg/kg)									
			As	Ba	Cd	Total Cr	Pb	Hg	Se	Ag		
		PRG ¹ mg/kg	1.59E+00	6.66E+04	4.50E+02	4.48E+02	8.00E+02	3.10E+02	5.11E+03	5.11E+03		
Boring Number	Sample Depth (ft bgs)	Date									pH ²	TPH ³ (mg/kg)
SB4-1-S	0-1	4/9/1997	11.4 *	1,010 *	<0.4	21.4	56.4	<0.1	<4	<0.4	9.52	<30
SB4-1-S-D	0-1-DUP	4/9/1997	24.5	1,450	<0.4	19.1	52.0	<0.1	<4	<0.4	ND	ND
SB4-1D	2-3	4/9/1997	5.3 *	246 *	<0.4	15.7	18.4	<0.1	<0.8	<0.4	10.3	<30
SB4-2-S	0-1	4/9/1997	10 *	558 *	<0.4	18.5	51.8	<0.1	<0.8	<0.4	8.32	<90
SB4-2-D	2-3	4/9/1997	3.5 *	179 *	<0.4	14.1	9.8	<0.1	<0.8	<0.4	8.63	<30
SB4-3-S	0-1	4/9/1997	17.4 *	1,360 *	<0.4	23	141	<0.1	<4.0	0.6	8.64	41 (X)
SB4-3-D	2-3	4/9/1997	3.9 *	161 *	<0.4	13	7.9	<0.1	<0.8	<0.4	9.14	<30
SB4-4-S	0-1	4/9/1997	5.3 *	175 *	<0.4	13.1	23	<0.1	<0.8	<0.4	8.92	37 (X)
SB4-4-D	2-3	4/9/1997	4.2	199 *	<0.3	20.7	9.4	<0.1	<0.7	<0.3	9.27	<30
SB4-4-D-D	2-3-DUP	4/9/1997	9.3	207 *	<0.4	24.2	29.2	<0.09	<0.8	<0.4	9.25	<30
SB4-5-S	0-1	4/9/1997	6.6	190 *	<0.3	20.1	15.3	0.1	<3	<0.3	8.14	<89
SB4-5-D	2-3	4/9/1997	4.4	196	<0.4	15.9	10.9	<0.1	<0.8	<0.4	8.24	<30
SB4-6-S	0-1	4/9/1997	4.3	200 *	<0.4	17.4	9.4	<0.1	<4	<0.4	9.65	<30
SB4-6-D	2-3	4/9/1997	5.3	202 *	<0.4	18.1	12.9	<0.09	<0.8	<0.4	9.07	<30
SB4-7-S	0-1	4/9/1997	16.6	329 *	<0.4	21.8	59.9	<0.1	<4	<0.4	9.94	<30
SB4-7-D	2-3	4/9/1997	4.9	245 *	<0.4	17.4	14.3	<0.1	<0.7	<0.4	8.67	<30
SB4-8-S	0-1	4/9/1997	14.6 *	360 *	<0.4	15.5	83	<0.1	<0.8	<0.4	9.18	79 (X)
SB4-8-D	2-3	4/9/1997	4.4	227 *	<0.4	14.3	11.5	<0.1	<0.8	<0.4	7.85	<89

			VOCs EPA Method 8240 (µg/kg)		
			Acetone	1, 1, 1-Trichloroethane (TCA)	All Others **
		PRG mg/kg	5.43E+04	6.90E+03 (mm)	--
Boring Number	Sample Depth (ft bgs)	Date			
SB4-1-S	0-1	4/9/1997	<10	<5	ND
SB4-1-S-D	0-1-DUP	4/9/1997	NA	NA	NA
SB4-1D	2-3	4/9/1997	<10	<5	ND
SB4-2-S	0-1	4/9/1997	<10	<5	ND
SB4-2-D	2-3	4/9/1997	11	<5	ND
SB4-3-S	0-1	4/9/1997	<10	<5	ND
SB4-3-D	2-3	4/9/1997	<10	<5	ND
SB4-4-S	0-1	4/9/1997	<10	<5	ND
SB4-4-D	2-3	4/9/1997	<9.8	<5	ND
SB4-4-D-D	2-3-DUP	4/9/1997	<10	<5	ND
SB4-5-S	0-1	4/9/1997	<10	<5	ND
SB4-5-D	2-3	4/9/1997	6.8 J	<5	ND
SB4-6-S	0-1	4/9/1997	<10	<5	ND
SB4-6-D	2-3	4/9/1997	7.0 J	<5	ND
SB4-7-S	0-1	4/9/1997	<9.8	<5	ND
SB4-7-D	2-3	4/9/1997	<10	<5	ND
SB4-8-S	0-1	4/9/1997	8.7 J	2.4 J	ND
SB4-8-D	2-3	4/9/1997	<10	<5	ND

