Summary of Available Data for LOU 29 Solid Waste Dumpsters

Tronox Facility – Henderson, Nevada

Name of Facility:

LOU 29 – Solid Waste Dumpsters

Goal of Closure:

- Continuation of current use – regulatory closure not presently requested.

Site Investigation Area:

- Size: Approximately 220 feet by 70 feet (0.35 acre).
- Location: Approximately 200 feet south of the Unit 4 Building.
- Current Status/Features: LOU 29 includes open-top solid waste dumpsters and is currently active.

Description:

- LOU 29 has been operational since February 1980 and is currently active [Ref. 1].
- The solid waste is stored in open-top metal dumpsters that are located on sloped concrete surfaces separated by areas of gravel-covered soil [Ref. 1].
- The elevated side ramp for the scrap steel container was constructed in 1984 [Ref. 1].
- LOU 29 is used as a trash and scrap metal collection area for the following types of waste [Ref. 1]:
  - recyclable scrap steel (western area);
  - paper trash (central area); and
  - recyclable stainless steel and non-ferrous metals (eastern area).
- Paper trash is periodically wetted to prevent wind dispersion and to reduce fire hazard [Ref. 1].
- Some of the paper waste could have been potentially contaminated with residual amounts of chlorates or perchlorates from plant operations (e.g., paper towels from sodium chlorate process operations) [Ref. 1].
- Scrap metals are washed prior to disposal in dumpsters at the point of origination. The hazardous waste chemical constituent concentrations, and the migration and dispersal potential of the constituents associated with the scrap metal are low [Ref. 1].
- Wastes disposed of at LOU 29 were classified as non-hazardous [Ref. 1].
- No asbestos-containing materials were disposed of in the solid waste dumpsters in LOU 29 [Ref. 2].
- Observations during the 1991 inspection indicated good housekeeping and management practices [Ref. 1].

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Tronox Facility – Henderson, Nevada

Process Waste Streams Associated with LOU 29	Known or Potential Chemicals Associated with LOU 29
Washed metal scrap materials	• Metals
Trace amounts of chlorates or perchlorates on paper wastes	• Perchlorate • Wet chemistry analytes

Overlapping or Adjacent LOUs:

The following LOUs overlap or are adjacent to LOU 29:

Overlapping LOUs

- No LOUs overlap LOU 29.

Adjacent LOUs

- LOUs 43 (Unit 4 Basement and Old Sodium Chlorate Plant Decommissioning) and 61 (Unit 5 Basement) – Located north (downgradient) of LOU 29.
- LOU 59 (Storm Sewer System) – Located north (downgradient) of LOU 29.

LOUs 43, 59, and 61 are downgradient of LOU 29 and therefore they are not considered to affect LOU 29. Additionally, LOUs 43, 54, and 61 contained the same metal, perchlorate and wet chemistry constituents; therefore, the addition of other chemical classes to the Phase B Analytical Plan for LOU 29 is not required.

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

LOUs Potentially Affecting Soils in LOU 29:

- None (see above)

Known or Potential Chemical Classes:

- Metals
- Perchlorate
- Wet chemistry analytes

Known or Potential Release Mechanisms:

- No known releases were documented for this LOU [Ref 1].
- Potential infiltration to subsurface soil and groundwater.
- Potential windblown waste paper contaminated with trace amounts of perchlorate.

Summary of Available Data for LOU 29 Solid Waste Dumpsters

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Results of Historical Sampling:

- No known historical sampling was identified in the documents reviewed for LOU 29.

Groundwater

- The nearest monitoring wells M-10 (about 350 feet upgradient) and M-11 and M-12A (about 550 feet downgradient) are routinely tested for hexavalent chromium, perchlorate, total dissolved solids, nitrate, and chlorate as part of a routine groundwater monitoring program. LOU 29 Table 10 – Groundwater Characterization Data – Routine Monitoring (see attached) presents a summary of historical analytical results.

Did Historical Samples Address Potential Release?

- No

Summary of Phase A SAI:

Soil

- No soil borings were specifically conducted for LOU 29. The closest boring (SA05) is approximately 675 feet northeast (downgradient) and was not sampled to evaluate LOU 29 [Ref. 3]. This boring is not considered to be representative of conditions at LOU 29.

Groundwater

- None specifically conducted for LOU 29. The closest downgradient wells sampled (M-11 and M-12A) are approximately 550 feet to the north and were not sampled to evaluate this LOU [Ref. 3].
- Analytical results for soil and groundwater from the Phase A sampling event are summarized in the LOU 29 Tables 1 through 9 [Ref. 3] (see attached).

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

- No

Is Phase B Investigation Recommended?

- Yes

Proposed Phase B Soil Investigation/Rationale:

The Phase B investigation for LOU 29 consists of collecting soil samples from two (2) locations:

  - Two (2) soil borings will be drilled within the boundary of LOU 29.
  - Both borings, along with the analytical program to evaluate soil samples from LOU 29, are listed on **Table A – Soil Sampling and Analytical Plan for LOU 29**.

- Soil sample locations consist of only judgmental locations. The closest random grid sample (RSAR7) is approximately 150 feet upgradient of LOU 29.

