

**Summary of Available Data for LOU 2 –
Open Area South of (Former) Trade Effluent Settling Ponds
Tronox Facility – Henderson, Nevada**

Name of Facility: Open Area South of “(Former) Trade Effluent (TE) Settling Ponds”

Goal of Closure:

- Closure for commercial/industrial future use.

Site Investigation Area:

- Size: Irregularly shaped, approximately 6.4-acres onsite.
- Location: Open area along western site boundary, southwest of Pond GW-11.
- Current Status/Features: LOU 2 is no longer active. Currently this area is vacant and consists of paved and unpaved areas, a north-south trending road, and a railroad spur.

Description:

- LOU 2 is the open area located south (upgradient) of the former TE settling ponds (LOU 1) [Ref. 1, 2 and 6].
- This LOU is a poorly defined historic disposal area shown on 1943 and 1950 aerial photographs and operated by the U.S. Government and BMI in association with the former TE settling ponds (LOU 1) [Ref. 1].
- In 1943, the area encompassed by this LOU was observed southwest of LOU 1 [Ref. 6].

Process Waste Stream Associated with LOU 2	Known or Potential Constituents Associated with LOU 2
U.S. Government Discharges.	<ul style="list-style-type: none"> • Specific chemical composition unknown but included acidic and caustic process liquors [Ref. 1 and 6].
Unknown solids / wastes 1945 to 1979.	<ul style="list-style-type: none"> • Potential solids from waste neutralization processes [Ref. 5].
Waste streams from chlorination process in the Unit buildings (“metal units”).	<ul style="list-style-type: none"> • Hydrochloric acid liquid wastes • Liquid wastes containing metals [Ref. 5]
Chlorine and hydrochloric acid from absorber towers.	<ul style="list-style-type: none"> • Waste caustic solution presumed to be sodium hydroxide [Ref. 5].

Overlapping or Adjacent LOUs: The following LOUs overlap or are adjacent to LOU 2:

Overlapping LOUs

- None

Adjacent LOUs

- LOU 1 (TE settling ponds) – Located north (downgradient) of LOU 2.

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- LOU 5 (Beta Ditch) – Located south (upgradient) of LOU 2.
- LOU 60 (Acid Drain System) – Located along the northern (downgradient) boundary of LOU 2.

Known or potential chemical classes associated with LOU 1, LOU 5, and LOU 60 are consistent with those listed for LOU 2; therefore, no additional chemical classes related to these LOUs have been added to the analytical plan for LOU 2.

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

LOUs Potentially Affecting Soils in LOU 2:

- LOU 5: The Beta Ditch was used to convey process waste streams from the southern portion of the Site as well as from the adjacent property to the west. Effluent in the Beta Ditch flowed from the west continuing off-site to the east. Potential surface releases from LOU 5 may have occurred that affected LOU 2; however, no releases have been documented. For detailed information on this LOU, please refer to the specific LOU data package.
- Known or potential chemical classes associated with LOU 5 are included as part of the Phase B analyte list proposed for the random boring grid locations within or near LOU 2.
- LOU 60: The portion of the Acid Drain System along the northern boundary of LOU 2 conveyed effluent to the TE settling ponds via an aboveground flume from the acid effluent neutralization plant.
- Known or potential chemical classes associated with LOU 60 are consistent with those listed for LOU 2; therefore, no additional chemical classes have been added to the Phase B Analytical Plan for LOU 2.

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

Known or Potential Chemical Classes:

- Metals
- Hexavalent chromium
- Wet chemistry analytes
- VOCs
- SVOCs
- TPH
- Organochlorine pesticides

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**Known or Potential Release
Mechanisms:**

- No known releases documented for LOU 2.
- Potential infiltration to subsurface soils and groundwater.
- Possible impacts to surrounding soils from surface releases.

Results of Historical Sampling:

- Two soil borings (SB1-1 and SB1-2) were drilled in or near this LOU (see attached figure). Analytical results are summarized: LOU 2 Table 23 (see attached) [Ref 2].
- Upgradient and downgradient monitoring wells (M-5A and TR-2) are tested for total chromium, perchlorate, and total dissolved solids as part of periodic or routine groundwater monitoring programs [Ref 4]. Analytical results are summarized: LOU 2 Tables 6 and 26 [Ref 4].

**Did Historical Samples Address
Potential Release?**

- Not completely. Historical borings were limited in depth and the constituents tested, and were not representative of the full extent of LOU 2.

Summary of Phase A SAI:

Soil

- Boring SA18 is located within LOU 2 and was specifically sampled to evaluate this LOU [Ref. 3].

Groundwater

- Well M-5A is approximately 40 feet to the north (downgradient) and was specifically sampled to evaluate this LOU [Ref. 3].

Chemical classes detected in Phase A soil boring SA15 and SA18:

- Metals
- Perchlorate
- Wet chemistry analytes
- VOCs
- SVOCs (SA15 only)
- Organochlorine pesticides
- Dioxins/furans
- Radionuclides
- Asbestos

As a result of the Phase A data, the Phase B analytical plan for samples collected from LOU 1 will be expanded to include analyses for perchlorate, dioxins/furans, radionuclides, and asbestos.

- Analytical results for soil and groundwater from the Phase A sampling event are summarized: LOU 2 Tables 1 through 5 and Tables 23-25 (see attached) [Ref. 3].

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- | | |
|--|---|
| Are Phase A Sample Locations in “Worst Case” Areas? | <ul style="list-style-type: none"> • In part, yes; however, given the extent of LOU 2, additional sampling is needed to more fully evaluate potential impacts (if any) associated with this LOU. |
| Is Phase B Investigation Recommended? | <ul style="list-style-type: none"> • Yes |
| Proposed Phase B Soil Investigation/Rationale: | <ul style="list-style-type: none"> • The Phase B investigation of LOU 2 consists of collecting soil samples from 14 locations. <ul style="list-style-type: none"> – Seven (7) soil borings will be drilled within the boundaries of LOU 2: – Two (2) soil boring locations will be drilled south (upgradient) of LOU 2. – Two (2) soil boring locations will be drilled north (downgradient) of LOU 2. – Three (3) soil boring locations will be drilled east or west (cross-gradient) of LOU 2. – All 14 borings along with the analytical program to evaluate soil samples from LOU 2 are listed on Table A – Soil Sampling and Analytical Plan for LOU 2. • Soil sample locations consist of both judgmental and randomly-placed locations. • Judgmental sample locations: <ul style="list-style-type: none"> – Are designed to evaluate soil for known or potential chemical classes associated with LOU 2, based on the known process waste streams. – Six (6) of the 14 sample locations are judgmental locations and include soil borings SA69, SA82, SA88, SA100, SA134 and SA152. • Random sample grid locations: <ul style="list-style-type: none"> – Are designed to assess whether unknown constituents associated with LOU 2 are present. – Eight (8) of the 14 sample locations are randomly-placed locations and include soil borings RSAK2, RSAK4, RSAL2, RSAL3, RSAL4, RSAM2, RSAM3, and RSAM4. |
| Proposed Phase B Constituents List for Soils: | <p>Both Judgmental and Random sample locations will be analyzed for the following constituents:</p> <ul style="list-style-type: none"> • Metals (Phase A list) • Hexavalent chromium • Perchlorate • Wet chemistry analytes • VOCs |

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- SVOCs
- TPH DRO/ORO
- Organochlorine pesticides
- Dioxins/furans
- Radionuclides
- Asbestos

Proposed Phase B Groundwater Investigation/Rationale

The Phase B groundwater investigation of LOU 2 consists of collecting groundwater samples from seven locations to evaluate local groundwater conditions and as part of site-wide evaluation of constituent trends in groundwater.

- One (1) well (M-126) within the boundaries of LOU 2 will be sampled.
- Three (3) wells south (upgradient) of LOU 2 will be sampled. These wells are: TR-4, M-125, and M-127.
- Three (3) wells north (downgradient or cross-gradient) of LOU 2 and will be sampled. These wells are: TR-2, M-5A and MW-16.
- All seven wells along with the analytical program to evaluate groundwater samples associated with LOU 2 are listed on **Table B – Groundwater Sampling and Analytical Plan for LOU 2.**

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

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Proposed Phase B Soil Gas Investigation/Rationale:

Three soil gas samples will be collected to evaluate area conditions for the presence of vapor-phase VOCs in the vadose zone.

- SG53 will be located adjacent to proposed soil boring RSAK2 to provide areal coverage in the site-wide investigation of VOCs from a groundwater source and assess possible offsite sources from the west.
- SG54 will be located to evaluate VOCs (6900 ug/L Chloroform, 88J ug/L Benzene) from a groundwater source as a companion for Phase B well M-126.
- SG56 will be located adjacent to proposed soil boring RSAM3 to evaluate VOCs from a groundwater source and serve as an eastward step out for borings located on the west property boundary to assess offsite sources of VOCs.

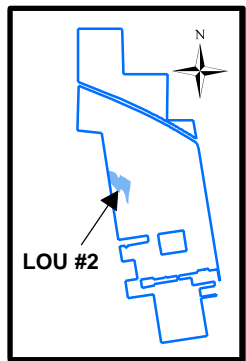
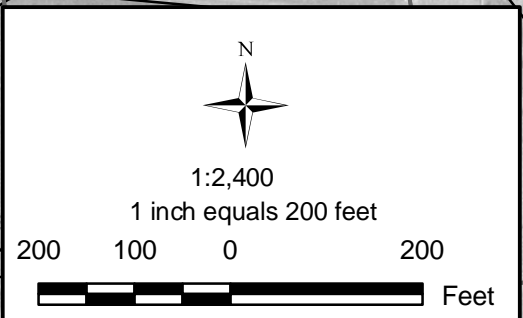
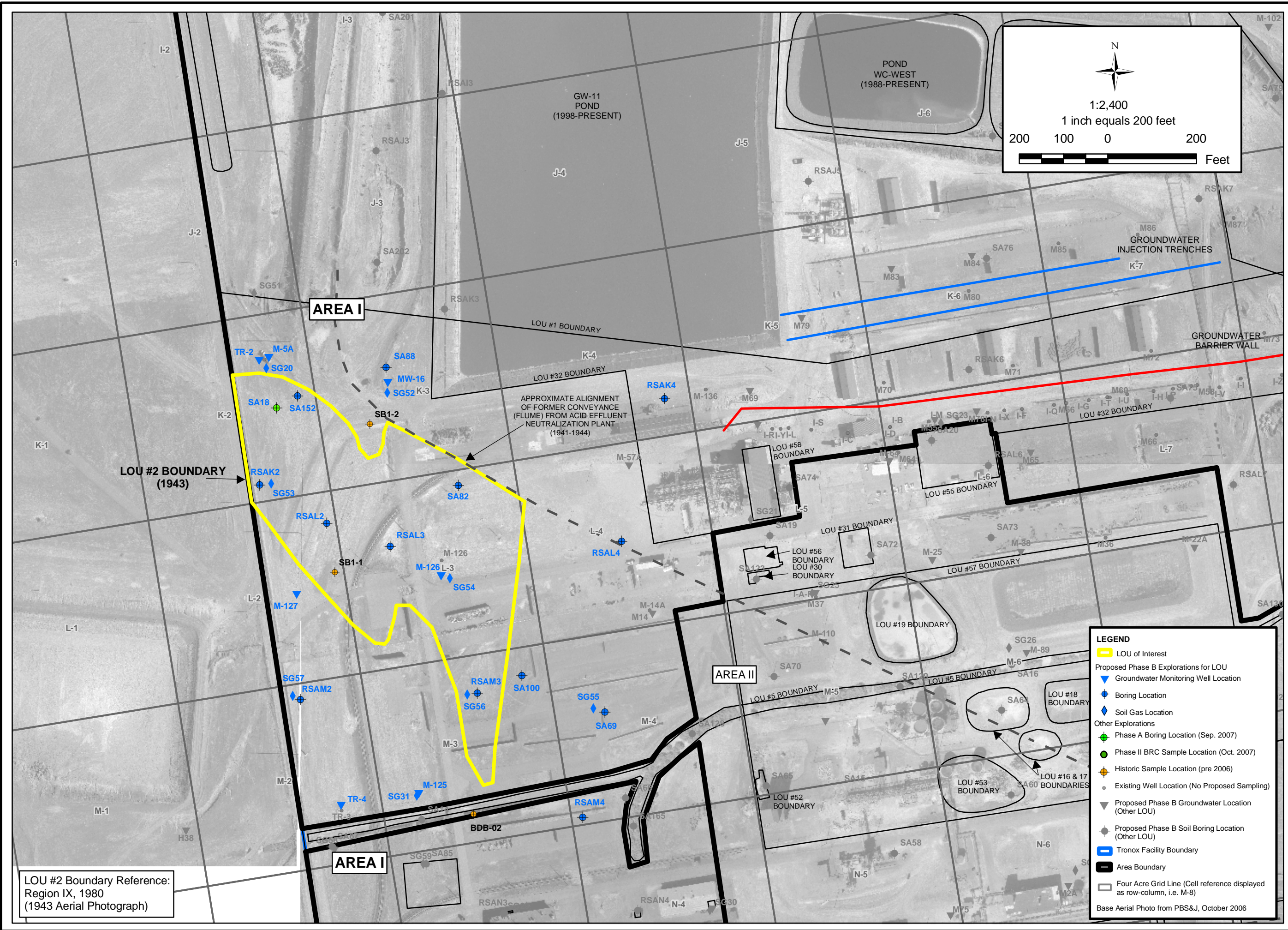
Details of the soil gas sampling program are contained in the NDEP-approved (March 26, 2008) Soil Gas Survey Work Plan, Tronox LLC, Henderson, Nevada, dated March 20, 2008.