**LOU 35 Table 6 (continued)
Summary of Historical Soil Analytical Data**

Tronox Facility - Henderson, Nevada
Truck Emptying/Dumping Site

Notes:

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

2. pH analysis used Method 9045

3. TPH analysis used EPA Method 8015M-d in mg/kg.

ft bgs = feet below ground surface

mg/kg = milligrams per kilogram

TPH = Total Petroleum Hydrocarbons

ND = Not determined

NA = constituent was Not Analyzed

VOCs = Volatile organic compounds

(mm) PRG is based on the soil saturation limit. Therefore, the risk-based value provided in the electronic backup to the PRG table was used.

SVOCs = Semi-volatile organic compounds

-S= shallow sample (referred to as -S in text) collected from 0 to 12 inches bgs

-D = deep sample (referred to as -D in text) collected from 24 to 36 inches bgs

-DUP = Duplicate sample

< = Not detected above the designated PQL.

J = Estimated value, constituent detected at a level less than the practical quantitation limit and greater than the method detection limit.

* = Relative percent difference (RPD) for duplicate analysis exceeded acceptable quality control limits.

(X) = TPH heavier than diesel present. The concentration result was based on the area of the peaks within the retention time window of diesel-

Source: ENSR, 1997, Phase II ECA.

As - Arsenic

Ba - Barium

Cd - Cadmium

Total Cr - Total Chromium

Pb - Lead

Hg - Mercury

Se - Selenium

Ag - Silver

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

<u>Analyte</u>	<u>PQL</u>	<u>Analyte</u>	<u>PQL</u>	<u>Analyte</u>	<u>PQL</u>
Chloromethane	5	Chloroform	5	1,1,2-Trichloroethane	5
Vinyl Chloride	5	2-Hexanone	10	Tetrachloroethene (PCE)	5
Bromomethane	5	1,1,1-Trichloroethane	5	Dibromochloromethane	5
Chloroethane	5	Carbon Tetrachloride	5	Chlorobenzene	5
Trichlorofluoromethane	5	1,2-Dichloroethane	5	Ethyl benzene	5
Acetone	10	Benzene	5	m, p-Xylene	5
1, 1-Dichloroethene	5	Trichloroethene (TCE)	5	o-Xylene	5
Carbon Disulfide	5	1,2-Dichloropropane	5	Bromoform	5
Methylene Chloride	5	Bromodichloromethane	5	1,1,2,2-Tetrachloroethane	5
trans-1,2-Dichloroethene	5	2-Chloroethylvinyl ether	20	1,3-Dichlorobenzene	5
Vinyl Acetate	10	4-Methyl-2-Pentanone	10	1,4-Dichlorobenzene	5
1,1-Dichloroethane	5	cis-1,3-Dichloropropene	5	1,2-Dichlorobenzene	5
2-Butanone	10	Toluene	5		
cis-1,2-Dichloroethene	5	trans-1,3-Dichloropropene	5		

LOU 35 Table 7
Soil Characterization Data - Organochlorine Pesticides (OCP)

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	
Boring No.		SA9	
Sample ID		SA9-0.5	
Sample Depth (ft)		0.5	
Sample Date		11/06/2006	
Organochlorine Pesticides	PRG ² mg/kg		Unit
4,4'-DDD	9.95E+00		0.027 J+ mg/kg
4,4'-DDE	7.02E+00		0.62 J+ mg/kg
4,4'-DDT	7.02E+00		0.14 J+ mg/kg
Aldrin	1.00E-01		0.0020 U mg/kg
Alpha-BHC	3.59E-01	(bbb)	0.0020 U mg/kg
Alpha-chlordane	6.47E+00	(y)	0.0020 U mg/kg
Beta-BHC	1.26E+00	(bbb)	1.3 J+ mg/kg
Delta-BHC	3.59E-01	(z)	0.0020 U mg/kg
Dieldrin	1.10E-01		0.0020 U mg/kg
Endosulfan I	3.70E+03	(aa)	0.0020 U mg/kg
Endosulfan II	3.70E+03	(aa)	0.0020 U mg/kg
Endosulfan Sulfate	3.70E+03	(aa)	0.0020 U mg/kg
Endrin	1.85E+02		0.0020 U mg/kg
Endrin Aldehyde	1.85E+02	(k)	0.017 J+ mg/kg
Endrin Ketone	1.85E+02	(k)	0.0020 U mg/kg
Gamma-BHC (Lindane)	1.74E+00	(bbb)	0.0020 U mg/kg
Gamma-Chlordane	6.47E+00	(y)	0.0020 U mg/kg
Heptachlor	3.83E-01		0.0020 U mg/kg
Heptachlor Epoxide	1.89E-01		0.0020 U mg/kg
Methoxychlor	3.08E+03		0.0040 U mg/kg
Tech-Chlordane	6.47E+00		0.012 U mg/kg
Toxaphene	1.57E+00		0.060 U mg/kg

