TRONOX

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March 12, 2008

Ms. Shannon Harbour, P.E.
Nevada Division of Environmental Protection
2030 East Flamingo Road, Suite 230
Las Vegas, Nevada 89119-0818

Subject: Response to NDEP 1-14-08 Request for an Updated Site-Related Chemical List Tronox LLC, Henderson, Nevada

Dear Ms. Harbour:

Tronox LLC (Tronox) received the subject request from Nevada Division of Environmental Protection (NDEP) regarding an updated site-related chemical (SRC) list for the Henderson facility. The last SRC list approval was received from NDEP in October 2004. In response to the request, Tronox has updated the site-related chemical (SRC) list based upon the information collected during the on-going environmental investigation at the Henderson, NV location. The updated document is attached in Attachment A. This document will be further revised, as needed, following our review of appropriate test methods for radionuclides.

In addition, NDEP had several questions in the January 14, 2008 letter regarding differences between the alphabetical listing and the analyte specific listing. A response to comments (RTC) is provided in Attachment B which addresses the questions.

Please contact me at (702) 651-2234 if you have any comments or questions concerning this correspondence.

Sincerely,

Susan M. Crowley, CEM 1428, exp 3-8-09

Overnight Mail

CC: Please see the attached distribution list

Tronox Document Distribution List Updated: 1-Feb-08

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			& Hard Data		
Bailey	Keith	Environ Answers	X	X	
Krish	Ed	ENSR	X	X	
Bilodeau	Sally	ENSR	X	X	
Gerry	Dave	ENSR		X	
Lambeth	Jeff	Veolia			
Cheung	Mary	Veolia			
Guerriero	Joe	AIG		X	
Giroux	Barry	GEI		X	
Stowers	Kirk	Broadbent			
Sahu	Rahnijit	BMI		X	
Crouse	George	Syngenta		X	
Erickson	Lee	Stauffer		X	
Kelly	Joe	Montrose			
Sundberg	Paul	Montrose		X	
Gibson	Jeff	AmPac			
Sylvia	Chris	Pioneer		X	
Wilkinson	Craig	Timet		X	
Mack	Joel	Montrose Counsel			

ATTACHMENT A

Table 1
Alphabetical Site Related Chemicals List
TronoxLLC, Henderson Nevada

1,1,1-trichloroethane	calcium oxide (lime)	light aliphatic naphtha	radon 222
1,4-dioxane	calcium sulfate	magnesium	selenium
2-butanone (methyl ethyl ketone)	chelant (Nalco 1745)	magnesium carbonate	silica
	chlorate	magnesium chlorate	silicon tetrabromide
2-hexanone	chloride	magnesium chloride	silicon tetrachloride
acenaphthene	chlorinated organics	magnesium perchlorate	silver
acenaphthylene	chlorinated paraffins	manganese	Silvex (2,4,5-trichlorophenoxypropionic acid)
acetone	chlorine	manganese dioxide	
actinium 228	chlorobenzol (monochlorobenzene, chlorobenzene)	manganese oxide	sodium
aluminum		manganese sulfate	sodium alpha olefin sulfonate
ammonia		mercury	sodium arsenite
ammonium perchlorate	chloroform	methanol	sodium borate
anthracene	chromium (hexavalent)	methyl isobutyl ketone (4-methyl-2-pentanone)	sodium carbonate
anti-foam agent	chromium (total)		sodium chlorate (tumbleaf defoliant)
antimony	chrysene	methyl mercury	sodium chloride
argon	citric acid	methyl tert-butyl ether (MTBE)	sodium dichromate
aroclor 1016	coagulants	methylene chloride	sodium hexametaphosphate
aroclor 1221	coal	molybdenum	sodium hydrosulfide
aroclor 1232	cobalt	napthalene	sodium hydroxide
aroclor 1242	coke	nickel	sodium oxide
aroclor 1248	copper	nitrate	sodium perchlorate
aroclor 1254	cyanide	nitrobenzene	sodium sulfite
aroclor 1260	DDD	octachlorostyrene	strontium
arsenic	DDE	organophosphorous pesticides	strontium carbonate
asbestos	DDT	orthodichlorobenzene (1,2-dichlorobenzene)	sulfate
barite	diatomaceous earth		sulfide
barium	dibenz(a,h)anthracene	PAHs (polycyclic aromatic hydrocarbons)	sulfur dioxide
barium hydroxide	diesel fuel		sulfuric acid
barium metaborate	dioxins/furans	paints	synthetic detergent
barium sulfate	ethylbenzene	paradichlorobenzene	tank mud
barium sulfide	filter aid	paraffin wax	TDS (total dissolved solids)
benz(a)anthracene	flammables	PCBs	tetrachloroethylene
benzene	flocculants	perchlorate	thallium
benzo(a)pyrene	fluoranthene	pesticides	thorium (isotopic)
benzo(b)fluoranthene	fluorene	pH	tin
benzo(ghi)perylene	formaldehyde titrant	phenanthrene	titanium
benzo(k)fluoranthene	glycols	phosphate	titanium tetrachloride
beryllium	graphite	phosphorous	toluene
bismuth 212	gross alpha (adjusted)	platinum	TPH (total petroleum hydrocarbons)
boric acid	hexachlorobenzene	polonium 210	tricalcium phosphate
boron	hydrochloric acid	polonium 215	trichloroethylene
boron carbide	hydrogen chloride	potassium	TSS
boron tribromide	hydrogen peroxide	potassium chlorate	tungsten
boron trichloride	hydrogen sulfide	potassium chloride	unknowns
C_{13}-C_{22}	indeno(1,2,3-cd)pyrene	potassium perchlorate	uranium (isotopic)
C_{23+}	insecticides	potassium phosphate	uranium (total)
C_4-C_{12}	iron	protactinium 231	urea
cadmium	iron oxide	pyrene	vanadium
calcium	kerosene	pyridine	various lab wastes
calcium carbonate	lead	radium 226	VM&P naphtha
calcium chloride	lead (isotopic)	radium 228	xylene
calcium hypochlorite	light aromatic naphtha	radon 219	zinc