References:

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

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LOU Map



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**SAMPLE LOCATIONS FOR LOU #2
 OPEN AREA SOUTH OF THE TRADE
 EFFLUENT SETTLING PONDS**

Phase B Source Area Investigation
 Tronox Facility
 Henderson, Nevada

SCALE: AS SHOWN DATE: 4/3/2008 PROJECT NUMBER: 04020-023-430

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	

LOU #2 Boundary Reference:
 Region IX, 1980
 (1943 Aerial Photograph)

FIGURE NUMBER:
1

SHEET NUMBER:
X

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Sampling and Analytical Plans for LOU 2:

- Table A – Soil Sampling and Analytical Plan for LOU 2
- Table B – Groundwater Sampling and Analytical Plan for LOU 2 -

Table A
Soil Sampling and Analytical Plan for LOU 2
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.	Formal-dehyde 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 (K-2) and ending with the southeastern-most grid in Area I (M-3).																		
K-2	2	SA152	SA152-0.0	0.0														Boring located to evaluate LOU 2 (open area south of Trade Effluent Settling Ponds) as a step-out boring to SA18 as requested by NDEP in comments to Phase A report.
K-2	2		SA152-0.5	0.5	X	X	X	X		X	X	X	X	X				
K-2	2		SA152-10	10	X	X	X	X		X	X	Hold	X	X				
K-2	2	RSAK2	RSAK2-0.0	0.0														Boring located to evaluate LOU 2 (open area south of Trade Effluent Settling Ponds) and to evaluate potential offsite VOC source to the west.
K-2	2		RSAK2-0.5	0.5	X	X	X	X		X	X	X	X	X				
K-2	2		RSAK2-10	10	X	X	X	X		X	X	Hold	X	X				
K-2	2		RSAK2-20	20	X	X	X	X		X	X		X	X				
K-2	2		RSAK3-30	30	X	X	X	X		X	X		X	X				
K-3	1, 2, 32	SA88	SA88-0.0	0.0														Boring located north (downgradient) of LOU 2 (open area south of Trade Effluent Settling Ponds) and south (upgradient) of LOU 1 (former Trade Effluent Settling Pond area) and for general site coverage.
K-3	1, 2, 32		SA88-0.5	0.5	X	X	X	X		X	X	X	X	X				
K-3	1, 2, 32		SA88-10	10	X	X	X	X		X	X	Hold	X	X				
K-3	1, 2, 32		SA88-20	20	X	X	X	X		X	X		X	X				
K-3	1, 2, 32		SA88-30	30	X	X	X	X		X	X		X	X				
K-3	2, 32, 60	SA134	SA134-0.0	0.0														Boring located to evaluate LOU 2 (Open Area South of Trade Effluent Settling Ponds).
K-3	2, 32, 60		SA134-0.5	0.5	X	X	X	X		X	X	X	X	X				
K-3	2, 32, 60		SA134-10	10	X	X	X	X		X	X	Hold	X	X				
K-3	2, 32, 60		SA134-20	20	X	X	X	X		X	X		X	X				
K-3	2, 32, 60		SA134030	30	X	X	X	X		X	X		X	X				
K-4	1, 2, 32	RSAK4	RSAK4-0.0	0.0														Boring located to evaluate LOU 32 and as an upgradient boring to LOU 1 (former Trade Effluent Settling).
K-4	1, 2, 32		RSAK4-0.5	0.5	X	X	X	X		X	X	X	X	X				
K-4	1, 2, 32		RSAK4-10	10	X	X	X	X		X	X	Hold	X	X				
K-4	1, 2, 32		RSAK4-20	20	X	X	X	X		X	X		X	X				
K-4	1, 2, 32		RSAK4-30	30	X	X	X	X		X	X		X	X				
L-2	2	RSAL2	RSAL2-0.0	0.0														Boring located to evaluate LOU 2 (Open Area South of Trade Effluent Settling Ponds).
L-2	2		RSAL2-0.5	0.5	X	X	X	X		X	X	X	X	X				
L-2	2		RSAL2-10	10	X	X	X	X		X	X	Hold	X	X				
L-2	2		RSAL2-20	20	X	X	X	X		X	X		X	X				
L-2	2		RSAL2-30	30	X	X	X	X		X	X		X	X				
L-3	2, 32, 60	SA82	SA82-0.0	0.0														Boring located to evaluate LOU 2 (open area south of Trade Effluent Disposal Ponds) and to evaluate pipeline route for LOU 60 (Acid Drain System).
L-3	2, 32, 60		SA82-0.5	0.5	X	X	X	X		X	X	X	X	X				
L-3	2, 32, 60		SA82-10	10	X	X	X	X		X	X	Hold	X	X				
L-3	2, 32, 60		SA82-20	20	X	X	X	X		X	X		X	X				
L-3	2, 32, 60		SA82-30	30	X	X	X	X		X	X		X	X				
L-3	2	RSAL3	RSAL3-0.0	0.0														Boring located to evaluate LOU 2 (open area south of Trade Effluent Disposal Ponds).
L-3	2		RSAL3-0.5	0.5	X	X	X	X		X	X	X	X	X				
L-3	2		RSAL3-10	10	X	X	X	X		X	X	Hold	X	X				
L-3	2		RSAL3-20	20	X	X	X	X		X	X		X	X				
L-3	2		RSAL3-30	30	X	X	X	X		X	X		X	X				
L-4	2, 32	RSAL4	RSAL4-0.0	0.0														Boring located to evaluate former Acid Drain System (LOU 60) pipeline/flume route and as a step-out to LOU 32 (Chromium and Perchlorate Groundwater Remediation Unit).
L-4	2, 32		RSAL4-0.5	0.5	X	X	X	X		X	X	X	X	X				
L-4	2, 32		RSAL4-10	10	X	X	X	X		X	X	Hold	X	X				
L-4	2, 32		RSAL4-20	20	X	X	X	X		X	X		X	X				
L-4	2, 32		RSAL4-25	25	X	X	X	X		X	X		X	X				
M-2	2	RSAM2	RSAM2-0.0	0.0														Boring located north of Beta Ditch along Olin (Pioneer) boundary; to evaluate potential VOC sources from the west, as a step-out boring for LOU 2 (open area south of the Trade Effluent Settling Ponds), and for general site coverage.
M-2	2		RSAM2-0.5	0.5	X	X	X	X		X	X	X	X	X				
M-2	2		RSAM2-10	10	X	X	X	X		X	X	Hold	X	X				
M-2	2		RSAM2-20	20	X	X	X	X		X	X		X	X				
M-2	2		RSAM2-30	30	X	X	X	X		X	X		X	X				
M-3	2	SA100	SA100-0.0	0.0														Boring located to evaluate LOU 2 (open area south of Trade Effluent Settling Ponds) and evaluate potential VOC sources from the west.
M-3	2		SA100-0.5	0.5	X	X	X	X		X	X	X	X	X				
M-3	2		SA100-10	10	X	X	X	X		X	X	Hold	X	X				
M-3	2		SA100-20	20	X	X	X	X		X	X		X	X				
M-3	2		SA100-30	30	X	X	X	X		X	X		X	X				

Table A
Soil Sampling and Analytical Plan for LOU 2
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 (K-2) and ending with the southeastern-most grid in Area I (M-3).																				
M-3	2	RSAM3	RSAM3-0.0	0.0													X	Boring to evaluate LOU 2 (open area south of Trade Effluent Settling Ponds).		
M-3	2		RSAM3-0.5	0.5	X	X	X	X		X	X	X	X	X	X					
M-3	2		RSAM3-10	10	X	X	X	X		X	X	Hold	X	X						
M-3	2		RSAM3-20	20	X	X	X	X		X	X		X	X						
M-3	2		RSAM3-30	30	X	X	X	X		X	X		X	X						
M-4	2	SA69	SA69-0.0	0													X	Boring located north of Beta Ditch as a step-out to LOUs 2 (open area south of Trade Effluent Settling Ponds) and 57 (AP Plant Transfer Lines to Sodium Chlorate Process, AP Plant SI's and Transfer Lines) and to investigate for potential offsite VOC sources from the west.		
M-4	2		SA69-0.5	0.5	X	X	X			X	X	X	X	X	X					
M-4	2		SA69-10	10	X	X	X			X	X	Hold	X	X						
M-4	2		SA69-20	20	X	X	X			X	X		X	X						
M-4	2		SA69-30	30	X	X	X			X	X		X	X						
M-4	2	RSAM4	RSAM4-0.0	0													X	Boring located for general area coverage.		
M-4	2		RSAM4-0.5	0.5	X	X	X	X		X	X	X	X	X	X					
M-4	2		RSAM4-10	10	X	X	X	X		X	X	Hold	X	X						
M-4	2		RSAM4-20	20	X	X	X	X		X	X		X	X						
M-4	2		RSAM4-30	30	X	X	X	X		X	X		X	X						
Number of Borings:		14	--	--																
Number of Samples:		--	--	--	54	54	54	46	0	54	54	14	50	54	14	0	13			

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 2
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	VOCs ¹ (EPA 8260)	Wet Chemistry ²	OCPs ³ (EPA 8081A)	SVOCs ⁴ (EPA 8270C)	Radio-nuclides ⁵	Rationale
Wells are organized by grid location as shown on Plate A - Starting point is on the northwestern-most grid in Area 1 (K-2) and ending with the southeastern-most grid covering Area I (M-3).													
K-2	1	M-5A	40 - 50	yes	X	X	X	X	X	X	X	X	Located to evaluate LOU 2 (Open Area South of the Trade Effluent Ponds); as an upgradient stepout for LOU 1 and LOU 10; to evaluate possible offsite sources to the West; and for general site coverage.
K-2	1	TR-2	144.5 - 174.5	no	X	X	X	X	X	X	X	X	To evaluate for SRCs in upper Muddy Creek Formation.
K-3	1	MW-16	25 - 40	no	X	X	X	X	X	X	X	X	New monitoring well to evaluate SRCs in upper Muddy Creek Formation from potential offsite sources from west.
L-2	1	M-127	TBD	new well	X	X	X	X	X	X	X	X	New monitoring well located to evaluate LOU 2; to evaluate potential offsite sources to the west; and for general site coverage.
L-3	1	M-126	19.7 - 39.7	no	X	X	X	X	X	X	X	X	New monitoring well located to serve as an up- to crossgradient stepout for LOU 2; to evaluate potential offsite sources from the west; and for general site coverage.
M-2	1	TR-4	124.5 - 144.5	no	X	X	X	X	X	X	X	X	Located to serve as a downgradient stepout for LOU 5; to evaluate possible offsite sources to the west (particularly for VOCs); and for general site coverage.
M-3	1	M-125	TBD	new well	X	X	X	X	X	X	X	X	New monitoring well located to serve as a downgradient stepout for LOUs 5 and 54; to evaluate potential offsite sources from the west; and for general site coverage.
Number of Field Samples:					7	7	7	7	7	7	7	7	
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 2 –
Open Area South of (Former) Trade Effluent Settling Ponds
Tronox Facility – Henderson, Nevada**