Notes:

1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA, Region 9, Preliminary Remediation Goals (PRGs) for industrial soil (October, 2004).

**LOU 35 Table 8
Groundwater Characterization Data - Organochlorine Pesticides (OCP)**

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	
Well ID		SA9	
Sample ID		GWSA9	
Sample Date		11/07/2006	
Organochlorine Pesticides	MCL ² 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)	0.11 J	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)	0.10	ug/L
Heptachlor	4.00E-01	0.061	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.

LOU 35 Table 9
Soil Characterization Data - Organophosphorus Pesticides (OPPs)

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	
Boring No.		SA9	
Sample ID		SA9-0.5	
Sample Depth (ft)		0.5	
Sample Date		11/06/2006	
OPPs	PRG ² mg/kg		Unit
Azinphos-methyl	--	0.016 U	mg/kg
Bolstar	--	0.016 U	mg/kg
Chlorpyrifos	1.85E+03	0.024 U	mg/kg
Coumaphos	--	0.016 U	mg/kg
Demeton-O	2.46E+01 (cc)	0.047 UJ	mg/kg
Demeton-S	2.46E+01 (cc)	0.018 UJ	mg/kg
Diazinon	5.54E+02	0.026 UJ	mg/kg
Dichlorvos	5.94E+00	0.028 U	mg/kg
Dimethoate	1.23E+02	0.026 U	mg/kg
Disulfoton	2.46E+01	0.058 U	mg/kg
EPN	6.16E+00	0.016 UJ	mg/kg
Ethoprop	--	0.018 U	mg/kg
Ethyl Parathion	1.54E+02 (tt)	0.022 U	mg/kg
Famphur	--	0.016 U	mg/kg
Fensulfothion	--	0.016 U	mg/kg
Fenthion	1.50E+02 (ff)	0.040 U	mg/kg
Malathion	1.23E+04	0.018 U	mg/kg
Merphos	1.85E+01	0.036 U	mg/kg
Methyl parathion	1.54E+02	0.024 U	mg/kg
Mevinphos	--	0.018 U	mg/kg
Naled	1.23E+03	0.040 UJ	mg/kg
Phorate	1.23E+02	0.024 U	mg/kg
Ronnel	3.08E+04	0.022 UJ	mg/kg
Stirphos	--	0.018 U	mg/kg
Sulfotep	3.08E+02	0.024 U	mg/kg
Thionazin	--	0.022 U	mg/kg
Tokuthion	--	0.024 U	mg/kg
Trichloronate	--	0.024 U	mg/kg

Notes:

1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA, Region 9, Preliminary Remediation Goals (PRGs) for industrial soil (October, 2004).

LOU 35 Table 10
Groundwater Characterization Data - Organophosphorus Pesticides (OPPs)

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	
Well ID		SA9	
Sample ID		GWSA9	
Sample Date		11/07/2006	
OPPs	MCL ² 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 UJ	ug/L
Dichlorvos	2.32E-01	1.0 UJ	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 UJ	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 UJ	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 35 Table 11
Soil Characterization Data - PCBs**