Notes: Selected synonyms are shown in parentheses.
The Site Related Chemical list was approved by NDEP on October 27, 2004 and March 9, 2006. The list was revised to include Protactinium 231, Polonium 215, and Radon 219, on February 21, 2006; 1,4-Dioxane on March 11, 2006; and barium metaborate, diesel fuel, kerosene, light aromatic naphtha, light aliphatic naphtha, methylene chloride, and VM&P naphtha on February 20, 2008. September 2006 and February 2008, selected synonyms were added. Formaldehyde was added on March 11, 2008.

Table 2
Site Related Chemical and
Investigation Analyte Correlations
Tronox LLC, Henderson, Nevada

Analyte	CAS No.	Method	SRC?	Class	UG	PA-SA	Applicable SRCs other than analyte	notes
Aluminum	7429-90-5	EPA 6010/6020	Y	M	Y	Y	flocculants	
Antimony	7440-36-0	EPA 6010/6020	Y	M	Y	Y		
Arsenic	7440-38-2	EPA 6010/6020	Y	M	Y	Y	sodium arsenite	
Barium	7440-39-3	EPA 6010/6020	Y	M	Y	Y	barium hydroxide, barium sulfide, barium sulfate, barium metaborate (8)	
Beryllium	7440-41-7	EPA 6010/6020	Y	M	Y	Y		
Boron	7440-42-8	EPA 6010/6020	Y	M	Y	Y	boric acid, boron carbide, boron tribromide, boron trichloride, sodium borate	
Cadmium	7440-43-9	EPA 6010/6020	Y	M	Y	Y		
Calcium	7440-70-2	EPA 6010/6020	Y	M	Y	Y	calcium carbonate, calcium chloride, calcium hypochlorite, calcium oxide, calcium sulfate, tricalcium phosphate	
Chromium (total)	7440-47-3	EPA 6010/6020	Y	M	Y	Y	sodium dichromate	
Chromium (hexavalent)	18540-29-9	EPA 7199/3060A	Y	M	Y	Y	sodium dichromate	
Cobalt	7440-48-4	EPA 6010/6020	Y	M	Y	Y		
Copper	7440-50-8	EPA 6010/6020	Y	M	Y	Y		
Iron	7439-89-6	EPA 6010/6020	Y	M	Y	Y	flocculents, iron oxide, coagulants	
Lead	7439-92-1	EPA 6010/6020	Y	M	Y	Y		
Magnesium	7439-95-4	EPA 6010/6020	Y	M	Y	Y	magnesium carbonte, magnesium chlorate, magnesium chloride, magnesium perchlorate	
Manganese	7439-95-4	EPA 6010/6020	Y	M	Y	Y	manganese dioxide, manganese oxide, manganese sulfate	
Mercury	7439-97-6	EPA 7470/7471	Y	M	Y	Y	methyl mercury	
Molybdenum	7439-98-7	EPA 6010/6020	Y	M	Y	Y		
Nickel	7440-02-0	EPA 6010/6020	Y	M	Y	Y		
Platinum	7440-06-4	EPA 6010/6020	Y	M	Y	Y		
Phosphorous	7723-14-0	EPA 6010/6020	Y	M	N	N	phosphate salts listed under phosphate	
Potassium	7440-09-7	EPA 6010/6020	Y	M	Y	Y	potassium chlorate, potassium chloride, potassium perchlorate, potassium phosphate	
Selenium	7782-49-2	EPA 6010/6020	Y	M	Y	Y		
Silicon	7440-21-3	EPA 6010/6020	Y	M	Y	N	silica, diatomaceous earth, filter aid, silicon tetrachloride, silicon tetrabromide	1
Silver	7440-22-4	EPA 6010/6020	Y	M	Y	Y		