Soil and Groundwater Characterization Data

**Summary of Available Data for LOU 2 –
Open Area South of (Former) Trade Effluent Settling Ponds
Tronox Facility – Henderson, Nevada**

LOU-specific analytes identified include:

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

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

LOU 2 Table 1 - Soil Characterization Data - Wet Chemistry

LOU 2 Table 2 - Groundwater Characterization Data - Wet Chemistry

LOU 2 Table 3 - Soil Characterization Data - Dioxins and Dibenzofurans

LOU 2 Table 4 - Soil Characterization Data - Metals

LOU 2 Table 5 - Groundwater Characterization Data - Metals

LOU 2 Table 6 - Groundwater Characterization Data - Routine Monitoring

LOU 2 Table 7 - Soil Characterization Data - Organochlorine Pesticides (OCP)

LOU 2 Table 8 - Groundwater Characterization Data - Organochlorine Pesticides (OCP)

LOU 2 Table 9 - Soil Characterization Data - Organophosphorus Pesticides (OPPs)

LOU 2 Table 10 - Groundwater Characterization Data - Organophosphorus Pesticides (OPPs)

LOU 2 Table 11 - Soil Characterization Data - PCBs

LOU 2 Table 12 - Groundwater Characterization Data - PCBs

LOU 2 Table 13 - Soil Characterization Data - Perchlorate

LOU 2 Table 14 - Groundwater Characterization Data - Perchlorate

LOU 2 Table 15 - Soil Characterization Data - Radionuclides

LOU 2 Table 16 - Groundwater Characterization Data - Radionuclides

LOU 2 Table 17 - Soil Characterization Data - SVOC

LOU 2 Table 18 - Groundwater Characterization Data - SVOC

LOU 2 Table 19 - Soil Characteristic Data - TPH and Fuel Alcohols

LOU 2 Table 20 - Soil Characterization Data - VOCs

LOU 2 Table 21 - Groundwater Characteristic Data – VOCs

LOU 2 Table 22 - Soil Characterization Data - Long Asbestos Fibers in Respirable Soil Fraction

LOU 2 Table 23 - Summary of Analytical Data for LOU # 2

LOU 2 Table 24 - Groundwater Characterization Data - Perchlorate

LOU 2 Table 25 - Groundwater Characterization Data - Routine Monitoring

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

**LOU 2 Table 1
Soil Characterization Data - Wet Chemistry**

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program	Ph A ¹	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.	SA15	SA15	SA15	SA15	SA15	SA15	SA15	SA18	SA18	SA18	SA18	SA18	
Sample ID	SA15-0.5	SA15-10	SA15-10D	SA15-20	SA15-30	SA15-35	SA15-35	SA18-0.5	SA18-0.5D	SA18-10	SA18-20	SA18-30	
Sample Depth (ft)	0.5	10	10	20	30	35	35	0.5	0.5	10	20	30	
Sample Date	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006	
Wet Chemistry Parameter	(USEPA values unless												Units
Percent moisture	--	13.4	14.8	9.0	9.3	26.5	27.3	8.3	4.9	7.8	7.0	9.1	percent
Alkalinity (as CaCO ₃)	--	233	58.7 U	54.9 U	55.1 U	344	125	84.8	90.1	54.3 U	53.7 U	55.0 U	mg/kg
Bicarbonate	--	332	368	462	1620	1630	160	357	450	354	881	135	mg/kg
Total Alkalinity	--	566	368	505	1620	1970	285	442	541	369	906	146	mg/kg
Ammonia (as N)	--	928 J	R	58.5 J	380 J	28.0 J	456 J	5.5 UJ	5.3 UJ	5.4 UJ	5.4 UJ	5.5 UJ	mg/kg
Cyanide	1.20E+04	0.58 UJ	0.59 UJ	0.55 UJ	0.55 UJ	0.68 UJ	0.69 UJ	R	R	R	R	R	mg/kg
MBAS	--	4.0 U	4.0 U	3.5 J	2.7 J	2.7 J	4.0 U	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	mg/kg
pH (solid)	--	8.8	7.9	7.9	7.8	8.2	8.5	7.7	8.6	7.8	8.0	8.5	none
Bromide	--	2.9 U	2.9 U	2.7 U	83.3	3.4 U	3.4 U	27.3 U	1.8 J	3.0	3.3	1.2 J	mg/kg
Chlorate	--	2.1 J-	5.9 U	15.7 J-	R	8.9 J-	R	10.2	4.7 J	3.4 J	4.6 J	5.5 U	mg/kg
Chloride	--	6.2	746 J	266 J	344	218	187	543 J	287 J	735 J	1180 J	280 J	mg/kg
Nitrate (as N)	--	35.3	515 J	43.4 J	176	10.4	10.9 J+	5.7 J+	3.8 J+	3.4 J+	2.9 J+	1.1 J+	mg/kg
Nitrite	--	1.3	5.3 J-	7.1	5.6	3.0	3.5	10.9 U	2.1 U	10.9 U	10.7 U	2.2 U	mg/kg
ortho-Phosphate	--	5.8 U	5.9 U	54.9 U	20.7 J	13.9	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U	mg/kg
Sulfate	--	13.4	39.3	36.6	11600	258	225 J+	163	129	3710	481	379	mg/kg
Total Organic Carbon	--	2800	5800	8500	4700	38600	21100	5400	6900	9600	6000	200 J	mg/kg

Notes:

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

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

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	Ph A	
Well ID		SA15	M5A	
Sample ID		GWSA15	M5A	
Sample Date		11/08/2006	12/07/2006	
Wet Chemistry Parameters	MCL (USEPA values unless noted)			Units
Total Dissolved Solids	500	14400	11000	mg/L
Total Suspended Solids	--	29800	18.0 J	mg/L
Alkalinity (as CaCO ₃)	--	5.0 U	5.0 U	mg/L
Bicarbonate	--	198	202	mg/L
Total Alkalinity	--	198	202	mg/L
Ammonia (as N)	--	893000	50.0 U	ug/L
MBAS	--	2.1 U	1.4 J	mg/L
Cyanide	2.00E+02	5.0 UJ	R	ug/L
pH (liquid)	--	7.3 J	7.0 J	none
Specific Conductance	--	21500	3350 J+	umhos/cm
Bromide	--	25.0 U	25.0 U	mg/L
Chlorate	--	172	5.0 U	mg/L
Chloride	2.50E-01 (j)	3750	5320	mg/L
Nitrate (as N)	10	132	2.0 U	mg/L
Nitrite	1	2.0 U	2.0 U	mg/L
ortho-Phosphate	--	50.0 U	50.0 U	mg/L
Sulfate	--	2200	1600	mg/L
Total Organic Carbon	--	3.8 J-	50.0 U	mg/L

Notes:

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

(b) USEPA, 2006. 2006 Edition of the Drinking Water Standards and Health Advisories. EPA 822-R-06-013. August 2006.

(j) See footnote (b). Secondary Drinking Water Regulation value.

LOU 2 Table 3
Soil Characterization Data - Dioxins and Dibenzofurans

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program				Ph A ¹	Ph A	Ph A
Boring No.				SA15	SA18	SA18
Sample ID				SA15-0.5	SA18-0.5	SA18-0.5D
Sample Depth (ft)				0.5	0.5	0.5
Sample Date				11/08/2006	11/15/2006	11/15/2006
chemical name:	Method	Unit	PRG (Industrial Soil)			
Dioxin 8290 SCREEN Total TEQ-ENSR Calculated (a) ng/kg		ng/kg	--	983	3.36	
Dioxin SW 846 8290 Total TEQ-ENSR Calculated (a) ng/kg		ng/kg	--	803	0.75	
Dioxin 8290 SCREEN Total TEQ-ENSR Calculated (b) ng/kg		ng/kg	--	983	3.39	
Dioxin SW 846 8290 Total TEQ-ENSR Calculated (b) ng/kg		ng/kg	--	803	0.82	
1,2,3,4,6,7,8-Heptachlorodibenzofuran	8290 Screen	ng/kg	--	5619.090	6.645	41.263
1,2,3,4,6,7,8-Heptachlorodibenzofuran	SW 846 8290	ng/kg	--	5666.967 J	6.645	
1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	365.788	0.516	2.633
1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--	365.788	0.516 U	
1,2,3,4,7,8,9-Heptachlorodibenzofuran	8290 Screen	ng/kg	--	3264.854	2.093	12.954
1,2,3,4,7,8,9-Heptachlorodibenzofuran	SW 846 8290	ng/kg	--	2758.352 J	2.093 J	
1,2,3,4,7,8-Hexachlorodibenzofuran	8290 Screen	ng/kg	--	2303.115	2.577	16.715
1,2,3,4,7,8-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--	1868.559 J	2.577	
1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	33.024	0.063	0.315
1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--	33.024	0.063 J	
1,2,3,6,7,8-Hexachlorodibenzofuran	8290 Screen	ng/kg	--	1407.017	1.450	9.814
1,2,3,6,7,8-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--	1161.921 J	1.45 J	
1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	89.921	0.130	0.802
1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--	89.921	0.13 JK	
1,2,3,7,8,9-Hexachlorodibenzofuran	8290 Screen	ng/kg	--	240.602	0.185 U	1.016 U
1,2,3,7,8,9-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--	240.702	0.185 U	
1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	109.299	0.117	0.769
1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--	109.299	0.117 JK	
1,2,3,7,8-Pentachlorodibenzofuran	8290 Screen	ng/kg	--	1020.569	0.985	6.188
1,2,3,7,8-Pentachlorodibenzofuran	SW 846 8290	ng/kg	--	890.137 J	0.985 J	
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	57.995	0.070	0.489
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--	57.995	0.07 J	
2,3,4,6,7,8-Hexachlorodibenzofuran	8290 Screen	ng/kg	--	787.272	0.488	2.185
2,3,4,6,7,8-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--	648.672 J	0.488 J	
2,3,4,7,8-Pentachlorodibenzofuran	8290 Screen	ng/kg	--	502.763	0.265	2.031
2,3,4,7,8-Pentachlorodibenzofuran	SW 846 8290	ng/kg	--	502.759	0.265 JK	
2,3,7,8-Tetrachlorodibenzofuran	8290 Screen	ng/kg	--	1292.662	1.360	7.436
2,3,7,8-Tetrachlorodibenzofuran	SW 846 8290	ng/kg	--	415.316 J	0.73 UJ	
2,3,7,8-Tetrachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	18.916	0.029 U	0.135
2,3,7,8-Tetrachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--	18.916	0.029 U	
Octachlorodibenzofuran	8290 Screen	ng/kg	--	17916.923	14.408	91.431
Octachlorodibenzofuran	SW 846 8290	ng/kg	--	13990.188 J	14.408	
Octachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	10 (h)(v)	410.286	1.964	3.608
Octachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	10 (h)(v)	410.286 J	1.964 U	
Tetrachlorinated Dibenzofurans, (Total)	SW 846 8290	ng/kg	--	7527.737 J	6.468	

LOU 2 Table 3
Soil Characterization Data - Dioxins and Dibenzofurans

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

	Sampling Program		Industrial		Ph A ¹	Ph A	Ph A
	Boring No.	Sample ID			SA15	SA18	SA18
		Sample Depth (ft)	Soil (PRG)		SA15-0.5	SA18-0.5	SA18-0.5D
		Sample Date			0.5	0.5	0.5
					11/08/2006	11/15/2006	11/15/2006
chemical name:	Method	Unit					
Total HpCDD	SW 846 8290	ng/kg	--		569.535	0.957 U	
Total HpCDF	SW 846 8290	ng/kg	--		12074.690 J	12.632	
Total HxCDD	SW 846 8290	ng/kg	--		714.161	0.142 J	
Total HxCDF	SW 846 8290	ng/kg	--		8663.283 J	9.841	
Total PeCDD	SW 846 8290	ng/kg	--		653.379	0.51 J	
Total PeCDF	SW 846 8290	ng/kg	--		8089.831 J	9.31	
Total TCDD	SW 846 8290	ng/kg	--		607.201	0.756 J	

Notes:

1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
 - (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 2 Table 4
Soil Characterization Data - Metals