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring ID		SA9	SA9	SA9	SA9	SA9	SA9	
Sample ID		SA9-0.5	SA9-10	SA9-10D	SA9-20	SA9-30	SA9-40	
Sample Depth (ft)		0.5	10	10	20	30	40	
Sample Date		11/06/2006	11/06/2006	11/06/2006	11/07/2006	11/07/2006	11/07/2006	
PCBs	PRG ² mg/kg							Unit
Aroclor-1016	1.00E+01 (i)	0.040 U	0.039 U	0.037 U	0.036 U	0.054 U	0.046 U	mg/kg
Aroclor-1221	1.00E+01 (i)	0.040 U	0.039 U	0.037 U	0.036 U	0.054 U	0.046 U	mg/kg
Aroclor-1232	1.00E+01 (i)	0.040 U	0.039 U	0.037 U	0.036 U	0.054 U	0.046 U	mg/kg
Aroclor-1242	1.00E+01 (i)	0.040 U	0.039 U	0.037 U	0.036 U	0.054 U	0.046 U	mg/kg
Aroclor-1248	1.00E+01 (i)	0.040 U	0.039 U	0.037 U	0.036 U	0.054 U	0.046 U	mg/kg
Aroclor-1254	1.00E+01 (i)	0.040 U	0.039 U	0.037 U	0.036 U	0.054 U	0.046 U	mg/kg
Aroclor-1260	1.00E+01 (i)	0.040 U	0.039 U	0.037 U	0.47 J+	0.054 U	0.046 U	mg/kg

Notes:

1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA, Region 9, Preliminary Remediation Goals (PRGs) for industrial soil (October, 2004).
(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 35 Table 12
Groundwater Characterization Data - PCBs**

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A	
Well ID		SA9	
Sample ID		GWSA9 ¹	
Sample Date		11/07/2006	
PCBs	MCL² 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 35 Table 13
Soil Characterization Data - Perchlorate

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

Boring ID	Sample ID	Sample Depth (ft)	Sample Date	Perchlorate ug/kg	PRG¹ mg/kg	Sampling Program
SA9	SA9-0.5	0.5	11/06/2006	35500	1.00E+02	Ph A ²
	SA9-10	10	11/06/2006	696 J	1.00E+02	Ph A
	SA9-10D	10	11/06/2006	408 J	1.00E+02	Ph A
	SA9-20	20	11/07/2006	169	1.00E+02	Ph A
	SA9-30	30	11/07/2006	2730	1.00E+02	Ph A
	SA9-40	40	11/07/2006	133	1.00E+02	Ph A

Notes:

1. U.S. EPA, Region 9, Preliminary Remediation Goals (PRGs) for industrial soil (October, 2004).
2. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.

**LOU 35 Table 14
Groundwater Characterization Data - Perchlorate**

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

Well ID Number	Sample ID	Sample Date	Perchlorate	Units	MCL ¹ ug/L	Sampling Program
SA9	GWSA9	11/07/2006	216	ug/L	1.80E+01 a,(m)	Ph A ²

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].

**LOU 35 Table 15
Soil Characterization Data - Radionuclides**

Truck Emptying/Dumping 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	
			PRG¹ mg/kg	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
SA9	SA9-0.5	0.5	11/06/2006	1.02 J	1.64							Ph A ²
	SA9-10	10	11/06/2006	1.12 J	1.76							Ph A
	SA9-10D	10	11/06/2006	1.14 J	1.61							Ph A
	SA9-20	20	11/07/2006	1.62 J	1.47							Ph A
	SA9-30	30	11/07/2006	2.33	0.892 J							Ph A
	SA9-40	40	11/07/2006	2.11	1.72							Ph A

Notes:

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

LOU 35 Table 16
Groundwater Characterization Data - Radionuclides

Truck Emptying/Dumping 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 ^{1,2}	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
SA9	GWSA9	11/07/2006	1.45 JB	1.26 JB							Ph A ³

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 35 Table 17
Soil Characterization Data - SVOCs**