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Analyte	CAS No.	Method	SRC?	Class	UG	PA-SA	Applicable SRCs other than analyte	notes
Sodium	7440-23-5	EPA 6010/6020	Y	M	Y	Y	sodium arsenite, sodium alphaolefin sulfonate, sodium borate, sodium carbonate, sodium chlorate, sodium chloride, sodium dichromate, sodium hexametaphosphate, sodium hydrosulfide, sodium hydroxide, sodium oxide, sodium perchlorate, sodium sulfite	
Strontium	7440-24-6	EPA 6010/6020	Y	M	Y	Y	strontium carbonate	
Tin	7440-31-5	EPA 6010/6020	Y	M	Y	Y		
Titanium	7440-32-6	EPA 6010/6020	Y	M	Y	Y	titanium tetrachloride	
Thallium	7440-28-0	EPA 6010/6020	Y	M	Y	Y		
Tungsten	7440-33-7	EPA 6010/6020	Y	M	Y	Y		
Uranium	7440-61-1	EPA 6010/6020	Y	M	Y	Y		
Vanadium	7440-62-2	EPA 6010/6020	Y	M	Y	Y		
Zinc	7440-66-6	EPA 6010/6020	Y	M	Y	Y		
Methyl mecury	22967-92-6	EPA 1630	Y	M	Y	N	mercury	1
Alkalinity (total,CO_3^-,HCO_3^-)		SM 2320B/EPA 310.1	Y	W	Y	Y	all alkaline salts in the SRC list	
Ammonia	7664-41-7	EPA 350.1	Y	W	Y	Y	ammonium perchlorate, urea	
Chloride	16887-00-6	EPA 300.0/9056A	Y	W	Y	Y	boron trichloride, calcium chloride, hydrogen chloride, magnesium chloride, potassium chloride, silicon tetrachloride, sodium chloride, titanium tetrachloride	
Chlorate	7790-93-4	EPA 300.0/9056	Y	W	Y	Y	sodium chlorate, potassium chlorate, tumbleaf defoliant	
Cyanide (total)	57-12-5	EPA 335.4/9014	Y	W	Y	Y		
Conductivity		SM 2510B/EPA 9050	Y	W	Y	Y	all soluble salts listed	
Fluoride	16984-48-8	SM 4500FC/EPA 9056	N	W	Y	N		2
Nitrate	7697-37-2	EPA 300.0/9056	Y	W	Y	Y		
Nitrite	14797-65-0	EPA 300.0	Y	W	Y	Y		
Phosphate (ortho)	14265-44-2	SM 4500PE/EPA9056	Y	W	Y	Y	phosphorus, triclacium phosphate, potassium phosphate, sodium hexametaphosphate	
Phosphate (total)	14265-44-2	EPA 365.2	Y	W	Y	N	phosphorus, triclacium phosphate, potassium phosphate, sodium hexametaphosphate	3
Perchlorate	14797-73-0	EPA 314.0	Y	W	Y	Y	magnesium perchlorate, potassim perchlorate, sodium perchlorate	
Sulfate	14808-79-8	EPA 300.0/9056	Y	W	Y	Y	barium sulfate, calcium sulfate, manganese sulfate, flocculents	

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Analyte	CAS No.	Method	SRC?	Class	UG	PA-SA	Applicable SRCs other than analyte	notes
Sulfide	18496-25-8	EPA 9030	Y	W	Y	N	flocculents, barium sulfide, hydrogen sulfide, sodium hydrosulfide, coagulants	3
TDS		EPA 160.1	Y	W	Y	Y		
TSS		EPA 160.2	Y	W	Y	Y		
Surfactants (MBAS)		EPA 425.1	Y	W	Y	Y	anti-foam agent, flocculents, sodium alphaolefin sulfonate, synthetic detergent	
pH		EPA 150.1/9040/9045	Y	W	Y	Y	hydrochloric acid, sulfuric acid	
Bromide	24959-67-9	EPA 300.0/9056	Y	W	Y	Y	boron tribromide, silicon tetrabromide	
Chlorine (residual)	7782-50-5	EPA 4500CLG	Y	W	Y	N	chlorine, calcium hypochlorite	3
Total Organic Carbon	7440-44-0	SM 5310C/ WB/EPA 9060	Y	W	Y	Y	coal, coke, graphite, all organic SRCs	
Flashpoint		EPA 1010	Y	W	Y	N	flammables	3
Sulfite	14265-45-3	EPA 377.1	Y	W	Y	N	sodium sulfite	3
Asbestos	132207-33-1	EPA 100.1/PLM	Y	A	Y	N		
Asbestos		EPA 540-R-97-028/ Draft Modified Elutriator	Y	A	N	Y		4
GRO(C6-C10)		EPA 8015B	Y	T	Y	Y	gasoline, flammables, C4-C12, VM&P naphtha, light aliphatic naphtha, light aromatic naphtha, TPH	8
DRO(C10-C28)		EPA 8015B	Y	T	Y	Y	diesel fuel, kerosene, lubricating oils, paraffin wax, C13-C22, TPH	8
ORO (C28-C40)		EPA 8015B	Y	T	Y	Y	lubricating oils, paraffin wax, C23+, TPH	
Methanol	67-56-1	EPA 8015B	Y	T	Y	Y	fuel oxygenate	
Ethanol	64-17-5	EPA 8015B	Y	T	Y	Y	fuel oxygenate	
Ethylene glycol	107-21-1	EPA 8015B	Y	T	Y	Y	glycols	
Formaldehyde	50-00-0	EPA 8315A	Y	F	N	N	formaldehyde titrant	9
4,4'-DDD	72-54-8	EPA 8081A	Y	P	Y	Y		
4,4'-DDE	72-55-9	EPA 8081A	Y	P	Y	Y		
4,4'-DDT	50-29-3	EPA 8081A	Y	P	Y	Y		
Aldrin	309-00-2	EPA 8081A	Y	P	Y	Y	pesticides	
alpha-BHC	319-84-6	EPA 8081A	Y	P	Y	Y	pesticides	
beta-BHC	319-85-7	EPA 8081A	Y	P	Y	Y	pesticides	
Chlordane, technical	57-74-9	EPA 8081A	Y	P	Y	Y	pesticides	
alpha-Chlordane	5103-71-9	EPA 8081A	Y	P	Y	Y	pesticides	
gamma-Chlordane	5103-74-2	EPA 8081A	Y	P	Y	Y	pesticides	
delta-BHC	319-86-8	EPA 8081A	Y	P	Y	Y	pesticides	