Summary of Available Data for LOU 29 Solid Waste Dumpsters

Tronox Facility – Henderson, Nevada

- Judgmental sample locations:
  - Designed to evaluate soil for known or potential chemical classes associated with LOUs, based on the known process waste streams.
  - Both (2) of the sample locations are judgmental locations and include soil borings SA122 and SA170.

Proposed Phase B Constituents List for Soils:

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

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

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

- Hexavalent Chromium
- VOCs
- Organochlorine pesticides
- Dioxins/furans
- Radionuclides
- Asbestos

Proposed Phase B Groundwater Investigation/Rationale:

The Phase B groundwater investigation of LOU 29 consists of collecting groundwater samples from four (4) locations to evaluate local groundwater conditions and as part of Site-wide evaluation of constituent trends in groundwater. However, Units 4 and 5 located downgradient of LOU 29 are known major sources of groundwater contaminants; therefore, any contributions from LOU 29 would be indistinguishable in these wells. Perchlorate and other groundwater constituents will be handled on a Site-wide basis.

- Well M-10 is located south (upgradient) of LOU 29 will be used to evaluate local and area-wide groundwater.
- Well M-11 and M-12A located north-northeast and north (downgradient) of LOU 29 will be used to evaluate local and area-wide groundwater.
- Well M-122 is located northeast (downgradient) of LOU 29 will be used to evaluate local and area-wide groundwater.
- The sampling wells and the analytical program to evaluate groundwater samples associated with LOU 29 are listed on **Table B – Groundwater Sampling and Analytical Plan for LOU 29**.

Summary of Available Data for LOU 29 Solid Waste Dumpsters

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:

- No soil gas samples are proposed specifically for LOU 29.

References:

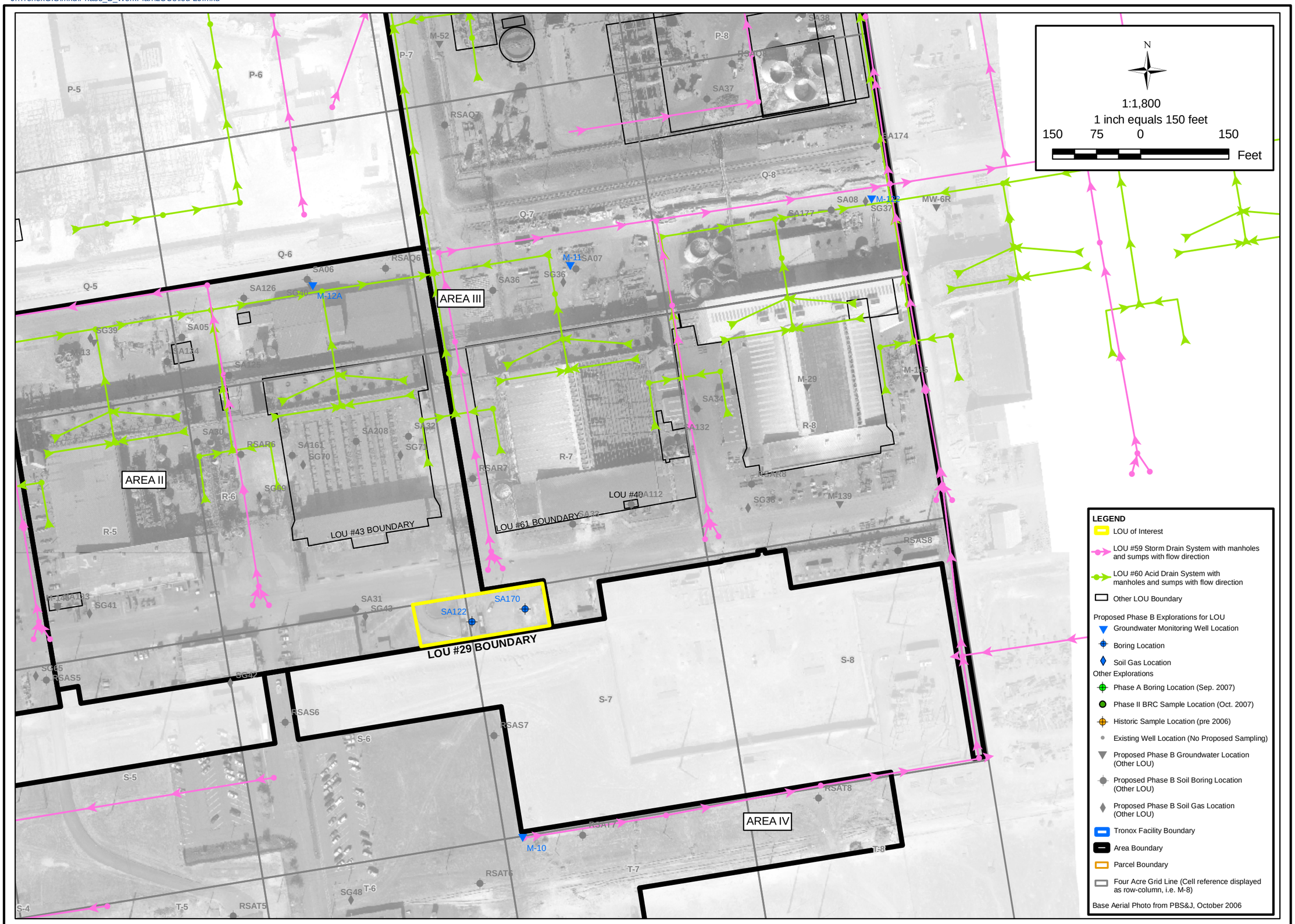
1. Kleinfelder, 1993, Environmental Conditions Assessment, Kerr-McGee Chemical Corporation, Henderson, Nevada Facility, April 15, 1993 (Final).
2. Tronox, 2008. Verbal communication. Crowley, Susan, January 17.
3. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.