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program	Ph A ¹	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.	SA15	SA15	SA15	SA15	SA15	SA15	SA15	SA18	SA18	SA18	SA18	SA18	
Sample ID	SA15-0.5	SA15-10	SA15-10D	SA15-20	SA15-30	SA15-35	SA18-0.5	SA18-0.5D	SA18-10	SA18-20	SA18-30		
Sample Depth (ft)	0.5	10	10	20	30	35	0.5	0.5	10	20	30		
Sample Date	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006	
Metals	PRG (Industrial soil)												Units
Aluminum	9.21E+05 (oo)	8180 J	7600 J	6240 J	5850 J	7930 J	12100 J	7650	6380	7300	6940	3780	mg/kg
Antimony	4.09E+02	0.18 J-	0.15 J-	0.12 J-	0.13 J-	0.13 J-	0.18 J-	0.17 J-	0.16 J-	0.18 J-	0.16 J-	0.080 J-	mg/kg
Arsenic	1.59E+00	2.5	5.3	4.2	11.4	20.4	16.2	2.8	2.4	4.0	4.5	4.6	mg/kg
Barium	6.66E+04	207 J	191 J	143 J	113 J	48.3 J	51.8 J	186 J	157 J	207 J	143 J	71.2 J	mg/kg
Beryllium	1.94E+03	0.49	0.49	0.41	0.32	0.34	0.58	0.47	0.40	0.45	0.44	0.20	mg/kg
Boron	2.00E+05 (oo)	3.6 J-	3.5 J-	2.9 J-	5.9 J-	12.0 J-	16.9 J-	4.3 UJ	3.4 UJ	8.7 UJ	6.3 UJ	3.0 UJ	mg/kg
Cadmium	4.50E+02	1.7	0.068	0.059	0.076	0.069	0.12	0.11	0.087	0.076	0.062	0.022 J	mg/kg
Calcium	-	5940 J	19300 J	18100 J	40400 J	129000 J	99800 J	32300 J	16600 J	19800 J	25500 J	2170 J	mg/kg
Chromium (Total)	6.40E+01	11.5 J-	10.6 J-	7.7 J-	8.6 J-	24.2 J-	18.1 J-	8.8 J-	8.5 J-	10.9 J-	8.6 J-	9.0 J-	mg/kg
Chromium-hexavalent	4.48E+02	0.23 U	0.23 U	0.22 U	0.22 U	0.27 U	0.28 U	0.22 U	0.21 U	0.22 U	0.21 U	0.22 U	mg/kg
Cobalt	1.92E+03	9.4 J	6.6 J-	6.4 J-	3.2 J-	2.8 J-	4.5 J-	5.8 J-	4.9 J-	7.7 J-	5.3 J-	2.4 J-	mg/kg
Copper	4.09E+04	14.3 J	12.7 J	11.0 J	8.0 J	6.1 J	10.6 J	12.4 J	10.3 J-	11.8 J	11.9 J	7.1 J	mg/kg
Iron	3.00E+05 (oo)	14100 J	13900 J	11600 J	7050 J	7320 J	10300 J	11900	10300	11300	11100	7450	mg/kg
Lead	8.00E+02	10.5	7.5	7.1	6.6	4.3	6.9	8.2	7.4	8.8	7.6	6.0	mg/kg
Magnesium	-	6620 J-	7970 J-	7250 J-	7550 J-	44700 J-	27300 J-	7190 J-	5900 J-	8810 J-	8790 J-	3970 J-	mg/kg
Manganese	1.95E+04	568 J+	239 J+	230 J+	151 J+	118 J+	212 J+	288	228	314	223	58.8	mg/kg
Molybdenum	5.11E+03	0.64	0.48 J	0.43 J	0.43 J	0.2615 U	0.72	0.52 J	0.41 J	0.73 J	0.44 J	0.42 J	mg/kg
Nickel	2.04E+04	14.1 J	12.5 J	11.6 J	9.1 J	8.6 J	11.9 J	12.5 J-	10.8 J-	18.2 J-	11.0 J-	5.2 J-	mg/kg
Platinum	-	0.040 J	0.019 J	0.017 J	0.011 U	0.014 U	0.030 J	0.015 J	0.016 J	0.014 J	0.012 J	0.011 U	mg/kg
Potassium	-	1430 J	1370 J	1230 J	1810 J	2040 J	3090 J	2500	2700	1490	1530	1190	mg/kg
Selenium	5.11E+03	0.13 UJ	0.13 UJ	0.12 UJ	0.12 UJ	0.15 UJ	0.15 UJ	0.12 UJ	0.11 UJ	0.12 UJ	0.12 UJ	0.12 UJ	mg/kg
Silver	5.11E+03	0.18 J	0.15 J	0.12 J	0.11 J	0.11 J	0.18 J	0.13 J	0.12 J	0.11 J	0.11 J	0.078 J	mg/kg
Sodium	-	763 J-	420 J-	384 J-	447 J-	1040 J-	1340 J-	800 J-	433 J-	711 J-	840 J-	822 J-	mg/kg
Strontium	6.12E+05 (oo)	46.1 J	99.0 J	74.2 J	805 J	437 J	119 J	174 J	106 J	316 J	274 J	69.9 J	mg/kg
Thallium	6.75E+01	0.16 J	0.082 U	0.077 U	0.077 U	0.098 J	0.21 J	0.081 U	0.080 U	0.076 U	0.075 U	0.15 U	mg/kg
Tin	6.12E+05 (oo)	0.64	0.56	0.45	0.45	0.38	0.59	0.54	0.45	0.51	0.44	0.33	mg/kg
Titanium	3.80E+06 (oo)	677 J	643 J	478 J	395 J	354 J	454 J	626	525	516	490	410	mg/kg
Tungsten	-	0.33 J-	0.36 J-	0.32 J-	0.37 J-	0.15 J-	0.42 J-	0.38 UJ	0.28 UJ	0.41 UJ	0.28 UJ	0.27 UJ	mg/kg
Uranium	2.04E+02	0.81	1.3	1.1	1.6	6.1	2.8	1.1	0.82	1.8	1.9	1.4	mg/kg
Vanadium	1.02E+03	38.0 J-	39.2 J-	31.6 J-	23.5 J-	27.3 J-	22.3 J-	34.3 J-	25.8 J-	32.6 J-	32.1 J-	24.5 J-	mg/kg
Zinc	3.10E+05 (oo)	36.7 J-	26.4 J-	21.5 J-	17.5 J-	17.2 J-	27.7 J-	26.1 J-	23.4 J-	25.3 J-	23.6 J-	14.9 J-	mg/kg
Mercury	3.10E+02 (t)	0.0077 U	0.0078 UJ	0.0073 UJ	0.0074 UJ	0.0091 UJ	0.0092 UJ	0.0073 UJ	0.007 UJ	0.0073 UJ	0.0072 UJ	0.0074 UJ	mg/kg

Notes:

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

(t) Value for mercury and compounds.

(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.

**LOU 2 Table 5
Groundwater Characterization Data - Metals**

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	Ph A	
Well ID:		SA15	M5A	
Sample ID		GWSA15	M5A-Z	
Sample Date		11/08/2006	05/10/2007	
Metals	MCL (USEPA values unless noted)			Unit
Aluminum	5.00E+01 (j)	157 UJ	786 U	ug/L
Antimony	6.00E+00	0.76 J-	50.0 U	ug/L
Arsenic	1.00E+01	53.6	261 J	ug/L
Barium	2.00E+03	39.8	44.3 J	ug/L
Beryllium	4.00E+00	1.8 UJ	8.8 U	ug/L
Boron	7.30E+03	2560 J-	2220 J	ug/L
Cadmium	5.00E+00	0.17 J	5.7 U	ug/L
Calcium	--	308000 J	782000	ug/L
Chromium (Total)	1.00E+02	56.0 UJ	280 U	ug/L
Chromium-hexavalent	1.09E+02 (c)	20.3 J	1.0 UJ	ug/L
Cobalt	7.30E+02 (c)	6.3 UJ	31.3 U	ug/L
Copper	1.30E+03 (p)	6.3 J-	25.0 U	ug/L
Iron	3.00E+02 (j)	188 UJ	R	ug/L
Lead	1.50E+01 (u)	9.8 U	49.2 U	ug/L
Magnesium	1.50E+05 (a)	144000 J	905000	ug/L
Manganese	5.00E+01 (j)	28.4 J+	1540	ug/L
Molybdenum	--	66.5	50.0 U	ug/L
Nickel	--	13.6 J-	51.7 U	ug/L
Platinum	--	56.0	10.0 U	ug/L
Potassium	--	42200 J-	21100	ug/L
Selenium	5.00E+01	1.9 J	100 U	ug/L
Silver	1.00E+02 (j)	0.20 U	20.3 U	ug/L
Sodium	--	2940000 J	1860000	ug/L
Strontium	2.19E+04 (c)	10300 J	23900	ug/L
Thallium	2.00E+00	6.4 U	32.0 U	ug/L
Tin	2.19E+04 (c)	0.20 UJ	20.0 U	ug/L
Titanium	1.46E+05 (c)	5.4 J	39.1 U	ug/L
Tungsten	--	1.2 J-	50.0 U	ug/L
Uranium	3.00E+01	18.9 J	46.4 J	ug/L
Vanadium	3.65E+01 (c)	8.8 J-	160 UJ	ug/L
Zinc	5.00E+03 (j)	20.0 UJ	100 U	ug/L
Mercury	2.00E+00	0.093 U	0.093 U	ug/L

Notes:

1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
- (a). Nevada Secondary MCL
- (c). TWPRG
- (b) USEPA, 2006. 2006 Edition of the Drinking Water Standards and Health Advisories. EPA 822-R-06-013. August 2006.
- (j) See footnote (b). Secondary Drinking Water Regulation value.
- (p) The national primary drinking water regulations (b) lists a treatment technology action level of 1.3 mg/l as the MCL for Copper. Therefore, the secondary value is not used.
- (u) See footnote (b). Treatment technology action level.

**LOU 2 Table 6
Groundwater Characterization Data - Routine Monitoring**

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Well ID	Date	water (ft)	Perchlorate mgl/	Qual	Chromium mgl/	Qual	TDS mgl/	Qual	(as N) mgl/	Qual	Chlorate mgl/	Qual
M-5A	5/2/2006	---	24	d	<0.01	ud	10800					
M-5A	8/1/2006	---	20.6	d	<0.01	ud	9330					
M-5A	5/2/2007	---	22.9		<0.02	U	9250					
M-5A	7/31/2007	---	24.7		<0.02	U	11100					
TR-2	1/13/2000	--	0.026									
TR-2	2/2/2001	--	<0.004									
TR-2	2/25/2002	--	0.034									
TR-2	2/19/2003	--	0.0046									
TR-2	2/3/2004	--	<0.004									
TR-2	2/18/2005	--	0.018									
TR-2	2/2/2006	--	<0.004									
TR-2	3/20/2006	--	<0.004									
TR-2	1/17-18/07	--	<0.004									

Notes:

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

Laboratory Qualifiers:

d = the sample was diluted
 u = the analyte was not detected above the sample reporting limit
 ud = the sample was diluted and was not detected above the sample reporting limit

Validation Qualifiers:

J = the result is an estimated quantity
 J- = the result is an estimated quantity and the result may be biased low
 U = the analyte was analyzed for, but was not detected above the sample reporting limit
 UJ = the sample was not detected above the sample reporting limit and the reporting limit is approximate

LOU 2 Table 7
Soil Characterization Data - Organochlorine Pesticides (OCP)