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Analyte	CAS No.	Method	SRC?	Class	UG	PA-SA	Applicable SRCs other than analyte	notes
Dieldrin	60-57-1	EPA 8081A	Y	P	Y	Y	pesticides	
Endosulfan I	959-98-8	EPA 8081A	Y	P	Y	Y	pesticides	
Endosulfan II	33213-65-9	EPA 8081A	Y	P	Y	Y	pesticides	
Endosulfan sulfate	1031-07-8	EPA 8081A	Y	P	Y	Y	pesticides	
Endrin	72-20-8	EPA 8081A	Y	P	Y	Y	pesticides	
Endrin aldehyde	7421-93-4	EPA 8081A	Y	P	Y	Y	pesticides	
Endrin Ketone	53494-70-5	EPA 8081A	Y	P	Y	Y	pesticides	
gamma-BHC (Lindane)	58-89-9	EPA 8081A	Y	P	Y	Y	pesticides	
Heptachlor	76-44-8	EPA 8081A	Y	P	Y	Y	pesticides	
Heptachlor epoxide	1024-57-3	EPA 8081A	Y	P	Y	Y	pesticides	
Methoxychlor	72-43-5	EPA 8081A	Y	P	Y	Y	pesticides	
Toxaphene	8001-35-2	EPA 8081A	Y	P	Y	Y	pesticides	
Aroclor 1016	12674-11-2	EPA 80882	Y	P	Y	Y	PCBs	
Aroclor 1221	11104-28-2	EPA 8082	Y	P	Y	Y	PCBs	
Aroclor 1232	11141-16-5	EPA 8082	Y	P	Y	Y	PCBs	
Aroclor 1242	53469-21-9	EPA 8082	Y	P	Y	Y	PCBs	
Aroclor 1248	12672-29-6	EPA 8082	Y	P	Y	Y	PCBs	
Aroclor 1254	11097-69-1	EPA 8082	Y	P	Y	Y	PCBs	
Aroclor 1260	11096-82-5	EPA 8082	Y	P	Y	Y	PCBs	
2,4,5-TP (Silvex)	93-72-1	EPA 8151	Y	H	N	Y	Silvex	
1,2,3,4,6,7,8,9-Ocatchlorodibenzofuran	39001-02-0	EPA 1613B/ 8290	Y	D	Y	Y	dioxins/furans	
1,2,3,4,6,7,8,9-Ocatchlorodibenzo-p-dioxin	3268-87-9	EPA 1613B/ 8290	Y	D	Y	Y	dioxins/furans	
1,2,3,4,6,7,8-Heptatchlorodibenzofuran	67562-39-4	EPA 1613B/ 8290	Y	D	Y	Y	dioxins/furans	
1,2,3,4,6,7,8-Heptatchlorodibenzo-p-dioxin	35822-46-9	EPA 1613B/ 8290	Y	D	Y	Y	dioxins/furans	
1,2,3,4,7,8,9-Heptatchlorodibenzofuran	55673-89-7	EPA 1613B/ 8290	Y	D	Y	Y	dioxins/furans	
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	EPA 1613B/ 8290	Y	D	Y	Y	dioxins/furans	
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6	EPA 1613B/ 8290	Y	D	Y	Y	dioxins/furans	
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	EPA 1613B/ 8290	Y	D	Y	Y	dioxins/furans	
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653-85-7	EPA 1613B/ 8290	Y	D	Y	Y	dioxins/furans	
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	EPA 1613B/ 8290	Y	D	Y	Y	dioxins/furans	
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3	EPA 1613B/ 8290	Y	D	Y	Y	dioxins/furans	
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	EPA 1613B/ 8290	Y	D	Y	Y	dioxins/furans	
1,2,3,7,8-Pentachlorodibenzof-p-dioxin	40321-76-4	EPA 1613B/ 8290	Y	D	Y	Y	dioxins/furans	