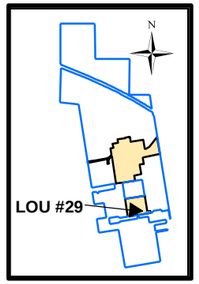
Summary of Available Data for LOU 29 Solid Waste Dumpsters

Tronox Facility – Henderson, Nevada

LOU Figure

J:\TronoxGIS\mxd\Phase_B_WorkPlan\LOUs\lou-29.mxd





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SAMPLE LOCATIONS FOR LOU #29
SOLID WASTE DUMPSTERS
Phase B Area II Source Area Investigation
Tronox Facility
Henderson, Nevada

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

FIGURE NUMBER:
1

SHEET NUMBER:
X

Summary of Available Data for LOU 29 Solid Waste Dumpsters

Tronox Facility – Henderson, Nevada

Sampling and Analytical Plans for LOU 29

Table A – Soil Sampling and Analytical Plan for LOU 29
Table B – Groundwater Sampling and Analytical Plan for LOU 29

Table A
Soil Sampling and Analytical Plan for LOU 29 in Area II
Phase B Source Area Investigation Work Plan
Tronox Facility - Henderson, Nevada

Grid Location	LOU Number	Phase B Boring No.	Sample ID Number	Sample Depths[1.] (ft. bgs)	Perchlorate (EPA 314.0)	Metals (EPA 6020)	Hex Cr (EPA 7199)	TPH-DRO/ORO (EPA 8015B)	TPH-GRO (EPA 8015B)	VOCs[2.] (EPA 8260B)	Wet Chemistry[3.]	Total Cyanide (EPA 9012A)	OCPs[4.] (EPA 8081A)	SVOCs[5.] (EPA 8270C)	Radio-nuclides[6.]	Dioxins/ Furans[7.]	Asbestos[9.] EPA/540/R-97/028	Geo-technical Tests[10.]	Rationale
Borings are organized by grid location as shown on Plate A - Starting point is on the northwestern most grid in Area 2 (M-2) and ending with the southeastern most grid in Area 2 (S-7).																			
S-7	29	SA122	SA122-0.0	0.0													X		Boring located to evaluate LOU 29 (Solid Waste Dumpsters). Located within the footprint of LOU 29 at a
S-7	29		SA122-0.5	0.5	X	X	X			X	X		X		X	X			between the two active dumpsters.
S-7	29		SA122-10	10	X	X	X			X	X		X		X				
S-7	29	SA170	SA170-0.0	0.0													X		Boring located to evaluate LOU 29 (Solid Waste Dumpsters). Located within the footprint of LOU 29 at a
S-7	29		SA170-0.5	0.5	X	X	X			X	X		X		X	X			stained area to evaluate visible surface release area.
S-7	29		SA170-10	10	X	X	X			X	X		X		X				
Number of Samples:					**4**	**4**	**4**	**0**	**0**	**4**	**4**	**0**	**4**	**0**	**4**	**2**	**2**	**0**	

Notes:

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

Table B
Groundwater Sampling And Analysis Plan for LOU 29 in Area II
Phase B Source Area Investigation Work Plan
Tronox Facility - Henderson Nevada

Grid Location	Location Area	Monitoring Well No.	Screen Interval (ft bgs)	Soil Type Expected Across Screen Interval[1]	Well Sampled for Phase A? (y/n)	Perchlorate (EPA 314.0)	Hex Cr (EPA 7199)	Metals	VOCs[2] (EPA 8260)	Wet Chemistry (a)	OCPs[3] (EPA 8081A)	SVOCs[4] (EPA 8270C)	Radionuclides[5]	Rationale
Wells are organized by grid location as shown on Plate A - Starting point is on the northwestern-most grid in Area II (L-4) and ending with the southeastern-most grid covering Area II (S-7).														
Q6	II	M-12A	28 48	MCfg1	yes	X	X	X	X	X	X	X	X	Located as a downgradient stepout for LOUs 12, 15, 29, 36, 43, 59 and 60; and for general Site coverage.
Q7	IIN	M-11	33.3 - 53	Qal/MCfg1	yes	X	X	X	X	X	X	X	X	Located to serve as a downgradient stepout for LOUs 29 and 43; and for general Site coverage.
T7	IIS	M-10	43 - 63	MCcg1	no	X	X	X	X	X	X	X	X	Located to serve as an upgradient stepout for LOUs 29, 43 and segments of LOU 60 in Area II; and for general Site coverage.
				Number of Field Samples:		**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	

Notes:

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

Summary of Available Data for LOU 29 Solid Waste Dumpsters

Tronox Facility – Henderson, Nevada

Soil and Groundwater Characterization Data

Summary of Available Data for LOU 29 Solid Waste Dumpsters

Tronox Facility – Henderson, Nevada

LOU-specific analytes identified include:

- Metals (Phase A list)
- Hexavalent chromium
- Perchlorate
- Wet chemistry analytes
- VOCs
- SVOCs
- TPH-DRO
- PCBs

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

LOU 29 Table 1 – Groundwater Characterization Data – Wet Chemistry
LOU 29 Table 2 – Groundwater Characterization Data – Metals
LOU 29 Table 3 – Groundwater Characterization Data – Organochlorine Pesticides (OCPs)
LOU 29 Table 4 –Groundwater Characterization Data – Organophosphorus Pesticides (OPPs)
LOU 29 Table 5 –Groundwater Characterization Data – PCBs
LOU 29 Table 6 – Groundwater Characterization Data – Perchlorate
LOU 29 Table 7 – Groundwater Characterization Data – Radionuclides
LOU 29 Table 8 – Groundwater Characterization Data – SVOCs
LOU 29 Table 9 – Groundwater Characterization Data – VOCs
LOU 29 Table 10 – Groundwater Characterization Data – Routine Monitoring
Notes for Phase A Data Tables are presented at the end of the tables.

LOU 29 Table 1
Groundwater Characterization Data - Wet Chemistry

Solid Waste Dumpsters
Tronox Facility - Henderson, Nevada

Sampling Program			Ph A[1]	Ph A
Well ID			M-11	M-12A
Sample ID			M-11	M-12A
Sample Date			12/06/2006	12/05/2006
Wet Chemistry Parameters	**MCL[2] mg/L**	**Units**		
Total Dissolved Solids	5.00E+02 j	mg/L	**3270**	**8170**
Total Suspended Solids	--	mg/L	**15.0 J**	**57.0 J**
Alkalinity (as CaCO3)	--	mg/L	5.0 U	5.0 U
Bicarbonate	--	mg/L	**205**	**381**
Total Alkalinity	--	mg/L	**205**	**381**
Ammonia (as N)	--	ug/L	50.0 U	50.0 U
MBAS	--	mg/L	**0.20**	**0.41**
Cyanide	2.00E-01	ug/L	R	R
pH (liquid)	--	none	**7.7 J**	**7.8 J**
Specific Conductance	--	umhos/cm	**2360 J+**	**3660 J+**
Bromide	--	mg/L	25.0 U	25.0 U
Chlorate	--	mg/L	**421**	**2370**
Chloride	2.50E+02	mg/L	**239**	**1030**
Nitrate (as N)	1.00E+01	mg/L	**3.4**	**15.2**
Nitrite	1.00E+00	mg/L	**3.1**	10.0 U
ortho-Phosphate	--	mg/L	5.0 U	500 U
Sulfate	2.50E+02 j	mg/L	**1290**	**1510**
Total Organic Carbon	--	mg/L	50 U	50.0 U

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

LOU 29 Table 2
Groundwater Characterization Data - Metals

Solid Waste Dumpsters
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	
Well ID:		M-11	M-11	
Sample ID		M-11	M-12A	
Sample Date		05/11/2007	05/11/2007	
Metals	**MCL[2] ug/L**			**Unit**
Aluminum	5.00E+01 j	393 U	786 U	ug/L
Antimony	6.00E+00	25.0 U	50.0 U	ug/L
Arsenic	1.00E+01	**328**	**700**	ug/L
Barium	2.00E+03	15.2 U	24.7 U	ug/L
Beryllium	4.00E+00	4.4 U	8.8 U	ug/L
Boron	7.30E+03	**10400**	3340 U	ug/L
Cadmium	5.00E+00	2.9 U	5.7 U	ug/L
Calcium	--	**50200**	**50100**	ug/L
Chromium (Total)	1.00E+02	**3130**	**12800**	ug/L
Chromium-hexaval	1.09E+02	**2510 J**	**14000**	ug/L
Cobalt	7.30E+02	15.7 U	31.3 U	ug/L
Copper	1.30E+03 p	12.5 U	25.0 U	ug/L
Iron	3.00E+02 j	**6310 J-**	940 UJ	ug/L
Lead	1.50E+01 u	24.6 U	49.2 U	ug/L
Magnesium	1.50E+05 a	**39300**	**19000**	ug/L
Manganese	5.00E+01 j	173 U	140 U	ug/L
Molybdenum	1.82E+02	25.0 U	**51.1 J**	ug/L
Nickel	7.30E+02	25.8 U	51.7 U	ug/L
Platinum	--	5.0 U	10.0 U	ug/L
Potassium	--	**19900**	**44400**	ug/L
Selenium	5.00E+01	50.0 U	100 U	ug/L
Silver	1.00E+02 j	10.1 U	20.3 U	ug/L
Sodium	--	**953000**	**2330000**	ug/L
Strontium	2.19E+04	**1300**	**1620**	ug/L
Thallium	2.00E+00	16.0 U	32.0 U	ug/L
Tin	2.19E+04	10.0 U	20.0 U	ug/L
Titanium	1.46E+05	19.6 U	39.1 U	ug/L
Tungsten	--	25.0 U	50.0 U	ug/L
Uranium	3.00E+01	**15.0 J**	**39.4 J**	ug/L
Vanadium	3.65E+01	**121 J**	160 UJ	ug/L
Zinc	5.00E+03 j	50.0 U	100 U	ug/L
Mercury	2.00E+00	0.11 U	0.093 U	ug/L