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

Sampling Program			Ph A ¹	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.			SA9	SA9	SA9	SA9	SA9	SA9
Sample ID			SA9-0.5	SA9-10	SA9-10D	SA9-20	SA9-30	SA9-40
Sample Depth (ft)			0.5	10	10	20	30	40
Sample Date			11/06/2006	11/06/2006	11/06/2006	11/07/2006	11/07/2006	11/07/2006
SVOC	Analytical Method	PRG ² mg/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,4-Dioxane	non-SIM	1.57E+02	79 U	390 U	370 U	360 U	540 U	460 U
2-Methylnaphthalene	non-SIM	1.88E+02 (jj)	400 U	390 U	370 U	360 U	540 U	460 U
2-Methylnaphthalene	SIM	1.88E+02 (jj)	7.9 U					
Acenaphthene	non-SIM	2.92E+04	400 U	390 U	370 U	360 U	540 U	460 U
Acenaphthene	SIM	2.92E+04	7.9 U					
Acenaphthylene	non-SIM	2.92E+04 (pp)	400 U	390 U	370 U	360 U	540 U	460 U
Acenaphthylene	SIM	2.92E+04 (pp)	7.9 U					
Anthracene	non-SIM	2.40E+05 (oo)	400 U	390 U	370 U	360 U	540 U	460 U
Anthracene	SIM	2.40E+05 (oo)	7.9 U					
Benz(a)anthracene	non-SIM	2.11E+00	400 U	390 U	40 J	90 J	540 U	460 U
Benz(a)anthracene	SIM	2.11E+00	12					
Benzo(a)pyrene	non-SIM	2.11E-01	400 U	390 U	45 J	79 J	540 U	460 U
Benzo(a)pyrene	SIM	2.11E-01	13					
Benzo(b)fluoranthene	non-SIM	2.11E+00	400 U	390 U	77 J	110 J	540 U	460 U
Benzo(b)fluoranthene	SIM	2.11E+00	22					
Benzo(g,h,i)perylene	non-SIM	2.91E+04 (w)	400 U	390 U	48 J	69 J	540 U	460 U
Benzo(g,h,i)perylene	SIM	2.91E+04 (w)	23					
Benzo(k)fluoranthene	non-SIM	2.11E+01	400 U	390 U	49 J	110 J	540 U	460 U
Benzo(k)fluoranthene	SIM	2.11E+01	16					
bis(2-Ethylhexyl)phthalate	non-SIM	1.23E+02	400 U	390 U	66 J	51 J	540 U	460 U
Butyl benzyl phthalate	non-SIM	1.23E+05 (oo)	400 U	390 U	370 U	360 U	540 U	460 U
Chrysene	non-SIM	2.11E+02	400 U	390 U	71 J	130 J	540 U	460 U
Chrysene	SIM	2.11E+02	24					
Dibenz(a,h)anthracene	non-SIM	2.11E-01	400 U	390 U	370 U	360 U	540 U	460 U
Dibenz(a,h)anthracene	SIM	2.11E-01	7.9 U					
Diethyl phthalate	non-SIM	4.92E+05 (oo)	400 U	390 U	370 U	360 U	540 U	460 U
Dimethyl phthalate	non-SIM	6.16E+06 (oo)	400 U	390 U	370 U	360 U	540 U	460 U
Di-N-Butyl phthalate	non-SIM	6.16E+04	400 U	390 U	370 U	360 U	540 U	460 U
Di-N-Octyl phthalate	non-SIM	2.46E+04	400 U	390 U	370 U	360 U	540 U	460 U
Fluoranthene	non-SIM	2.20E+04	400 U	390 U	85 J	180 J	540 U	460 U
Fluoranthene	SIM	2.20E+04	17					
Fluorene	non-SIM	2.63E+04	400 U	390 U	370 U	360 U	540 U	460 U
Fluorene	SIM	2.63E+04	7.9 U					
Hexachlorobenzene	non-SIM	1.08E+00	400 U	390 U	370 U	360 U	540 U	460 U
Hexachlorobenzene	SIM	1.08E+00	31					
Nitrobenzene	non-SIM	1.03E+02	400 U	390 U	370 U	360 U	540 U	460 U
Octachlorostyrene	non-SIM	--	400 U	390 U	370 U	360 U	540 U	460 U
Phenanthrene	non-SIM	2.40E+05 (n)	400 U	390 U	370 U	59 J	540 U	460 U
Phenanthrene	SIM	2.40E+05 (n)	10					
Pyrene	non-SIM	2.91E+04	400 U	390 U	78 J	160 J	540 U	460 U
Pyrene	SIM	2.91E+04	23					
Pyridine	non-SIM	6.16E+02	1900 U	1900 U	1800 U	1700 U	2600 U	2200 U

Notes:

- ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
- U.S. EPA, Region 9, Preliminary Remediation Goals (PRGs) for industrial soil (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.
 - (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 used.
 - (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 35 Table 18
Groundwater Characterization Data - SVOCs

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

Sampling Program				Ph A ¹
Well No.				SA9
Sample ID				GWSA9
Sample Date				11/07/2006
SVOCs	Analytic Method	MCL ² 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		1.4 J
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		500 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 35 Table 18 (continued)
Groundwater Characterization Data - SVOCs**

Tronox Facility - Henderson, Nevada
Truck Emptying/Dumping Site

Sampling Program			Ph A ¹
Well No.			SA9
Sample ID			GWSA9
Sample Date			11/07/2006
SVOCs	Analytic Method	MCL ² 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:

- ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
- 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 35 Table 19
Soil Characterization Data - TPH and Fuel Alcohols