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Site Related Chemical and
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Tronox LLC, Henderson, Nevada

Analyte	CAS No.	Method	SRC?	Class	UG	PA-SA	Applicable SRCs other than analyte	notes
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	EPA 1613B/ 8290	Y	D	Y	Y	dioxins/furans	
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	EPA 1613B/ 8290	Y	D	Y	Y	dioxins/furans	
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	EPA 1613B/ 8290	Y	D	Y	Y	dioxins/furans	
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	EPA 1613B/ 8290	Y	D	Y	Y	dioxins/furans	
Actinium 228	14331-83-0	EPA 901.1/ EML HASL 300	Y	R	Y	N		1
Bismuth 212	14913-49-6	EPA 901.1/ EML HASL 300	Y	R	Y	N		1
Gross alpha (adjusted) [3]		EPA 900/ 9310	Y	R	Y	N		1
Lead 210	14255-04-0	EML HASL 300	Y	R	Y	N		1
Lead 212	15092-94-2	EPA 901.1/ EML HASL 300	Y	R	Y	N		1
Polonium 210	13981-52-7	EML HASL 300	Y	R	Y	N		1
Polonium 215			Y	R	N	N	analysis not possible due to short half-life	1, 6
Proactinium 231	7440-13-3	EPA 901.1/ EML HASL 300	Y	R	Y	N		1, 6
Radium 226	13982-63-3	EPA 903.1/ EML HASL 300	Y	R	Y	Y		
Radium 228	15262-20-1	EPA 904.0/ EML HASL 300	Y	R	Y	Y		
Radon 219			Y	R	N	N	analysis not possible due to short half-life	1, 6
Radon 222	10043-92-2	SM7500-RN-B	Y	R	Y	N		1
Thorium (isotopic)		EML HASL 300 (alpha)	Y	R	Y	Y		
Uranium (isotopic)		EML HASL 300 (alpha)	Y	R	Y	Y		
Uranium (total)		ASTM D5174	Y	R	Y	N		1,5
Azinphos-methyl	86-50-0	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Bolstar	35400-43-2	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Chlorpyrifos	2921-88-2	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Coumaphos	56-72-4	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Demeton-O	298-03-3	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Demeton-S	126-75-0	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Diazinon	333-41-5	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Dichlorvos	62-73-7	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Dimethoate	60-51-5	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Disulfoton	298-04-4	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
EPN	2104-65-5	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Ethoprop	13194-48-4	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Famphur	52-85-7	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Fensulfothion	115-90-2	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Fenthion	55-38-9	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	

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Tronox LLC, Henderson, Nevada

Analyte	CAS No.	Method	SRC?	Class	UG	PA-SA	Applicable SRCs other than analyte	notes
Malathion	121-75-5	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Merphos	150-50-5	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Mevinphos	7786-34-7	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Naled	300-76-5	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Parathion-ethyl	56-38-2	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Parathion-methyl	298-00-0	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Phorate	298-02-2	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Ronnel	299-84-3	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Stirphos	22248-79-9	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Sulfotepp	3689-24-5	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Thionazin	297-97-2	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Tokuthion	34643-46-4	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
Trichloronate	327-98-0	EPA 8141	Y	O	Y	Y	organophosphorus pesticides	
1,1,1,2-Tetrachloroethane	630-20-6	EPA 8260	N	V	Y	Y		
1,1,1-Trichloroethane	71-55-6	EPA 8260	Y	V	Y	Y		
1,1,2,2-Tetrachloroethane	79-34-5	EPA 8260	N	V	Y	Y		
1,1,2-Trichloroethane	79-00-5	EPA 8260	N	V	Y	Y		
1,1-Dichloroethane	75-34-3	EPA 8260	N	V	Y	Y		
1,1-Dichloroethene	75-35-4	EPA 8260	N	V	Y	Y		
1,1-Dichloropropene	563-58-6	EPA 8260	N	V	Y	Y		
1,2,3-Trichlorobenzene	120-82-1	EPA 8260	N	V	Y	Y		
1,2,3-Trichloropropane	96-18-4	EPA 8260	N	V	Y	Y		
1,2,4-Trichlorobenzene	120-82-1	EPA 8260	N	V	Y	Y		
1,2,4-Trimethylbenzene	95-63-6	EPA 8260	Y	V	Y	Y	light aromatic naphtha	8
1,2-Dibromo-3-chloropropane	96-12-8	EPA 8260	N	V	Y	Y		
1,2-Dibromoethane	106-93-4	EPA 8260	N	V	Y	Y		
1,2-Dichlorobenzene	95-50-1	EPA 8260	Y	V	Y	Y	orthodichlorobenzene	
1,2-Dichloroethane	107-06-2	EPA 8260	N	V	Y	Y		
1,2-Dichloropropane	78-87-5	EPA 8260	N	V	Y	Y		
1,3,5-Trimethylbenzene	108-67-8	EPA 8260	Y	V	Y	Y		
1,3-Dichlorobenzene	541-73-1	EPA 8260	Y	V	Y	Y	metadichlorobenzene	
1,3-Dichloropropane	142-28-9	EPA 8260	N	V	Y	Y		
1,4-Dichlorobenzene	106-46-7	EPA 8260	Y	V	Y	Y	paradichlorobenzene	
1-Chlorohexane	544-10-5	EPA 8260	N	V	Y	N		2