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	Ph A	Ph A	Ph A	
Boring No.		SA15	SA15	SA18	SA18	
Sample ID		SA15-0.5	SA15-10	SA18-0.5	SA18-0.5D	
Sample Depth (ft)		0.5	10	0.5	0.5	
Sample Date		11/08/2006	11/08/2006	11/15/2006	11/15/2006	
Organochlorine Pesticides	PRG (Industrial Soil)					Unit
4,4'-DDD	9.95E+00	0.0020 U	0.020 U	0.0019 U	0.0018 U	mg/kg
4,4'-DDE	7.02E+00	0.0020 UJ	0.065 J	0.0019 U	0.0018 U	mg/kg
4,4'-DDT	7.02E+00	0.0020 UJ	0.052 J	0.0021	0.0018 U	mg/kg
Aldrin	1.00E-01	0.0020 U	0.020 U	0.0019 U	0.0018 U	mg/kg
Alpha-BHC	3.59E-01 (bbb)	0.0020 U	0.020 U	0.0019 U	0.0018 U	mg/kg
Alpha-chlordane	6.47E+00 (y)	0.0020 U	0.020 U	0.0019 U	0.0018 U	mg/kg
Beta-BHC	1.26E+00 (bbb)	0.0030	0.052	0.0019 U	0.0018 U	mg/kg
Delta-BHC	6.47E+00	0.0020 U	0.020 U	0.0019 U	0.0018 U	mg/kg
Dieldrin	3.59E-01 (z)	0.0020 U	0.020 U	0.0019 U	0.0018 U	mg/kg
Endosulfan I	1.10E-01	0.0020 U	0.020 U	0.0019 U	0.0018 U	mg/kg
Endosulfan II	3.70E+03 (aa)	0.0020 U	0.020 U	0.0019 U	0.0018 U	mg/kg
Endosulfan Sulfate	3.70E+03 (aa)	0.0020 U	0.020 U	0.0019 U	0.0018 U	mg/kg
Endrin	3.70E+03 (aa)	0.0020 U	0.020 U	0.0019 U	0.0018 U	mg/kg
Endrin Aldehyde	1.85E+02	0.0020 U	0.020 U	0.0019 U	0.0018 U	mg/kg
Endrin Ketone	1.85E+02 (k)	0.0020 U	0.020 U	0.0019 U	0.0018 U	mg/kg
Gamma-BHC (Lindane)	1.85E+02 (k)	0.0020 U	0.020 U	0.0019 U	0.0018 U	mg/kg
Gamma-Chlordane	1.74E+00 (bbb)	0.0020 U	0.020 U	0.0019 U	0.0018 U	mg/kg
Heptachlor	6.47E+00 (y)	0.0020 U	0.020 U	0.0019 U	0.0018 U	mg/kg
Heptachlor Epoxide	3.83E-01	0.0020 U	0.020 U	0.0019 U	0.0018 U	mg/kg
Methoxychlor	1.89E-01	0.0038 U	0.039 U	0.0036 UJ	0.0035 UJ	mg/kg
Tech-Chlordane	3.08E+03	0.012 U	0.12 U	0.011 U	0.011 U	mg/kg
Toxaphene	1.57E+00	0.058 U	0.59 U	0.055 U	0.053 U	mg/kg

Notes:

1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
- (k) Value for endrin used as surrogate for endrin aldehyde and endrin ketone due to structural similarities.
(y) Value for chlordane (technical) used as surrogate for alpha-chlordane and gamma-chlordane based on structural similarities.
(z) Value for alpha-BHC used as surrogate for delta-BHC based on structural similarities.
(aa) Value for endosulfan used as surrogate for endosulfan I, endosulfan II and endosulfan sulfate based on structural similarities.
(bbb) BHC listed as HCH in the PRG table.

LOU 2 Table 8
Groundwater Characterization Data - Organochlorine Pesticides (OCP)

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	Ph A	
Well ID		SA15	M5A	
Sample ID		GWSA15	M5A	
Sample Date		11/08/2006	12/07/2006	
Organochlorine Pesticides	MCL (USEPA values unless noted)	ug/L	ug/L	Unit
4,4'-DDD	2.80E-01 (c)	0.050 U	0.050 U	ug/L
4,4'-DDE	1.98E-01 (c)	0.050 U	0.050 U	ug/L
4,4'-DDT	1.98E-01 (c)	0.050 U	0.050 U	ug/L
Aldrin	4.00E-03 (c)	0.050 U	0.050 U	ug/L
Alpha-BHC	1.10E-02 (bbb),(c)	0.050 U	1.8 J+	ug/L
Alpha-chlordane	2.00E+00 (l)	0.050 U	0.050 U	ug/L
Beta-BHC	3.74E-02 (bbb),(c)	0.050 U	0.050 U	ug/L
Delta-BHC	1.10E-02 (z), (c)	0.050 U	0.050 U	ug/L
Dieldrin	4.20E-03 (c)	0.050 U	0.050 U	ug/L
Endosulfan I	2.19E+02 (aa), (c)	0.050 U	0.050 U	ug/L
Endosulfan II	2.19E+02 (aa), (c)	0.050 U	0.050 U	ug/L
Endosulfan Sulfate	2.19E+02 (aa), (c)	0.050 U	0.050 U	ug/L
Endrin	2.00E+00 --	0.050 U	0.050 U	ug/L
Endrin Aldehyde	1.09E+01 (k), (c)	0.050 U	0.050 U	ug/L
Endrin Ketone	1.09E+01 (k), (c)	0.050 U	0.050 U	ug/L
Gamma-BHC (Lindane)	2.00E-01 --	0.050 U	0.050 U	ug/L
Gamma-Chlordane	2.00E+00 (l)	0.050 U	0.050 U	ug/L
Heptachlor	4.00E-01 --	0.050 U	0.41 J+	ug/L
Heptachlor Epoxide	2.00E-01 --	0.050 U	0.050 U	ug/L
Methoxychlor	4.00E+01 --	0.10 UJ	0.12 J+	ug/L
Tech-Chlordane	--	0.50 U	0.50 U	ug/L
Toxaphene	3.00E+00 --	2.0 U	2.0 U	ug/L

Notes:

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

(c). TW PRG

(k) Value for endrin used as

(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.

(bbb) BHC listed as HCH in the PRG table.

LOU 2 Table 9
Soil Characterization Data - Organophosphorus Pesticides (OPPs)

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

	Sampling Program Boring No. Sample ID Sample Depth (ft) Sample Date	Ph A ¹	Ph A	Ph A	
		SA15	SA18	SA18	
		SA15-0.5	SA18-0.5	SA18-0.5D	
		0.5	0.5	0.5	
		11/08/2006	11/15/2006	11/15/2006	
OPPs	PRG (Industrial Soil)	mg/kg	mg/kg	mg/kg	Unit
Azinphos-methyl	--	0.015 UJ	0.014 UJ	0.014 UJ	mg/kg
Bolstar	--	0.015 U	0.014 U	0.014 U	mg/kg
Chlorpyrifos	1.85E+03	0.023 U	0.022 UJ	0.021 UJ	mg/kg
Coumaphos	--	0.015 U	0.014 UJ	0.014 UJ	mg/kg
Demeton-O	2.46E+01 (cc)	0.045 U	0.043 U	0.041 U	mg/kg
Demeton-S	2.46E+01 (cc)	0.017 U	0.016 UJ	0.016 UJ	mg/kg
Diazinon	5.54E+02	0.025 U	0.024 U	0.023 U	mg/kg
Dichlorvos	5.94E+00	0.027 U	0.025 U	0.024 U	mg/kg
Dimethoate	1.23E+02	0.025 U	0.024 UJ	0.023 UJ	mg/kg
Disulfoton	2.46E+01	0.055 U	0.052 U	0.050 U	mg/kg
EPN	6.16E+00	0.015 U	0.014 U	0.014 U	mg/kg
Ethoprop	--	0.017 U	0.016 U	0.016 U	mg/kg
Ethyl Parathion	1.23E+03 (tt)	0.021 U	0.020 U	0.019 U	mg/kg
Famphur	--	0.015 U	0.014 UJ	0.014 UJ	mg/kg
Fensulfothion	--	0.015 U	0.014 U	0.014 U	mg/kg
Fenthion	1.50E+02 (ff)	0.038 U	0.036 U	0.035 U	mg/kg
Malathion	1.23E+04	0.017 U	0.016 U	0.016 U	mg/kg
Merphos	1.85E+01	0.035 U	0.033 U	0.032 U	mg/kg
Methyl parathion	1.54E+02	0.023 U	0.022 U	0.021 U	mg/kg
Mevinphos	--	0.017 U	0.016 U	0.016 U	mg/kg
Naled	1.23E+03	0.038 UJ	0.036 UJ	0.035 UJ	mg/kg
Phorate	1.23E+02	0.023 U	0.022 U	0.021 U	mg/kg
Ronnel	3.08E+04	0.021 UJ	0.020 UJ	0.019 UJ	mg/kg
Stirphos	--	0.017 UJ	0.016 UJ	0.016 UJ	mg/kg
Sulfotep	3.08E+02	0.023 U	0.022 U	0.021 U	mg/kg
Thionazin	--	0.021 U	0.020 U	0.019 U	mg/kg
Tokuthion	--	0.023 U	0.022 U	0.021 U	mg/kg
Trichloronate	--	0.023 U	0.022 UJ	0.021 UJ	mg/kg

Notes:

1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
- (cc) Value for demeton used as surrogate for demeton-o and demeton-s based on structural similarities.
(ff) Value for methyl parathion used as surrogate for fenthion based on structural similarities.
(tt) Value for parathion-methyl used as surrogate for parathion-ethyl due to structural similarities.

LOU 2 Table 10
Groundwater Characterization Data - Organophosphorus Pesticides (OPPs)

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	Ph A	
Well ID		SA15	M5A	
Sample ID		GWSA15	M5A	
Sample Date		11/08/2006	12/07/2006	
OPPs	MCL (USEPA values unless noted)	ug/L	ug/L	Unit
Azinphos-methyl	--	2.5 U	2.5 U	ug/L
Bolstar	--	1.0 U	1.0 U	ug/L
Chlorpyrifos	1.09E+02 (c)	1.0 U	1.0 U	ug/L
Coumaphos	--	1.0 U	1.0 U	ug/L
Demeton-O	1.46E+00 (cc)3	1.0 U	1.0 U	ug/L
Demeton-S	1.46E+00 (cc)3	1.0 U	1.0 U	ug/L
Diazinon	3.28E+01 (c)	1.0 U	1.0 U	ug/L
Dichlorvos	2.32E-01 (c)	1.0 U	1.0 U	ug/L
Dimethoate	7.30E+00 (c)	1.0 U	1.0 U	ug/L
Disulfoton	1.46E+00 (c)	0.50 U	0.50 U	ug/L
EPN	3.65E-01 (c)	1.2 UJ	1.2 U	ug/L
Ethoprop	--	0.50 U	0.50 U	ug/L
Ethyl Parathion	9.12E+00 (tt), (c)	1.0 UJ	1.0 U	ug/L
Famphur	--	1.0 U	1.0 U	ug/L
Fensulfothion	--	2.5 U	2.5 U	ug/L
Fenthion	9.10E+00 (ff), (c)	2.5 U	2.5 U	ug/L
Malathion	7.30E+02 (c)	1.2 U	1.2 U	ug/L
Merphos	1.09E+00 (c)	5.0 U	5.0 U	ug/L
Methyl parathion	9.12E+00 (c)	4.0 UJ	4.0 U	ug/L
Mevinphos	--	6.2 U	6.2 U	ug/L
Naled	7.30E+01 (c)	1.0 UJ	1.0 U	ug/L
Phorate	7.30E+00 (c)	1.2 U	1.2 U	ug/L
Ronnel	1.82E+03 (c)	10 U	10 U	ug/L
Stirphos	--	3.5 UJ	3.5 U	ug/L
Sulfotep	1.82E+01 (c)	1.5 U	1.5 U	ug/L
Thionazin	--	1.0 U	1.0 U	ug/L
Tokuthion	--	1.6 U	1.6 U	ug/L
Trichloronate	--	0.50 U	0.50 U	ug/L

Notes:

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

(c)TW PRG

(cc) Value for demeton used as surrogate for demeton-o and demeton-s based on structural similarities.

(ff) Value for methyl parathion used as surrogate for fenthion based on structural similarities.

(tt) Value for parathion-methyl used as surrogate for parathion-ethyl due to structural similarities.