Truck Emptying/Dumping 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	
			PRG ¹ mg/kg	--	1.23E+06 oo	3.08E+05 oo	1.00E+02 w	1.00E+02 w	1.00E+02 w	
Boring No.	Sample ID.	Sample Depth (ft)	Sample Date							Sampling Program
SA9	SA9-0.5	0.5	11/06/2006	60 UJ	110 UJ	60 UJ	30 U	30 U	0.12 U	Ph A ²
	SA9-10	10	11/06/2006	60 UJ	114 UJ	60 UJ	30 U	30 U	0.12 U	Ph A
	SA9-10D	10	11/06/2006	56 UJ	100 UJ	56 UJ	28 U	28 U	0.11 U	Ph A
	SA9-20	20	11/07/2006	55 UJ	97 UJ	55 UJ	27 U	27 U	0.11 U	Ph A
	SA9-30	30	11/07/2006	82 UJ	142 UJ	82 UJ	41 U	41 U	0.16 U	Ph A
	SA9-40	40	11/07/2006	69 UJ	137 UJ	69 UJ	35 U	35 U	3.2	Ph A

Notes:

1. U.S. EPA, Region 9, Preliminary Remediation Goals (PRGs) for industrial soil (October, 2004).
 2. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
- (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 used.
- (w) Value for pyrene used as surrogate for benzo(g,h,i)perylene based on structural similarities.

**LOU 35 Table 20
Soil Characterization Data - VOCs**

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.		SA9	SA9	SA9	SA9	SA9	SA9
Sample ID		SA9-0.5	SA9-10	SA9-10D	SA9-20	SA9-30	SA9-40
Sample Depth (ft)		0.5	10	10	20	30	40
Sample Date		11/06/2006	11/06/2006	11/06/2006	11/07/2006	11/07/2006	11/07/2006
VOCs	PRG ² mg/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Naphthalene	1.88E+02	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,1,1,2-Tetrachloroethane	7.28E+00	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,1,1-Trichloroethane	6.90E+03 (mm)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,1,2,2-Tetrachloroethane	9.29E-01	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,1,2-Trichloroethane	1.61E+00	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,1-Dichloroethane	1.74E+03	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,1-Dichloroethene	4.13E+02	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,1-Dichloropropene	1.76E+00 (gg)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,2,3-Trichlorobenzene	2.16E+02 (hh)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,2,3-Trichloropropane	7.60E-02 (yy)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,2,4-Trichlorobenzene	2.16E+02	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,2,4-Trimethylbenzene	1.70E+02	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,2-Dibromo-3-chloropropane	2.02E+00	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,2-Dichlorobenzene	4.00E+03 (mm)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	180
1,2-Dichloroethane	6.03E-01	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,2-Dichloropropane	7.42E-01	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,3,5-Trimethylbenzene	6.97E+01	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,3-Dichlorobenzene	2.10E+03 (mm)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,3-Dichloropropane	3.61E+02	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
1,4-Dichlorobenzene	7.87E+00	0.77 J	6.0 U	5.6 U	5.5 U	8.2 U	760
2,2-Dichloropropane	7.42E-01 (ii)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
2-Butanone	1.13E+05	12 U	12 U	11 U	11 U	16 U	14 U
2-Chlorotoluene	5.60E+02	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
2-Hexanone	4.70E+04 (nn)	12 UJ	12 UJ	11 UJ	11 UJ	16 UJ	14 UJ
2-Methoxy-2-methyl-butane	--	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
4-Chlorotoluene	5.60E+02 (ww)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
4-Isopropyltoluene	--	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
4-Methyl-2-pentanone	4.70E+04	12 U	12 U	11 U	11 U	16 U	14 U
Acetone	5.43E+04	12 U	12 U	11 U	11 U	16 U	5.6 J