Table 2
Site Related Chemical and
Investigation Analyte Correlations
Tronox LLC, Henderson, Nevada

Analyte	CAS No.	Method	SRC?	Class	UG	PA-SA	Applicable SRCs other than analyte	notes
2,2-Dichloropropane	594-20-7	EPA 8260	N	V	Y	Y		
2-Butanone	78-93-3	EPA 8260	Y	V	Y	Y	paint, methyl ethyl ketone	
2-Chlorotoluene	95-49-8	EPA 8260	N	V	Y	Y		
2-Hexanone	591-78-6	EPA 8260	Y	V	Y	Y	paint	
4-Chlorotoluene	106-43-4	EPA 8260	N	V	Y	Y		
4-Methyl-2-pentanone	108-10-1	EPA 8260	Y	V	Y	Y	paint, methyl isobutyl ketone	
Acetone	67-64-1	EPA 8260	Y	V	Y	Y	paint	
Benzene	71-43-2	EPA 8260	Y	V	Y	Y		
Bromobenzene	108-86-1	EPA 8260	N	V	Y	Y		
Bromochloromethane	74-97-5	EPA 8260	N	V	Y	Y		
Bromodichloromethane	75-27-4	EPA 8260	N	V	Y	Y		
Bromoform	75-25-2	EPA 8260	N	V	Y	Y		
Bromomethane	74-83-9	EPA 8260	N	V	Y	Y		
Carbon Tetrachloride	56-23-5	EPA 8260	N	V	Y	Y		
Chlorobenzene	108-90-7	EPA 8260	Y	V	Y	Y	chlorobenzol	
Chloroethane	75-00-3	EPA 8260	N	V	Y	Y		
Chloroform	67-66-3	EPA 8260	Y	V	Y	Y		
Chloromethane	74-87-3	EPA 8260	N	V	Y	Y		
cis-1,2-Dichloroethene	156-92-2	EPA 8260	N	V	Y	Y		
cis-1,3-Dichloropropene	10061-01-5	EPA 8260	N	V	Y	Y		
Dibromochloromethane	124-48-1	EPA 8260	N	V	Y	Y		
Dibromomethane	74-95-3	EPA 8260	N	V	Y	Y		
Dichlorodifluoromethane	75-71-8	EPA 8260	N	V	Y	Y		
Diisopropyl ether (DIPE)	108-20-3	EPA 8260	Y	V	Y	Y	fuel oxygenate	
Ethylbenzene	100-41-4	EPA 8260	Y	V	Y	Y	light aromatic naphtha	8
Ethyl-tert-butyl ether (ETBE)	637-92-3	EPA 8260	Y	V	Y	Y	fuel oxygenate	
Hexachlorobutadiene	87-68-3	EPA 8260	N	V	Y	Y		
Isopropyl Benzene	98-28-8	EPA 8260	Y	V	Y	Y	light aromatic naphtha	8
Xylenes (total)	1330-20-7	EPA 8260	Y	V	Y	Y	paint	
Methylene Chloride	75-09-2	EPA 8260	Y	V	Y	Y		8
Methyl-tert-butyl ether (MTBE)	1634-04-4	EPA 8260	N	V	Y	Y	fuel oxygenate	
Naphthalene	91-20-3	EPA 8260	Y	V	Y	Y	light aromatic naphtha, PAHs	8
n-Butylbenzene	104-51-8	EPA 8260	Y	V	Y	Y	light aromatic naphtha	8
n-Propylbenzene	103-65-1	EPA 8260	Y	V	Y	Y	light aromatic naphtha	8

Table 2
Site Related Chemical and
Investigation Analyte Correlations
Tronox LLC, Henderson, Nevada