**LOU 2 Table 11
Soil Characterization Data - PCBs**

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program	Ph A ¹	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A		
Boring ID	SA15	SA15	SA15	SA15	SA15	SA15	SA15	SA18	SA18	SA18	SA18	SA18	SA18		
Sample ID	SA15-0.5	SA15-10	SA15-10D	SA15-20	SA15-30	SA15-35	SA18-0.5	SA18-0.5D	SA18-10	SA18-20	SA18-30				
Sample Depth (ft)	0.5	10	10	20	30	35	0.5	0.5	10	20	30				
Sample Date	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006		
PCBs	PRG (Industrial Soil)													Unit	
Aroclor-1016	1.00E+01 (i)	0.038 U	0.039 U	0.036 U	0.036 U	0.045 U	0.045 U	0.036 U	0.035 U	0.036 U	0.035 U	0.036 U	0.035 U	0.036 U	mg/kg
Aroclor-1221	1.00E+01 (i)	0.038 U	0.039 U	0.036 U	0.036 U	0.045 U	0.045 U	0.036 U	0.035 U	0.036 U	0.035 U	0.036 U	0.035 U	0.036 U	mg/kg
Aroclor-1232	1.00E+01 (i)	0.038 U	0.039 U	0.036 U	0.036 U	0.045 U	0.045 U	0.036 U	0.035 U	0.036 U	0.035 U	0.036 U	0.035 U	0.036 U	mg/kg
Aroclor-1242	1.00E+01 (i)	0.038 U	0.039 U	0.036 U	0.036 U	0.045 U	0.045 U	0.036 U	0.035 U	0.036 U	0.035 U	0.036 U	0.035 U	0.036 U	mg/kg
Aroclor-1248	1.00E+01 (i)	0.038 U	0.039 U	0.036 U	0.036 U	0.045 U	0.045 U	0.036 U	0.035 U	0.036 U	0.035 U	0.036 U	0.035 U	0.036 U	mg/kg
Aroclor-1254	1.00E+01 (i)	0.038 U	0.039 U	0.036 U	0.036 U	0.045 U	0.045 U	0.036 U	0.035 U	0.036 U	0.035 U	0.036 U	0.035 U	0.036 U	mg/kg
Aroclor-1260	1.00E+01 (i)	0.038 U	0.039 U	0.036 U	0.036 U	0.045 U	0.045 U	0.036 U	0.035 U	0.036 U	0.035 U	0.036 U	0.035 U	0.036 U	mg/kg

Notes:

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

(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 2 Table 12
Groundwater Characterization Data - PCBs**

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	Ph A	
Well ID		SA15	M5A	
Sample ID		GWSA15	M5A	
Sample Date		11/08/2006	12/7/2006	
PCBs	MCL (USEPA values unless noted)	ug/L	ug/L	Unit
Aroclor-1016	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1221	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1232	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1242	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1248	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1254	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1260	5.00E-01 (bb)	0.10 U	0.10 U	ug/L

Notes:

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

(bb) Value for total PCBs.

**LOU 2 Table 13
Soil Characterization Data - Perchlorate**

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Boring ID	Sample ID	Sample Depth (ft)	Sample Date	Perchlorate	PRG (Industrial Soil)	Unit	Sampling Program
SA15	SA15-0.5	0.5	11/08/2006	113000	1.00E+05	ug/kg	Ph A ¹
	SA15-10	10	11/08/2006	1210000	1.00E+05	ug/kg	Ph A
	SA15-10D	10	11/08/2006	1160000	1.00E+05	ug/kg	Ph A
	SA15-20	20	11/08/2006	943000	1.00E+05	ug/kg	Ph A
	SA15-30	30	11/08/2006	2330000	1.00E+05	ug/kg	Ph A
	SA15-35	35	11/08/2006	204000	1.00E+05	ug/kg	Ph A
SA18	SA18-0.5	0.5	11/15/2006	3850 J	1.00E+05	ug/kg	Ph A
	SA18-0.5D	0.5	11/15/2006	1590 J	1.00E+05	ug/kg	Ph A
	SA18-10	10	11/15/2006	3500 J	1.00E+05	ug/kg	Ph A
	SA18-20	20	11/15/2006	2120 J	1.00E+05	ug/kg	Ph A
	SA18-30	30	11/15/2006	53.0 J	1.00E+05	ug/kg	Ph A

Notes:

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

LOU 2 Table 14
Groundwater Characterization Data - Perchlorate

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Well ID Number	Sample ID	Sample Date	Perchlorate	MCL (USEPS values unless noted)	Units	Sampling Program
SA15	GWSA15	11/08/2006	6290000	1.80E+01 (m),(a)	ug/L	Ph A ¹
M5A	M5A	12/07/2006	33.9 U	1.80E+01 (m),(a)	ug/L	Ph A

Notes:

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

(a) Nevada Secondary MCL

(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 2 Table 15
Soil Characterization Data - Radionuclides**

Open Area South of Trade Effluent Ponds
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)	
				2.60E-02	1.50E-01	2.25E-01	2.02E+01	1.90E+01	3.24E+01	3.98E-01	1.80E+00	
Boring ID	Sample ID	Sample	PRG (Industrial Soil) (dd) Date	pci/g	pci/g	pci/g	pci/g	pci/g	pci/g	pci/g	pci/g	Sampling
SA15	SA15-0.5	0.5	11/08/2006	1.19 J+	2.11 J+							Ph A ¹
	SA15-10	10	11/08/2006	1.2 J+	1.91 J+	0.868 J	0.794 J	0.796 J	0.518 J	0.0102 U	0.376 J	Ph A
	SA15-10D	10	11/08/2006	1.21 J+	1.89 J+	0.779 J	0.529 J	0.544 J	0.404 J	0.00471 U	0.392 J	Ph A
	SA15-20	20	11/08/2006	1.43 J+	1.84 J+							Ph A
	SA15-30	30	11/08/2006	1.91 J+	0.777 J+							Ph A
	SA15-35	35	11/08/2006	1.54 J+	0.852 J+							Ph A
SA 18	SA18-0.5	0.5	11/15/2006	1.19 J	1.75	0.763 J	0.433 J-	0.676 J	0.547 J	0.00628 U	0.313 J	Ph A
	SA18-0.5D	0.5	11/15/2006	1.06 J	1.97	0.481 J	0.495 J-	0.658 J	0.322 J	0.0114 J+	0.263 J	Ph A
	SA18-10	10	11/15/2006	1.25 J	1.78							Ph A
	SA18-20	20	11/15/2006	1.8 J	1.83							Ph A
	SA18-30	30	11/15/2006	2.47	1.99							Ph A

Notes:

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

(dd) 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.

**LOU 2 Table 16
Groundwater Characterization Data - Radionuclides**

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

			Ra-226	Ra-228	Th-228	Th-230	Th-232	U-233/234	U-235/236	U-238	
			TW PRG (c) (dd)								
			8.16E-04	0.0458	0.159	0.523	0.471	6.74E-01	6.63E-01	0.547	
Well ID Number	Sample ID	Date									Sampling Program
SA15	GWSA15	11/08/2006	3.32 J+	2.18							Ph A ¹
M5A	M5A-Z	05/10/2007	0.566 J	1.11							Ph A

Notes:

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

**LOU 2 Table 17
Soil Characterization Data - SVOC**

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program			Ph A ¹	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.			SA15	SA15	SA15	SA15	SA15	SA15	SA15	SA 18	SA 18	SA 18	SA 18
Sample ID			SA15-0.5	SA15-10	SA15-10D	SA15-20	SA15-30	SA15-35	SA18-0.5	SA18-0.5D	SA18-10	SA18-20	SA18-30
Sample Depth (ft)			0.5	10	10	20	30	35	0.5	0.5	10	20	30
Sample Date			11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006
SVOC	Analytical Method	PRG (Industrial Soil)	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,4-Dioxane	non-SIM	1.57E+05	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
2-Methylnaphthalene	non-SIM	1.88E+05 (jj)	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
2-Methylnaphthalene	SIM	1.88E+05 (jj)											
Acenaphthene	non-SIM	2.92E+07	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
Acenaphthene	SIM	2.92E+07											
Acenaphthylene	non-SIM	2.92E+04 (pp)	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
Acenaphthylene	SIM	2.92E+04 (pp)											
Anthracene	non-SIM	2.40E+08 (oo)	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
Anthracene	SIM	2.40E+08 (oo)											
Benz(a)anthracene	non-SIM	2.11E+03	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
Benz(a)anthracene	SIM	2.11E+03											
Benzo(a)pyrene	non-SIM	2.11E+02	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
Benzo(a)pyrene	SIM	2.11E+02											
Benzo(b)fluoranthene	non-SIM	2.11E+03	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
Benzo(b)fluoranthene	SIM	2.11E+03											
Benzo(g,h,i)perylene	non-SIM	2.91E+07 (w)	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
Benzo(g,h,i)perylene	SIM	2.91E+07 (w)											
Benzo(k)fluoranthene	non-SIM	2.11E+04	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
Benzo(k)fluoranthene	SIM	2.11E+04											
bis(2-Ethylhexyl)phthalate	non-SIM	1.23E+05	380 U	390 U	160 J	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
Butyl benzyl phthalate	non-SIM	1.23E+08 (oo)	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
Chrysene	non-SIM	2.11E+05	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
Chrysene	SIM	2.11E+05											
Dibenz(a,h)anthracene	non-SIM	2.11E+02	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
Dibenz(a,h)anthracene	SIM	2.11E+02											
Diethyl phthalate	non-SIM	4.92E+08 (oo)	380 U	390 U	360 U	360 U	150 J	450 U	360 U	350 U	360 U	350 U	360 U
Dimethyl phthalate	non-SIM	6.16E+09 (oo)	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
Di-N-Butyl phthalate	non-SIM	6.16E+07	380 U	390 U	650	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
Di-N-Octyl phthalate	non-SIM	2.46E+07	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
Fluoranthene	non-SIM	2.20E+07	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U
Fluoranthene	SIM	2.20E+07											
Fluorene	non-SIM	2.63E+07	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U

LOU 2 Table 17 (continued)
Soil Characterization Data - SVOC

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program			Ph A ¹	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.			SA15	SA15	SA15	SA15	SA15	SA15	SA15	SA18	SA18	SA18	SA18	SA18
Sample ID			SA15-0.5	SA15-10	SA15-10D	SA15-20	SA15-30	SA15-35	SA18-0.5	SA18-0.5D	SA18-10	SA18-20	SA18-30	SA18-30
Sample Depth (ft)			0.5	10	10	20	30	35	0.5	0.5	10	20	30	30
Sample Date			11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006
SVOC	Analytical Method	PRG (Industrial Soil)	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Fluorene	SIM	2.63E+07												
Hexachlorobenzene	non-SIM	1.08E+03	310 J	390 U	160 J	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U	360 U
Hexachlorobenzene	SIM	1.08E+03												
Indeno(1,2,3-cd)pyrene	non-SIM	2.11E+03	380 U	390 U	360 U	360 U	450 U	450 U	360 UJ	350 UJ	360 UJ	350 U	360 UJ	360 UJ
Indeno(1,2,3-cd)pyrene	SIM	2.11E+03												
Naphthalene	non-SIM	1.88E+05	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.4 U	5.5 U
Naphthalene	non-SIM	1.88E+05	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U	360 U
Naphthalene	SIM	1.88E+05												
Nitrobenzene	non-SIM	1.03E+05	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U	360 U
Octachlorostyrene	non-SIM	-	130 J	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U	360 U
Phenanthrene	non-SIM	2.40E+08	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U	360 U
Phenanthrene	SIM	2.40E+08												
Pyrene	non-SIM	2.91E+07	380 U	390 U	360 U	360 U	450 U	450 U	360 U	350 U	360 U	350 U	360 U	360 U
Pyrene	SIM	2.92E+07												
Pyridine	non-SIM	6.16E+05	1800 U	1900 U	1800 U	1800 U	2200 U	2200 U	1700 U	1700 U	1700 U	1700 U	1700 UJ	1800 U

Notes:

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

(w) Value for pyrene used as surrogate for benzo(g,h,i)perylene based on structural similarities.

(jj) Value for naphthalene used as surrogate for 2-methylnaphthalene 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.

(pp) Value for acenaphthene used as surrogate for acenaphthylene based on structural similarities.