**LOU 35 Table 20 (continued)
Soil Characterization Data - VOCs**

Tronox Facility - Henderson, Nevada
Truck Emptying/Dumping Site

Sampling Program		Ph A ¹	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.		SA9	SA9	SA9	SA9	SA9	SA9
Sample ID		SA9-0.5	SA9-10	SA9-10D	SA9-20	SA9-30	SA9-40
Sample Depth (ft)		0.5	10	10	20	30	40
Sample Date		11/06/2006	11/06/2006	11/06/2006	11/07/2006	11/07/2006	11/07/2006
VOCs	PRG ² mg/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Benzene	1.41E+00	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	4100
Bromobenzene	9.22E+01	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Bromochloromethane	1.83E+00 (qq)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Bromodichloromethane	1.83E+00	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Bromoform	2.18E+02	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Bromomethane	1.31E+01	12 U	12 U	11 U	11 U	16 U	14 U
Carbon tetrachloride	5.49E-01	6.0 U	6.0 U	5.6 U	5.5 U	15	16
Chlorobenzene	5.30E+02	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	12000
Chloroethane	6.49E+00	6.0 UJ	6.0 UJ	5.6 UJ	5.5 UJ	8.2 UJ	6.9 UJ
Chloroform	4.70E-01	0.18 J	2.0 J	2.0 J	7.3	1900	5400
Chloromethane	1.56E+02	6.0 UJ	6.0 UJ	5.6 UJ	5.5 UJ	8.2 UJ	6.9 UJ
cis-1,2-Dichloroethene	1.46E+02	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
cis-1,3-Dichloropropene	1.76E+00 (gg)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Dibromochloromethane	2.55E+00	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Dibromomethane	2.34E+02 (xx)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Dichlorodifluoromethane	3.08E+02	6.0 UJ	6.0 UJ	5.6 UJ	5.5 UJ	8.2 UJ	6.9 UJ
Ethyl t-butyl ether	3.64E+01 (kk)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Ethylbenzene	7.40E+03 (mm)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Ethylene dibromide	7.30E-02	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Hexachlorobutadiene	2.21E+01	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
isopropyl ether	--	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Isopropylbenzene	2.00E+03 (zz)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Methyl tert butyl ether	3.64E+01	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Methylene chloride	2.05E+01	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	8.3
N-Butylbenzene	2.19E+03 (mm)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
N-Propylbenzene	2.19E+03 (mm)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
sec-Butylbenzene	1.63E+03 (mm)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Styrene	1.80E+04 (mm)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
t-Butyl alcohol	--	12 UJ	12 UJ	11 UJ	11 UJ	16 UJ	14 UJ

LOU 35 Table 20 (continued)
Soil Characterization Data - VOCs

Tronox Facility - Henderson, Nevada
Truck Emptying/Dumping Site

Sampling Program		Ph A ¹	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.		SA9	SA9	SA9	SA9	SA9	SA9
Sample ID		SA9-0.5	SA9-10	SA9-10D	SA9-20	SA9-30	SA9-40
Sample Depth (ft)		0.5	10	10	20	30	40
Sample Date		11/06/2006	11/06/2006	11/06/2006	11/07/2006	11/07/2006	11/07/2006
VOCs	PRG ² mg/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
tert-Butylbenzene	1.97E+03 (mm)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Tetrachloroethene	1.31E+00	6.0 U	6.0 U	5.6 U	5.5 U	0.90 J	8.1
Toluene	2.20E+03 (mm)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
trans-1,2-Dichloroethylene	--	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
trans-1,3-Dichloropropene	1.76E+00 (gg)	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Trichloroethene	1.15E-01	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Trichlorofluoromethane	1.28E+03 (mm)	6.0 UJ	6.0 UJ	5.6 UJ	5.5 UJ	1.2 J	14 J
Vinylchloride	7.46E-01	6.0 U	6.0 U	5.6 U	5.5 U	8.2 U	6.9 U
Xylene (Total)	9.00E+02 (mm)	12 U	12 U	11 U	11 U	16 U	14 U

Notes:

1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
 2. U.S. EPA, Region 9, Preliminary Remediation Goals (PRGs) for industrial soil (October, 2004).
- (mm) PRG is based on the soil saturation limit. Therefore, the risk-based value provided in the electronic backup to the PRG table was used.
- (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.
- (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 35 Table 21
Groundwater Characterization Data - VOCs**