Analyte	CAS No.	Method	SRC?	Class	UG	PA-SA	Applicable SRCs other than analyte	notes
p-Isopropyltoluene	99-87-6	EPA 8260	Y	V	Y	Y	light aromatic naphtha	8
sec-Butylbenzene	135-98-8	EPA 8260	Y	V	Y	Y	light aromatic naphtha	8
Styrene	100-42-5	EPA 8260	N	V	Y	Y		
tert-Amyl-methyl ether (TAME)	994-05-8	EPA 8260	Y	V	Y	Y	fuel oxygenate	
tert-Butyl alcohol (TBA)	75-65-0	EPA 8260	Y	V	Y	Y	fuel oxygenate	
tert-Butylbenzene	98-06-6	EPA 8260	N	V	Y	Y	light aromatic naphtha	8
Tetrachloroethene	127-18-4	EPA 8260	Y	V	Y	Y		
Toluene	108-88-3	EPA 8260	Y	V	Y	Y	paint, light aromatic naphtha	8
trans-1,2-Dichloroethene	156-60-5	EPA 8260	N	V	Y	Y		
trans-1,3-Dichloropropene	10061-02-6	EPA 8260	N	V	Y	Y		
Trichloroethene	79-01-6	EPA 8260	Y	V	Y	Y		
Trichlorofluoromethane	75-69-4	EPA 8260	N	V	Y	Y		
Vinyl Chloride	75-01-4	EPA 8260	N	V	Y	Y		
1,2-Dichlorobenzene	95-50-1	EPA 8270	Y	S	Y	N	orthodichlorobenzene	5
1,3-Dichlorobenzene	541-73-1	EPA 8270	Y	S	Y	N	metadichlorobenzene	5
1,4-Dichlorobenzene	106-46-7	EPA 8270	Y	S	Y	N	paradichlorobenzene	5
2,4,5-Trichlorophenol	95-95-4	EPA 8270	N	S	Y	N		1
2,4,6-Trichlorophenol	88-06-2	EPA 8270	N	S	Y	N		1
2,4-Dichlorophenol	120-83-2	EPA 8270	N	S	Y	N		1
2,4-Dimethylphenol	105-67-9	EPA 8270	N	S	Y	N		1
2,4-Dinitrophenol	51-28-5	EPA 8270	N	S	Y	N		1
2,4-Dinitrotoluene	121-14-2	EPA 8270	N	S	Y	N		1
2,6-Dinitrotoluene	606-20-2	EPA 8270	N	S	Y	N		1
2-Chloronaphthalene	91-58-7	EPA 8270	N	S	Y	N		1
2-Chlorophenol	95-57-8	EPA 8270	N	S	Y	N		1
2-Methylnaphthalene	91-57-6	EPA 8270 SIM	Y	S	Y	Y	PAHs	
2-Methylphenol	95-48-7	EPA 8270	N	S	Y	N		1
2-Nitroaniline	88-74-4	EPA 8270	N	S	Y	N		1
2-Nitrophenol	88-75-5	EPA 8270	N	S	Y	N		1
3,3'-Dichlorobenzidine	91-94-1	EPA 8270	N	S	Y	N		1
3-Nitroaniline	99-09-2	EPA 8270	N	S	Y	N		1
4,6-Dinitro-2-methylphenol	534-52-1	EPA 8270	N	S	Y	N		1
4-Bromophenyl-phenylether	101-55-3	EPA 8270	N	S	Y	N		1
4-Chloro-3-methylphenol	59-50-7	EPA 8270	N	S	Y	N		1

Table 2
Site Related Chemical and
Investigation Analyte Correlations
Tronox LLC, Henderson, Nevada