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility - Henderson, Nevada, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(j) Secondary Drinking Water Regulation value.
(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 29 Table 3
Groundwater Characterization Data - Organochlorine Pesticides (OCPs)

Solid Waste Dumpsters
Tronox Facility - Henderson, Nevada

		Sampling Program	Ph A[1]	Ph A
		Well ID	M-11	M-12A
		Sample ID	M-11	M-12A
		Sample Date	12/06/2006	12/05/2006
Organochlorine Pesticides	**MCL[2] ug/L**		ug/L	ug/L
4,4'-DDD	2.80E-01		0.050 U	0.050 U
4,4'-DDE	1.98E-01		0.050 U	0.050 U
4,4'-DDT	1.98E-01		0.050 U	0.050 U
Aldrin	4.00E-03		0.050 U	0.050 U
Alpha-BHC	1.10E-02		0.050 U	0.050 U
Alpha-chlordane	2.00E+00	(l)	0.050 U	0.050 U
Beta-BHC	3.74E-02		0.050 U	0.050 U
Delta-BHC	1.10E-02	(z)	0.050 U	0.050 U
Dieldrin	4.20E-03	(z)	0.050 U	0.050 U
Endosulfan I	2.19E+02	(aa)	0.050 U	0.050 U
Endosulfan II	2.19E+02	(aa)	0.050 U	0.050 U
Endosulfan Sulfate	2.19E+02	(aa)	0.050 U	0.050 U
Endrin	2.00E+00		0.050 U	0.050 U
Endrin Aldehyde	1.09E+01	(k)	0.050 U	0.050 U
Endrin Ketone	1.09E+01	(k)	0.050 U	0.050 U
Gamma-BHC (Lindane)	2.00E-01		0.050 U	0.050 U
Gamma-Chlordane	2.00E+00	(l)	0.050 U	0.050 U
Heptachlor	4.00E-01		0.050 U	0.050 U
Heptachlor Epoxide	2.00E-01		0.050 U	0.050 U
Methoxychlor	4.00E+01		0.10 U	0.10 U
Tech-Chlordane	2.00E+00	(l)	0.50 U	0.50 U
Toxaphene	3.00E+00		2.0 U	2.0 U

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

LOU 29 Table 4
Groundwater Characterization Data - Organophosphorus Pesticides (OPPs)

Solid Waste Dumpsters
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A[1]	Ph A
	Well ID	M-11	M-12A
	Sample ID	M-11	M-12A
	Sample Date	12/06/2006	12/05/2006
OPPs	**MCL[2] ug/L**	ug/L	ug/L
Azinphos-methyl	--	2.5 U	2.5 U
Bolstar	--	1.0 U	1.0 U
Chlorpyrifos	1.09E+02	1.0 U	1.0 U
Coumaphos	--	1.0 U	1.0 U
Demeton-O	1.46E+00 (cc)	1.0 U	1.0 U
Demeton-S	1.46E+00 (cc)	1.0 U	1.0 UJ
Diazinon	3.28E+01	1.0 U	1.0 U
Dichlorvos	2.32E-01	1.0 U	1.0 U
Dimethoate	7.30E+00	1.0 U	1.0 U
Disulfoton	1.46E+00	0.50 U	0.50 U
EPN	3.65E-01	1.2 U	1.2 U
Ethoprop	--	0.50 U	0.50 U
Ethyl Parathion	9.12E+00 (tt)	1.0 U	1.0 U
Famphur	--	1.0 U	1.0 U
Fensulfothion	--	2.5 U	2.5 U
Fenthion	9.10E+00 (ff)	2.5 U	2.5 U
Malathion	7.30E+02	1.2 U	1.2 U
Merphos	1.09E+00	5.0 U	5.0 U
Methyl parathion	9.12E+00	4.0 U	4.0 U
Mevinphos	--	6.2 U	6.2 U
Naled	7.30E+01	1.0 U	1.0 UJ
Phorate	7.30E+00	1.2 U	1.2 UJ
Ronnel	1.82E+03	10 U	10 U
Stirphos	--	3.5 U	3.5 U
Sulfotep	1.82E+01	1.5 U	1.5 U
Thionazin	--	1.0 U	1.0 U
Tokuthion	--	1.6 U	1.6 U
Trichloronate	--	0.50 U	0.50 U

Notes
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(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 29 Table 5
Groundwater Characterization Data-PCBs

Solid Waste Dumpsters
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	
Boring ID		M-11	M-12A	
Sample ID		M-11	M-12A	
Sample Date		12/06/2006	12/05/2006	
PCBs	**MCL[2] ug/L**			**Unit**
Aroclor-1016	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1221	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1232	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1242	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1248	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1254	5.00E-01 (bb)	0.10 U	0.10 U	ug/L
Aroclor-1260	5.00E-01 (bb)	0.10 U	0.10 U	ug/L

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

LOU 29 Table 6
Groundwater Characterization Data-Perchlorate

Solid Waste Dumpsters
Tronox Facility - Henderson, Nevada

Well ID Number	Sample ID	Sample Date	Perchlorate	Units	MCL[1] ug/L	Sampling Program
M-11	M-11	12/06/2006	**32500 J+**	ug/L	1.80E+01 a,(m)	Ph A[2]
M-12A	M-12A	12/05/2006	**323000 J+**	ug/L	1.80E+01 a,(m)	Ph A