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹
Well ID		SA10
Sample ID		GWSA9
Sample Date		11/07/2006
VOCs	MCL ² ug/L	ug/L
Naphthalene	6.20E+00 c	500 U
1,1,1,2-Tetrachloroethane	4.32E-01 c	500 U
1,1,1-Trichloroethane	2.00E+02	500 U
1,1,2,2-Tetrachloroethane	5.00E+00	500 U
1,1,2-Trichloroethane	5.00E+00	500 U
1,1-Dichloroethane	8.11E+02 c	500 U
1,1-Dichloroethene	7.00E+00	500 U
1,1-Dichloropropene	3.95E-01 c,gg	500 U
1,2,3-Trichlorobenzene	7.16E+00 c,hh	500 U
1,2,3-Trichloropropane	5.60E-03 c,yy	500 U
1,2,4-Trichlorobenzene	7.00E+01	500 U
1,2,4-Trimethylbenzene	1.23E+01	500 U
1,2-Dibromo-3-chloropropane	2.00E-01	500 U
1,2-Dichlorobenzene	6.00E+02	720
1,2-Dichloroethane	5.00E+00	500 U
1,2-Dichloropropane	5.00E+00	500 U
1,3,5-Trimethylbenzene	1.23E+01 c	500 U
1,3-Dichlorobenzene	1.83E+02 c	500 U
1,3-Dichloropropane	1.22E+02 c	500 U
1,4-Dichlorobenzene	7.50E+01	1600
2,2-Dichloropropane	1.65E-01 c,ii	500 U
2-Butanone	6.97E+03 c	1000 U
2-Chlorotoluene	1.22E+02 c	500 U
2-Hexanone	2.00E+03 c,nn	1000 UJ
2-Methoxy-2-methyl-butane	--	500 U
4-Chlorotoluene	1.22E+02 c,ww	500 U
4-Isopropyltoluene	--	500 U
4-Methyl-2-pentanone	1.99E+03 c	1000 U
Acetone	5.48E+03 c	1000 U
Benzene	5.00E+00	19000
Bromobenzene	2.03E+01 c	500 U
Bromochloromethane	1.81E-01 c,qq	500 U
Bromodichloromethane	8.00E+01 r	500 U
Bromoform	8.00E+01 r	500 U
Bromomethane	8.66E+00 c	1000 U
Carbon tetrachloride	5.00E+00	560
Chlorobenzene	1.00E+02 c,o	44000
Chloroethane	4.64E+00	500 UJ
Chloroform	8.00E+01 r	20000
Chloromethane	1.58E+02 c	500 UJ
cis-1,2-Dichloroethene	7.00E+01	500 U
cis-1,3-Dichloropropene	3.95E-01 c,gg	500 U

LOU 35 Table 21 (continued)
Groundwater Characterization Data - VOCs

Tronox Facility - Henderson, Nevada
Truck Emptying/Dumping Site

Sampling Program		Ph A ¹
Well ID		SA10
Sample ID		GWSA9
Sample Date		11/07/2006
VOCs	MCL ² ug/L	ug/L
Dibromochloromethane	8.00E+01 r	500 U
Dibromomethane	6.08E+01 c,xx	500 U
Dichlorodifluoromethane	3.95E+02 c	500 UJ
Ethyl t-butyl ether	1.10E+01 c,kk	500 U
Ethylbenzene	7.00E+02	500 U
Ethylene dibromide	--	500 U
Hexachlorobutadiene	8.62E-01 c	500 U
isopropyl ether	--	500 U
Isopropylbenzene	6.58E+02 c,zz	500 U
Methyl tert butyl ether	2.00E+01 a,uu	500 U
Methylene chloride	5.00E+00	500 U
N-Butylbenzene	2.43E+02 c	500 U
N-Propylbenzene	2.43E+02 c	500 U
sec-Butylbenzene	2.43E+02 c	500 U
Styrene	1.00E+02	500 U
t-Butyl alcohol	--	1000 UJ
tert-Butylbenzene	2.43E+02 c	500 U
Tetrachloroethene	5.00E+00	44 J
Toluene	1.00E+03	500 U
trans-1,2-Dichloroethylene	1.00E+02	500 U
trans-1,3-Dichloropropene	--	500 U
Trichloroethene	5.00E+00	500 U
Trichlorofluoromethane	--	220 J
Vinylchloride	2.00E+00	500 U
Xylene (Total)	1.00E+04	1000 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.

LOU 35 Table 22
Soil Characterization Data - Long Asbestos Fibers in Respirable Soil Fraction

Truck Emptying/Dumping Site
Tronox Facility - Henderson, Nevada

			Long Amphibole Protocol Structures	Long Amphibole Protocol Structures (structures/samples)	Long Chrysotile Protocol Structures	Long Chrysotile Protocol Structures (structures/samples)	Sampling Program
No.	Sample ID	Sample Date	s/gPM10		s/gPM10		
SA9	SA9	12/02/2006	2990000	1	5970000	2	Ph A ¹

Notes:

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

Notes for Phase A Data Tables
Tronox Facility, Henderson, Nevada

Blank	Not analyzed.
Bold	Bold values are constituents detected above the laboratory sample quantitation limit.
Gray	Grayed out values are non-detected values with the laboratory sample quantitation limits shown.
Truck Emptying/Dumping Site	
B	The result may be a false positive totally attributable to blank contamination.
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.
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