**LOU 2 Table 18
Groundwater Characterization Data - SVOC**

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program			Ph A ¹	Ph A
Well No.			SA15	M5A
Sample ID			GWSA15	M5A
Sample Date			11/08/2006	12/7/2006
SVOCs	Analytical Method	MCL (USEPA values unless noted)	ug/L	ug/L
1,4-Dioxane	non-SIM	--	10 U	10 U
2-Methylnaphthalene	non-SIM	--	10 U	10 U
2-Methylnaphthalene	SIM	--		
Acenaphthene	non-SIM	--	10 U	10 U
Acenaphthene	SIM	--		
Acenaphthylene	non-SIM	--	10 U	10 U
Acenaphthylene	SIM	--		
Anthracene	non-SIM	--	10 U	10 U
Anthracene	SIM	--		
Benz(a)anthracene	non-SIM	--	10 U	10 U
Benz(a)anthracene	SIM	--		
Benzo(a)pyrene	non-SIM	2.00E-01	10 U	10 U
Benzo(a)pyrene	SIM	2.00E-01		
Benzo(b)fluoranthene	non-SIM	--	10 U	10 U
Benzo(b)fluoranthene	SIM	--		
Benzo(g,h,i)perylene	non-SIM	--	10 U	10 U
Benzo(g,h,i)perylene	SIM	--		
Benzo(k)fluoranthene	non-SIM	--	10 U	10 U
Benzo(k)fluoranthene	SIM	--		
bis(2-Ethylhexyl)phthalate	non-SIM	6.00E+00	1.1 J	10 U
Butyl benzyl phthalate	non-SIM	--	10 U	10 U
Chrysene	non-SIM	--	10 U	10 U
Chrysene	SIM	--		
Dibenz(a,h)anthracene	non-SIM	--	10 U	10 U
Dibenz(a,h)anthracene	SIM	--		
Diethyl phthalate	non-SIM	--	10 U	10 U
Dimethyl phthalate	non-SIM	--	10 U	10 U
Di-N-Butyl phthalate	non-SIM	--	10 U	10 U
Di-N-Octyl phthalate	non-SIM	--	10 U	10 U
Fluoranthene	non-SIM	--	10 U	10 U
Fluoranthene	SIM	--		
Fluorene	non-SIM	--	10 U	10 U
Fluorene	SIM	--		
Hexachlorobenzene	non-SIM	1.00E+00	10 U	10 U
Hexachlorobenzene	SIM	1.00E+00		
Indeno(1,2,3-cd)pyrene	non-SIM	--	10 U	10 UJ
Indeno(1,2,3-cd)pyrene	SIM	--		
Naphthalene	non-SIM	--	5.0 U	5.0 U
Naphthalene	non-SIM	--	10 U	10 UJ
Naphthalene	SIM	--		
Nitrobenzene	non-SIM	--	10 U	10 U
Octachlorostyrene	non-SIM	--	10 U	10 U
Phenanthrene	non-SIM	--	10 U	10 U
Phenanthrene	SIM	--		

LOU 2 Table 18 (continued)
Groundwater Characterization Data - SVOC

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program			Ph A ¹	Ph A
Well No.			SA15	M5A
Sample ID	Analytic		GWSA15	M5A
Sample Date	Method		11/08/2006	12/7/2006
SVOCs			ug/L	ug/L
Pyrene	non-SIM	--	10 U	10 U
Pyrene	SIM	--		
Pyridine	non-SIM	--	20 U	20 U

Notes:

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

**LOU 2 Table 19
Soil Characteristic Data - TPH and Fuel Alcohols**

Open Area South of Trade Effluent Ponds
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	
				Soil)	1.23E+06	3.08E+05	1.00E+02	1.00E+02	1.00E+02	
Boring No.	Sample ID.	Sample Depth (ft)	Sample Date							
SA15	SA15-0.5	0.5	11/08/2006				29 U	29 U	0.12 U	Ph A ¹
SA18	SA18-0.5	0.5	11/15/2006				27 U	27 U	0.11 U	Ph A
	SA18-0.5D	0.5	11/15/2006				26 U	26 U	0.11 U	Ph A
	SA18-10	10.0	11/15/2006				27 U	27 U	0.11 U	Ph A
	SA18-20	20.0	11/15/2006				27 U	27 U	0.11 U	Ph A
	SA18-30	30.0	11/15/2006				28 U	28 U	0.11 U	Ph A

Notes:

1. 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.

(v) Nevada Administrative Code 445A.2272. Contamination of soil: Establishment of action levels. NAC 445A.2272.1.b.

**LOU 2 Table 20
Soil Characterization Data - VOCs**

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program	Ph A ¹	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.	SA 15	SA 15	SA 15	SA 15	SA 15	SA 15	SA 15	SA 18	SA 18	SA 18	SA 18	SA 18
Sample ID	SA15-0.5	SA15-10	SA15-10D	SA15-20	SA15-30	SA15-35	SA18-0.5	SA18-0.5D	SA18-10	SA18-20	SA18-30	SA18-30
Sample Depth (ft)	0.5	10	10	20	30	35	0.5	0.5	10	20	30	30
Sample Date	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006
VOCs	Industrial Soil PRG	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Naphthalene	1.88E+02	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,1,1,2-Tetrachloroethane	7.28E+00	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,1,1-Trichloroethane	6.90E+03 (mm)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,1,2,2-Tetrachloroethane	9.29E-01	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,1,2-Trichloroethane	1.61E+00	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,1-Dichloroethane	1.74E+03	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,1-Dichloroethene	4.13E+02	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,1-Dichloropropene	1.76E+00 (gg)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,2,3-Trichlorobenzene	2.16E+02 (hh)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,2,3-Trichloropropane	7.60E-02 (yy)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,2,4-Trichlorobenzene	2.16E+02	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,2,4-Trimethylbenzene	1.70E+02	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,2-Dibromo-3-chloropropane	2.02E+00	5.8 UJ	5.9 UJ	5.5 UJ	5.5 UJ	6.8 U	6.9 UJ	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,2-Dichlorobenzene	4.00E+03 (mm)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	0.31 J
1,2-Dichloroethane	6.03E-01	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,2-Dichloropropane	7.42E-01	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,3,5-Trimethylbenzene	6.97E+01	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,3-Dichlorobenzene	2.10E+03 (mm)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,3-Dichloropropane	3.61E+02	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
1,4-Dichlorobenzene	7.87E+00	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	0.76 J
2,2-Dichloropropane	7.42E-01 (ii)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
2-Butanone	1.13E+05	12 U	12 U	11 U	11 U	14 U	14 U	11 U	11 U	11 U	11 U	4.4 J
2-Chlorotoluene	5.60E+02	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
2-Hexanone	4.70E+04 (nn)	12 UJ	12 UJ	11 UJ	11 UJ	14 U	14 UJ	11 UJ	11 UJ	11 UJ	11 UJ	11 UJ
2-Methoxy-2-methyl-butane	--	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
4-Chlorotoluene	5.60E+02 (ww)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
4-Isopropyltoluene	--	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
4-Methyl-2-pentanone	4.70E+04	12 UJ	12 UJ	11 UJ	11 UJ	14 U	14 UJ	11 U	11 U	11 U	11 U	11 U
Acetone	5.43E+04	12 U	12 U	11 U	11 U	14 UJ	14 U	11 U	11 U	11 U	11 U	32
Benzene	1.41E+00	0.84 J	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	1.2 J
Bromobenzene	9.22E+01	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U

LOU 2 Table 20 (continued)
Soil Characterization Data - VOCs

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program	Ph A ¹	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.	SA 15	SA 15	SA 15	SA 15	SA 15	SA 15	SA 15	SA 18	SA 18	SA 18	SA 18	SA 18
Sample ID	SA15-0.5	SA15-10	SA15-10D	SA15-20	SA15-30	SA15-35	SA18-0.5	SA18-0.5D	SA18-10	SA18-20	SA18-30	SA18-30
Sample Depth (ft)	0.5	10	10	20	30	35	0.5	0.5	10	20	30	30
Sample Date	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006
VOCs	Industrial Soil PRG	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Bromochloromethane	1.83E+00 (qq)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Bromodichloromethane	1.83E+00	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Bromoform	2.18E+02	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Bromomethane	1.31E+01	12 U	12 U	11 U	11 U	14 UJ	14 U	11 U	11 U	11 U	11 U	11 U
Carbon tetrachloride	5.49E-01	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Chlorobenzene	5.30E+02	7.5	1.9 J	1.2 J	0.99 J	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	1.6 J
Chloroethane	6.49E+00	5.8 UJ	5.9 UJ	5.5 UJ	5.5 UJ	6.8 UJ	6.9 UJ	5.5 UJ	5.3 UJ	5.4 UJ	5.4 UJ	5.5 UJ
Chloroform	4.70E-01	2.8 J	0.59 J	0.54 J	0.35 J	8.3	4.9 J	5.5 U	5.3 U	5.4 U	0.28 J	5.5 U
Chloromethane	1.56E+02	5.8 UJ	5.9 UJ	5.5 UJ	5.5 UJ	6.8 UJ	6.9 UJ	5.5 UJ	5.3 UJ	5.4 UJ	5.4 UJ	5.5 UJ
cis-1,2-Dichloroethene	1.46E+02	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
cis-1,3-Dichloropropene	1.76E+00 (gg)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Dibromochloromethane	2.55E+00	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Dibromomethane	2.34E+02 (xx)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Dichlorodifluoromethane	3.08E+02	5.8 UJ	5.9 UJ	5.5 UJ	5.5 UJ	6.8 UJ	6.9 UJ	5.5 UJ	5.3 UJ	5.4 UJ	5.4 UJ	5.5 UJ
Ethyl t-butyl ether	--	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Ethylbenzene	7.40E+03 (mm)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Ethylene dibromide	3.64E+01 (kk)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Hexachlorobutadiene	2.21E+01	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
isopropyl ether	2.00E+03 (zz)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Isopropylbenzene	2.05E+01	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Methyl tert butyl ether	3.64E+01	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Methylene chloride	2.05E+01	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 UJ	5.3 U	5.4 U	5.4 U	5.5 U
N-Butylbenzene	2.19E+03 (mm)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
N-Propylbenzene	2.19E+03 (mm)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 UJ	5.4 UJ	5.4 UJ	5.5 UJ
sec-Butylbenzene	1.63E+03 (mm)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 UJ	5.4 UJ	5.4 UJ	5.5 UJ
Styrene	1.80E+04 (mm)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
t-Butyl alcohol	--	12 UJ	12 UJ	11 UJ	11 UJ	16 UJ	14 UJ	11 UJ	11 UJ	11 UJ	11 UJ	11 UJ
tert-Butylbenzene	1.97E+03 (mm)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Tetrachloroethene	1.31E+00	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Toluene	2.20E+03 (mm)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	0.25 J
trans-1,2-Dichloroethylene	2.35E+02	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U

**LOU 2 Table 20 (continued)
Soil Characterization Data - VOCs**

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.		SA 15	SA 15	SA 15	SA 15	SA 15	SA 15	SA 18	SA 18	SA 18	SA 18	SA 18
Sample ID		SA15-0.5	SA15-10	SA15-10D	SA15-20	SA15-30	SA15-35	SA18-0.5	SA18-0.5D	SA18-10	SA18-20	SA18-30
Sample Depth (ft)		0.5	10	10	20	30	35	0.5	0.5	10	20	30
Sample Date		11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/08/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006	11/15/2006
VOCs	Industrial Soil PRG	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
trans-1,3-Dichloropropene	1.76E+00 (gg)	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Trichloroethene	1.15E-01	5.8 U	5.9 U	5.5 U	5.5 U	6.8 UJ	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Trichlorofluoromethane	1.28E+03 (mm)	5.8 UJ	5.9 UJ	5.5 UJ	5.5 UJ	6.8 UJ	6.9 UJ	5.5 UJ	5.3 UJ	5.4 UJ	5.4 UJ	5.5 UJ
Vinylchloride	7.46E-01	5.8 U	5.9 U	5.5 U	5.5 U	6.8 U	6.9 U	5.5 U	5.3 U	5.4 U	5.4 U	5.5 U
Xylene (Total)	9.00E+02 (mm)	12 U	12 U	11 U	11 U	14 UJ	14 U	11 U	11 U	11 U	11 U	11 U

Notes:

1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
 (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.
 (kk) Value for methyl tertbutyl ether (MTBE) used as surrogate for ethyl-tert-butyl ether (ETBE) based on structural similarities.
 (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.
 (nn) Value for methyl isobutyl ketone used as surrogate for 2-hexanone based on structural similarities.
 (qq) Value for bromodichloromethane used as surrogate for bromochloromethane due to structural similarities.
 (ww) Value for 2-chlorotoluene used as surrogate for 4-chlorotoluene based on structural similarities.
 (xx) Value for methylene bromide used as surrogate for dibromomethane based on structural similarities.
 (zz) Isopropyl benzene is listed as cumene (isopropylbenzene) in the PRG table.