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 29 Table 7
Groundwater Characterization Data - Radionuclides

Solid Waste Dumpsters
Tronox Facility - Henderson, Nevada

			Ra-226	**Ra-228**	**Th-228**	**Th-230**	**Th-232**	**U-233/234**	**U-235/236**	**U-238**	
			pCi/L	pCi/L	pCi/L	pCi/L	pCi/L	pCi/L	pCi/L	pCi/L	
Well ID Number	**Sample ID**	**Date**									**Sampling Program**
M-11	M-11-Z	05/11/2007	0.332 U	**1.23 B**							Ph A[1]
M-12A	M-12A-Z	05/11/2007	**0.601 J**	**1.45**							

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

LOU 29 Table 8
Groundwater Characterization Data - SVOCs

Solid Waste Dumpsters
Tronox Facility - Henderson, Nevada

			Sampling Program	Ph A[1]	Ph A
			Well No.	M-11	M-12A
			Sample ID	M-11	M-12A
			Sample Date	12/06/2006	12/05/2006
SVOCs		**MCL[2] ug/L**		ug/L	ug/L
1,4-Dioxane	non-SIM	6.11E+00		10 U	10 U
2-Methylnaphthalene	non-SIM	6.20E+00	(jj)	10 U	10 U
2-Methylnaphthalene	SIM	6.20E+00	(jj)		
Acenaphthene	non-SIM	3.65E+02		10 U	10 U
Acenaphthene	SIM	3.65E+02			
Acenaphthylene	non-SIM	3.65E+02	(pp)	10 U	10 U
Acenaphthylene	SIM	3.65E+02	(pp)		
Anthracene	non-SIM	1.83E+03		10 U	10 U
Anthracene	SIM	1.83E+03			
Benz(a)anthracene	non-SIM	9.21E-02		10 U	10 U
Benz(a)anthracene	SIM	9.21E-02			
Benzo(a)pyrene	non-SIM	2.00E-01		10 U	10 U
Benzo(a)pyrene	SIM	2.00E-01			
Benzo(b)fluoranthene	non-SIM	9.21E-02		10 U	10 U
Benzo(b)fluoranthene	SIM	9.21E-02	c		
Benzo(g,h,i)perylene	non-SIM	1.83E+02	(w)	10 U	10 U
Benzo(g,h,i)perylene	SIM	1.83E+02	(w)		
Benzo(k)fluoranthene	non-SIM	9.21E-01		10 U	10 U
Benzo(k)fluoranthene	SIM	9.21E-01			
bis(2-Ethylhexyl)phthalate	non-SIM	6.00E+00		10 U	10 U
Butyl benzyl phthalate	non-SIM	7.30E+03		10 U	10 U
Chrysene	non-SIM	9.21E+00		10 U	10 U
Chrysene	SIM	9.21E+00			
Dibenz(a,h)anthracene	non-SIM	9.21E-03		10 U	10 U
Dibenz(a,h)anthracene	SIM	9.21E-03			
Diethyl phthalate	non-SIM	2.92E+04		10 U	10 U
Dimethyl phthalate	non-SIM	3.65E+05		10 U	10 U
Di-N-Butyl phthalate	non-SIM	3.65E+03		10 U	10 U
Di-N-Octyl phthalate	non-SIM	1.46E+03		10 U	10 U
Fluoranthene	non-SIM	1.46E+03		10 U	10 U
Fluoranthene	SIM	1.46E+03			
Fluorene	non-SIM	2.43E+02		10 U	10 U
Fluorene	SIM	2.43E+02			
Hexachlorobenzene	non-SIM	1.00E+00		10 U	10 U
Hexachlorobenzene	SIM	1.00E+00			
Indeno(1,2,3-cd)pyrene	non-SIM	9.21E-02		10 UJ	10 U
Indeno(1,2,3-cd)pyrene	SIM	9.21E-02			
Naphthalene	non-SIM	6.20E+00		5.0 U	5.0 U
Naphthalene	non-SIM	6.20E+00		10 UJ	10 U
Naphthalene	SIM	6.20E+00			
Nitrobenzene	non-SIM	3.40E+00		10 U	10 U
Octachlorostyrene	non-SIM	--		10 U	10 U

LOU 29 Table 8 (continued)
Groundwater Characterization Data - SVOCs

Solid Waste Dumpsters
Tronox Facility - Henderson, Nevada

		Sampling Program	Ph A[1]	Ph A
		Well No.	M-11	M-12A
		Sample ID	M-11	M-12A
		Sample Date	12/06/2006	12/05/2006
SVOCs		**MCL[2] ug/L**	ug/L	ug/L
Phenanthrene	non-SIM	1.80E+03 (n)	10 U	10 U
Phenanthrene	SIM	1.80E+03 (n)		
Pyrene	non-SIM	1.83E+02	10 U	10 U
Pyrene	SIM	1.83E+02		
Pyridine	non-SIM	3.65E+01	20 U	20 U

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

LOU 29 Table 9
Groundwater Characterization Data - VOCs

Solid Waste Dumpsters
Tronox Facility - Henderson, Nevada

		Sampling Program	Ph A[1]	Ph A
		Well ID	M-11	M-12A
		Sample ID	M-11	M-12A
		Sample Date	12/06/2006	12/05/2006
VOCs	**MCL[2] ug/L**		ug/L	ug/L
Naphthalene	6.20E+00		5.0 U	5.0 U
1,1,1,2-Tetrachloroethane	4.32E-01		5.0 U	5.0 U
1,1,1-Trichloroethane	2.00E+02		5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	5.00E+00		5.0 U	5.0 U
1,1,2-Trichloroethane	5.00E+00		5.0 U	5.0 U
1,1-Dichloroethane	8.11E+02		5.0 U	5.0 U
1,1-Dichloroethene	7.00E+00		5.0 U	5.0 U
1,1-Dichloropropene	3.95E-01	gg	5.0 U	5.0 U
1,2,3-Trichlorobenzene	7.16E+00	hh	5.0 U	5.0 U
1,2,3-Trichloropropane	5.60E-03		5.0 U	5.0 U
1,2,4-Trichlorobenzene	7.00E+01		5.0 U	5.0 U
1,2,4-Trimethylbenzene	1.23E+01		5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	2.00E-01		5.0 U	5.0 UJ
1,2-Dichlorobenzene	6.00E+02		5.0 U	5.0 U
1,2-Dichloroethane	5.00E+00		5.0 U	5.0 U
1,2-Dichloropropane	5.00E+00		5.0 U	5.0 U
1,3,5-Trimethylbenzene	1.23E+01		5.0 U	5.0 U
1,3-Dichlorobenzene	1.83E+02		5.0 U	5.0 U
1,3-Dichloropropane	1.22E+02		5.0 U	5.0 U
1,4-Dichlorobenzene	7.50E+01		5.0 U	5.0 U
2,2-Dichloropropane	1.65E-01	ii	5.0 U	5.0 U
2-Butanone	6.97E+03		10 U	10 U
2-Chlorotoluene	1.22E+02		5.0 U	5.0 U
2-Hexanone	2.00E+03	nn	10 UJ	10 U
2-Methoxy-2-methyl-butane	--		5.0 UJ	5.0 U
4-Chlorotoluene	1.22E+02	ww	5.0 U	5.0 U
4-Isopropyltoluene	--		5.0 U	5.0 U
4-Methyl-2-pentanone	1.99E+03		10 UJ	10 UJ
Acetone	5.48E+03		10 U	10 U
Benzene	5.00E+00		5.0 U	5.0 U
Bromobenzene	2.03E+01		5.0 U	5.0 U
Bromochloromethane	1.81E-01	qq	5.0 U	5.0 U
Bromodichloromethane	8.00E+01	r	5.0 U	5.0 U
Bromoform	8.00E+01	r	5.0 U	5.0 U
Bromomethane	8.66E+00		10 U	10 UJ
Carbon tetrachloride	5.00E+00		5.0 U	5.0 U
Chlorobenzene	1.00E+02	o	5.0 U	5.0 U
Chloroethane	4.64E+00		5.0 U	5.0 U
Chloroform	8.00E+01	r	**130**	**1600 J+**
Chloromethane	1.58E+02		5.0 U	5.0 U
cis-1,2-Dichloroethene	7.00E+01		5.0 U	5.0 U
cis-1,3-Dichloropropene	3.95E-01	gg	5.0 U	5.0 U
Dibromochloromethane	8.00E+01	r	5.0 U	5.0 U
Dibromomethane	6.08E+01	xx	5.0 U	5.0 U
Dichlorodifluoromethane	3.95E+02		5.0 UJ	5.0 U
Ethyl t-butyl ether	1.10E+01	kk	5.0 UJ	5.0 U
Ethylbenzene	7.00E+02		5.0 U	5.0 U
Ethylene dibromide	--		5.0 U	5.0 U
Hexachlorobutadiene	8.62E-01		5.0 U	5.0 U

LOU 29 Table 9 (continued)
Groundwater Characterization Data - VOCs

Solid Waste Dumpsters
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A[1]	Ph A
	Well ID	M-11	M-12A
	Sample ID	M-11	M-12A
	Sample Date	12/06/2006	12/05/2006
VOCs	**MCL[2] ug/L**	ug/L	ug/L
isopropyl ether	--	5.0 UJ	5.0 U
Isopropylbenzene	6.58E+02	5.0 U	5.0 U
Methyl tert butyl ether	2.00E+01 a,uu	5.0 U	5.0 U
Methylene chloride	5.00E+00	5.0 UJ	5.0 U
N-Butylbenzene	2.43E+02	5.0 U	5.0 U
N-Propylbenzene	2.43E+02	5.0 U	5.0 U
sec-Butylbenzene	2.43E+02	5.0 U	5.0 U
Styrene	1.00E+02	5.0 U	5.0 U
t-Butyl alcohol	--	10 UJ	10 UJ
tert-Butylbenzene	2.43E+02	5.0 U	5.0 U
Tetrachloroethene	5.00E+00	5.0 U	**0.93 J**
Toluene	1.00E+03	5.0 U	5.0 U
trans-1,2-Dichloroethylene	1.00E+02	5.0 U	5.0 U
trans-1,3-Dichloropropene	--	5.0 U	5.0 U
Trichloroethene	5.00E+00	5.0 U	5.0 U
Trichlorofluoromethane	--	5.0 U	5.0 U
Vinylchloride	2.00E+00	5.0 U	5.0 U
Xylene (Total)	1.00E+04	10 UJ	10 U