**LOU 2 Table 21
Groundwater Characteristic Data - VOCs**

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	Ph A
Well ID		GWSA15	M5A
Sample ID		GWSA15	M5A
Sample Date		11/08/2006	12/07/2006
VOCs	MCL (USEPA values unless noted)	ug/L	ug/L
Naphthalene	6.20E+00 3	5.0 U	5.0 U
1,1,1,2-Tetrachloroethane	4.32E-01 3	5.0 U	5.0 U
1,1,1-Trichloroethane	3.17E+03 3	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	5.53E-02 3	5.0 U	5.0 U
1,1,2-Trichloroethane	5.00E+00	5.0 U	5.0 U
1,1-Dichloroethane	8.11E+02 3	5.0 U	5.0 U
1,1-Dichloroethene	7.00E+00	5.0 U	5.0 U
1,1-Dichloropropene	3.95E-01 (gg)3	5.0 U	5.0 U
1,2,3-Trichlorobenzene	7.16E+00 (hh)3	5.0 U	5.0 U
1,2,3-Trichloropropane	5.60E-03 (yy)3	5.0 U	5.0 U
1,2,4-Trichlorobenzene	7.00E+01	5.0 U	5.0 U
1,2,4-Trimethylbenzene	1.23E+01 3	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	2.00E-01	5.0 U	5.0 UJ
1,2-Dichlorobenzene	6.00E+02	5.0 U	0.72 J+
1,2-Dichloroethane	5.00E+00	5.0 U	5.0 UJ
1,2-Dichloropropane	5.00E+00	5.0 U	5.0 U
1,3,5-Trimethylbenzene	1.23E+01 3	5.0 U	5.0 U
1,3-Dichlorobenzene	1.83E+02 3	5.0 U	5.0 U
1,3-Dichloropropane	1.22E+02 3	5.0 U	5.0 U
1,4-Dichlorobenzene	5.02E-01 3	5.0 U	1.2 J+
2,2-Dichloropropane	1.65E-01 (ii)3	5.0 U	5.0 U
2-Butanone	6.97E+03 3	10 U	10 U
2-Chlorotoluene	1.22E+02 3	5.0 U	5.0 U
2-Hexanone	2.00E+03 (nn)3	10 UJ	10 U
2-Methoxy-2-methyl-butane	--	5.0 U	5.0 U
4-Chlorotoluene	1.22E+02 (ww)3	5.0 U	5.0 U
4-Isopropyltoluene	--	5.0 U	5.0 U
4-Methyl-2-pentanone	1.99E+03 3	10 U	10 UJ
Acetone	5.48E+03	10 U	10 UJ
Benzene	5.00E+00	5.0 U	0.64 J+
Bromobenzene	2.03E+01	5.0 U	5.0 U
Bromochloromethane	1.81E-01 (qq)3	5.0 U	5.0 U
Bromodichloromethane	8.00E+01 (r)	5.0 U	5.0 U
Bromoform	8.00E+01 (r)	5.0 U	5.0 U
Bromomethane	8.66E+00 3	10 U	10 UJ
Carbon tetrachloride	5.00E+00	5.0 U	5.0 U
Chlorobenzene	1.00E+02 (o)	5.0 U	100 J+
Chloroethane	4.64E+00 3	5.0 UJ	5.0 U
Chloroform	8.00E+01 (r)	41	5.0 U
Chloromethane	1.58E+02 3	5.0 UJ	5.0 U
cis-1,2-Dichloroethene	7.00E+01	5.0 U	5.0 U
cis-1,3-Dichloropropene	3.95E-01 (gg)3	5.0 U	5.0 U
Dibromochloromethane	8.00E+01 (r)	5.0 U	5.0 U
Dibromomethane	6.08E+01 (xx)3	5.0 U	5.0 U

**LOU 2 Table 21 (continued)
Groundwater Characteristic Data - VOCs**

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Sampling Program	MCL (USEPA values unless noted)	Ph A ¹	Ph A
Well ID		GWSA15	M5A
Sample ID		GWSA15	M5A
Sample Date		11/08/2006	12/07/2006
VOCs		ug/L	ug/L
Dichlorodifluoromethane	3.95E+02 (c)	5.0 UJ	5.0 U
Ethyl t-butyl ether	1.10E+01 (kk),(c)	5.0 U	5.0 U
Ethylbenzene	7.00E+02	5.0 U	5.0 U
Ethylene dibromide	--	5.0 U	5.0 U
Hexachlorobutadiene	8.62E-01 (c)	5.0 U	5.0 U
isopropyl ether	--	5.0 U	5.0 U
Isopropylbenzene	6.58E+02 (zz)3	5.0 U	5.0 U
Methyl tert butyl ether	2.00E+01 (uu)2	5.0 U	5.0 U
Methylene chloride	5.00E+00	5.0 U	5.0 U
N-Butylbenzene	2.43E+02 (c)	5.0 U	5.0 U
N-Propylbenzene	2.43E+02 (c)	5.0 U	5.0 U
sec-Butylbenzene	2.43E+02 (c)	5.0 U	5.0 U
Styrene	1.00E+02	5.0 U	5.0 U
t-Butyl alcohol	--	10 UJ	10.0 UJ
tert-Butylbenzene	2.43E+02 (c)	5.0 U	5.0 U
Tetrachloroethene	5.00E+00	5.0 U	5.0 U
Toluene	1.00E+03	5 U	5.0 U
trans-1,2-Dichloroethylene	1.00E+02	5.0 U	5.0 U
trans-1,3-Dichloropropene	3.95E-01 (c)	5.0 U	5.0 U
Trichloroethene	5.00E+00	5.0 U	5.0 U
Trichlorofluoromethane	1.29E+03 (c)	5.0 UJ	5.0 U
Vinylchloride	2.00E+00	5.0 U	5.0 U
Xylene (Total)	1.00E+04	10 U	10 U

Notes:

1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
 - (a) TW PRG
 - (c) Selected Regulatory Level
 - (b) USEPA, 2006. 2006 Edition of the Drinking Water Standards and Health Advisories. EPA 822-R-06-013. August 2006.
 - (o) See footnote (b). Listed under synonym monochlorobenzene.
 - (r) Value for total trihalomethanes.
 - (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.
 - (kk) Value for methyl tertbutyl ether (MTBE) used as surrogate for ethyl-tert-butyl ether (ETBE) based on structural similarities.
 - (nn) Value for methyl isobutyl ketone used as surrogate for 2-hexanone based on structural similarities.
 - (qq) Value for bromodichloromethane used as surrogate for bromochloromethane due to structural similarities.
 - (uu) NDEP, 1998. Oxygenated Fuel Corrective Action Guidance. Draft. October, 12 1998. URL [http://ndep.nv.gov/bca/mtbe_doc.htm].
 - (ww) Value for 2-chlorotoluene used as surrogate for 4-chlorotoluene based on structural similarities.
 - (xx) Value for methylene bromide used as surrogate for dibromomethane 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.
 - (zz) Isopropyl benzene is listed as cumene (isopropylbenzene) in the PRG table.

LOU 2 Table 22
Soil Characterization Data - Long Asbestos Fibers in Respirable Soil Fraction

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

			Long Amphibole Protocol Structures	Long Chrysotile Protocol Structures	Sampling Program
No.	Sample ID	Sample Date	s/gPM10	s/gPM10	
SA15	SA15	12/08/2006	5990000	5990000	Ph A ¹
SA18	SA18	12/03/2006	2995000 U	5990000	Ph A
SA18D	SA18D	12/02/2006	2989000 U	5980000	Ph A

Notes:

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

LOU 2 Table 23
 Summary of Analytical Data for LOU # 2
 Open Area South of Trade Effluent Ponds
 Tronox Facility - Henderson, Nevada

Boring Number	Sample Date	Sample Depth (ft bgs)	Metals EPA Method 6010 (mg/kg)															pH (Method 9045)
			As	Industrial Soil PRG	Ba	Industrial Soil PRG	Cd	Industrial Soil PRG	Total Cr	Pb	Industrial Soil PRG	Hg	Industrial Soil PRG	Se	Industrial Soil PRG	Ag	Industrial Soil PRG	
SB1-1	4/9/1997	-1	3.2 ¹	1.59E+00	173 ¹	6.66E+04	<0.4	4.50E+02	11.4	8	8.00E+02	<0.1	3.10E+02	<0.8	5.11E+03	<0.4	5.11E+03	8.9
		-5	4.4 ¹	1.59E+00	131 ¹	6.66E+04	<0.4	4.50E+02	9.9	5.1	8.00E+02	<0.1	3.10E+02	<0.8	5.11E+03	<0.4	5.11E+03	8.6
		-10	5.1 ¹	1.59E+00	183	6.66E+04	<0.4	4.50E+02	13.6	8.7	8.00E+02	<0.1	3.10E+02	<0.8	5.11E+03	<0.4	5.11E+03	8.2
SB1-2	4/9/1997	-10 D	5.16	1.59E+00	193	6.66E+04	<0.4	4.50E+02	14.2	8.23	8.00E+02	<0.1	3.10E+02	<0.8	5.11E+03	<0.4	5.11E+03	ND
		-1	3.9	1.59E+00	180	6.66E+04	<0.4	4.50E+02	11	9.7	8.00E+02	<0.1	3.10E+02	<0.9	5.11E+03	<0.4	5.11E+03	8.2
		-5	4.1	1.59E+00	286	6.66E+04	<0.4	4.50E+02	12.8	9	8.00E+02	<0.1	3.10E+02	<0.9	5.11E+03	<0.4	5.11E+03	8.3
		-10	5	1.59E+00	198	6.66E+04	<0.4	4.50E+02	11.8	8	8.00E+02	<0.1	3.10E+02	<0.8	5.11E+03	<0.4	5.11E+03	8.7

Notes:

ft bgs = feet below ground surface

As = Arsenic

Ba = Barium

Cd = Cadmium

Cr = Chromium

Pb = Lead

Hg = Mercury

Se = Selenium

Ag = Silver

< = not detected above the designated method detection limit

B = Reported value is less than the contract-required detection limit but greater than or equal to the instrument detection limit.

¹ = Relative percent difference (RPD) exceeded acceptable quality control limits.

D = Duplicate

LOU = Letter of Understanding

ND = Not determined

Data from ENSR, 1997, Phase II ECA.

**LOU 2 Table 24
Groundwater Characterization Data - Perchlorate**

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

Well Name	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date
	1/13/00	2/2/01	2/25/02	2/19/03	2/3/04	2/18/05	2/2/06	3/20/06	1/17-18/07
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MCL (USEPA values unless noted)									
	1.80E+01	1.80E+01	1.80E+01	1.80E+01	1.80E+01	1.80E+01	1.80E+01	1.80E+01	1.80E+01
	(m)2	(m)2	(m)2	(m)2	(m)2	(m)2	(m)2	(m)2	(m)2
TR-1	<5	14	14	<4	<4	<4	<4	<4	<4

Notes:

ClO₄ by IC by Montgomery-Watson Laboratories

* = as reported

2.Nevada Secondary MCL

(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 2 Table 25
Groundwater Characterization Data - Routine Monitoring**

Open Area South of Trade Effluent Ponds
Tronox Facility - Henderson, Nevada

WELL #	Sample Date	Total Depth (ft bgs)	Depth to Water (ft TOC)	Mn (ppm)	pH (Lab)	EC (Lab, μ mho/cm)	Cr ⁺⁶ (ppm)	Cr-total (ppm)	ClO ₄ (ppm)	LAB
TR-2	10/7/99	180.00	28.00	0.14	7.5	4,080	--	--	<0.004	MW

Notes:

μ mho/cm = micromhos per centimeter

ppm = parts per million

ft bgs = feet below ground surface

ft TOC = feet from Top of Casing

ND = Not determined

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

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

Labs:

AP

KMC Kerr-McGee Corporation

KMCLLC Kerr-McGee Corporation, LLC

KMG Kerr-McGee

LAS

MW Montgomery Watson

NEL Nevada Environmental Laboratory

SNWA Southern Nevada Water Authority

WECK

Well Data From: Kerr-McGee Chemical LLC Company, Mother-hen Database.

Notes for Phase A Data Tables

Open Area South of Trade Effluent Ponds Tronox Facility - Henderson, Nevada

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