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

LOU 29 Table 10
Groundwater Characterization Data - Routine Monitoring

Solid Waste Dumpsters
Tronox Facility - Henderson, Nevada

Well ID	Date	Depth to water (ft)	Perchlorate mg/L	Qual	MCL[2] mg/L	Total Chromium mg/L	Qual	MCL[2] mg/L	TDS mg/L	Qual	MCL[2] mg/L	Nitrate (as N) mg/L	Qual	MCL[2] mg/L	Chlorate mg/L	Qual	MCL[2] mg/L
M-10	1/31/2006	48.03			1.80E-02 a,m	0.9	d	1.00E-01			5.00E+02 j			1.00E+01			--
M-10	1/31/2006	48.03	23	d	1.80E-02 a,m	0.89	d	1.00E-01	3180		5.00E+02 j	1.8	d	1.00E+01			--
M-10	5/2/2006	49.76	22	d	1.80E-02 a,m	1	d	1.00E-01	2660		5.00E+02 j	<0.1	ud	1.00E+01	195	d	--
M-10	8/2/2006	50.01			1.80E-02 a,m	1.1	d	1.00E-01			5.00E+02 j	<0.1	ud	1.00E+01			--
M-10	8/2/2006	50.01	23.8	d	1.80E-02 a,m	1.1	d	1.00E-01	2510		5.00E+02 j	1	d	1.00E+01	420	d	--
M-10	10/31/2006	49.31			1.80E-02 a,m	0.91	d	1.00E-01			5.00E+02 j	<0.1	ud	1.00E+01			--
M-10	10/31/2006	49.31	29.4	d	1.80E-02 a,m	0.86	d	1.00E-01	3160		5.00E+02 j	2.61	d	1.00E+01	252	d	--
M-10	1/31/2007	49.22	32		1.80E-02 a,m	0.61		1.00E-01	3190		5.00E+02 j	2.8	d	1.00E+01			--
M-10	5/1/2007	49.63	25.6		1.80E-02 a,m	0.71		1.00E-01	3160		5.00E+02 j	3.2		1.00E+01	220		--
M-10	8/2/2007	49.47	30.1		1.80E-02 a,m	0.96		1.00E-01	3260		5.00E+02 j	3.6		1.00E+01			--
M-11	2/2/2006	42.69	52	d	1.80E-02 a,m	2.8	d	1.00E-01	3660		5.00E+02 j			1.00E+01			--
M-11	5/3/2006	43.29	43	d	1.80E-02 a,m	2.7	d	1.00E-01	2980		5.00E+02 j	<0.1	ud	1.00E+01	460	d	--
M-11	8/2/2006	43.50	31.4	d	1.80E-02 a,m	2.8	d	1.00E-01	2700		5.00E+02 j	1.3	d	1.00E+01	230	d	--
M-11	10/31/2006	43.51	33.4	d	1.80E-02 a,m	2.7	d	1.00E-01	3260		5.00E+02 j	3.86	d	1.00E+01	487	d	--
M-11	1/31/2007	43.50	30.6		1.80E-02 a,m	3		1.00E-01	3380		5.00E+02 j			1.00E+01			--
M-11	5/2/2007	43.51	25.1		1.80E-02 a,m	2.7		1.00E-01	3180		5.00E+02 j	3.01		1.00E+01	434		--
M-11	8/2/2007	43.82	33.9		1.80E-02 a,m	2.6		1.00E-01	3400		5.00E+02 j			1.00E+01			--
M-12A	2/2/2006	---	360	d	1.80E-02 a,m	13	d	1.00E-01	10230		5.00E+02 j			1.00E+01			--
M-12A	5/4/2006	---	340	d	1.80E-02 a,m	12	d	1.00E-01	8760		5.00E+02 j	<0.1	ud	1.00E+01	2600	d	--
M-12A	8/2/2006	---	312	d	1.80E-02 a,m	12	d	1.00E-01	5640		5.00E+02 j	13	d	1.00E+01	1260	d	--
M-12A	11/1/2006	---	288	d	1.80E-02 a,m	12	d	1.00E-01	7270		5.00E+02 j	14.1	d	1.00E+01	2540	d	--
M-12A	2/1/2007	---	291		1.80E-02 a,m	12		1.00E-01	7820		5.00E+02 j			1.00E+01			--
M-12A	5/3/2007	---	283	J	1.80E-02 a,m	12		1.00E-01	7910	J	5.00E+02 j	18.2	d	1.00E+01	1980	d	--
M-12A	8/1/2007	---	320		1.80E-02 a,m	13		1.00E-01	7890		5.00E+02 j			1.00E+01			--

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

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

Laboratory Qualifiers:
d = the sample was diluted
u = the analyte was not detected above the sample reporting limit
ud = the sample was dilluted and was not detected above the sample reporting limit

Validation Qualifiers:
J = the result is an estimated quantity

LOU 29
Notes for Phase A Data Tables

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