Analyte	CAS No.	Method	SRC?	Class	UG	PA-SA	Applicable SRCs other than analyte	notes
4-Chloroaniline	106-47-8	EPA 8270	N	S	Y	N		1
4-Chlorophenyl-phenylether	7005-72-3	EPA 8270	N	S	Y	N		1
4-Methylphenol	106-44-5	EPA 8270	N	S	Y	N		1
4-Nitroaniline	100-01-6	EPA 8270	N	S	Y	N		1
4-Nitrophenol	100-02-7	EPA 8270	N	S	Y	N		1
Acenaphthene	83-32-9	EPA 8270 SIM	Y	S	Y	Y	PAHs	
Acenaphthylene	208-96-8	EPA 8270 SIM	Y	S	Y	Y	PAHs	
Anthracene	120-12-7	EPA 8270 SIM	Y	S	Y	Y	PAHs	
Benzo(a)anthracene	56-55-3	EPA 8270 SIM	Y	S	Y	Y	PAHs	
Benzo(a)pyrene	50-32-8	EPA 8270 SIM	Y	S	Y	Y	PAHs	
Benzo(b)fluoranthene	205-99-2	EPA 8270 SIM	Y	S	Y	Y	PAHs	
Benzo(g,h,i)perylene	191-24-2	EPA 8270 SIM	Y	S	Y	Y	PAHs	
Benzo(k)fluoranthene	207-08-9	EPA 8270 SIM	Y	S	Y	Y	PAHs	
Benzoic acid	65-85-0	EPA 8270	N	S	Y	N		1
Benzyl alcohol	100-51-6	EPA 8270	N	S	Y	N		1
Bis(2-chloroethoxy)methane	111-91-1	EPA 8270	N	S	Y	N		1
Bis(2-chloroethyl)ether	54-28-1	EPA 8270	N	S	Y	N		1
Bis(2-chloroisopropyl)ether	108-60-1	EPA 8270	N	S	Y	N		1
Bis(2-ethylhexyl)phthalate	117-81-7	EPA 8270	Y	S	Y	Y	paint	
Butylbenzylphthalate	85-68-7	EPA 8270	Y	S	Y	Y	paint	
Carbazole	86-74-8	EPA 8270	N	S	Y	N		1
Chrysene	218-01-9	EPA 8270	Y	S	Y	Y	PAHs	
Dibenzo(a,h)anthracene	53-70-3	EPA 8270 SIM	N	S	Y	Y	PAHs	
Dibenzofuran	132-64-9	EPA 8270	N	S	Y	Y	PAHs	
Diethylphthalate	84-66-2	EPA 8270	Y	S	Y	Y	paint	
Dimethylphthalate	131-11-3	EPA 8270	Y	S	Y	Y	paint	
Di-n-butylphthalate	84-74-2	EPA 8270	Y	S	Y	Y	paint	
Di-n-octylphthalate	117-84-0	EPA 8270	Y	S	Y	Y	paint	
Fluoranthene	206-44-0	EPA 8270 SIM	Y	S	Y	Y	PAHs	
Fluorene	86-73-7	EPA 8270 SIM	Y	S	Y	Y	PAHs	
Hexachlorobenzene	118-74-1	EPA 8270 SIM	Y	S	Y	Y		
Hexachlorobutadiene	87-68-3	EPA 8270	N	S	Y	N		1
Hexachlorocyclopentadiene	74-47-4	EPA 8270	N	S	Y	N		1
Hexachloroethane	67-72-1	EPA 8270	N	S	Y	N		1

Table 2
Site Related Chemical and
Investigation Analyte Correlations
Tronox LLC, Henderson, Nevada

Analyte	CAS No.	Method	SRC?	Class	UG	PA-SA	Applicable SRCs other than analyte	notes
Indeno(1,2,3-cd)pyrene	193-39-5	EPA 8270 SIM	Y	S	Y	Y	PAHs	
Isophorone	78-59-1	EPA 8270	N	S	Y	N		1
Naphthalene	91-20-3	EPA 8270 SIM	Y	S	Y	Y	PAHs	
Nitrobenzene	98-95-3	EPA 8270	Y	S	Y	Y		
n-Nitroso-di-n-propylamine	621-64-7	EPA 8270	N	S	Y	N		1
n-Nitrosodiphenylamine	86-30-6	EPA 8270	N	S	Y	N		1
Pentachlorophenol	87-86-5	EPA 8270 SIM	N	S	Y	N		1
Phenanthrene	85-01-8	EPA 8270 SIM	Y	S	Y	Y	PAHs	
Phenol	108-95-2	EPA 8270	N	S	Y	N		1
Pyrene	129-00-0	EPA 8270 SIM	Y	S	Y	Y	PAHs	
Pyridine	110-86-1	EPA 8270	Y	S	Y	Y		
Octachlorostyrene	29082-74-4	EPA 8270	Y	S	Y	Y		
1,4-Dioxane	123-91-1	EPA 8270	Y	S	N	Y		7

A = Asbestos
D = Dioxins/Dibenzofurans
F = Formaldehyde
H = Herbicides
M = Metals
N = No
NDEP = Nevada Division of Environmental Protection
O = Organophosphorus Pesticides
P = Organochlorine Pesticides/PCBs
PA-SA = Phase A Source Area Investigation
R = Radionuclides
S = Semivolatile Organic Compounds
SRC = Site Related Chemicals
T = TPH/Fuel Alcohols
UG = Upgradient Investigation
V = Volatile Organic Compounds
W = Wet Chemistry
Y = Yes

notes:
1 Analyte eliminated or reduced in PA-SA; see attached Table 3 - General Investigation Parameters Phase A
2 Analyte eliminated in PA-SA because not in SRC list
3 Analyte eliminated in PA-SA because unstable and degrades into another analyte on list
4 Method change in PA-SA per NDEP request, old method eliminated
5 Analyte eliminated in PA-SA because appears under another method in list
6 Analyte added February 21, 2006 in PA-SA per NDEP request
7 Analyte added March 11, 2006 in PA-SA per NDEP request
8 SRC status was added/changed February 20, 2008
9 SRC and analyte status added March 11, 2008 ; Tronox noted as used in LOU 54

Table 3
General Investigation Parameters
Phase A Investigation
Tronox LLC, Henderson, Nevada

In addition to the specific Site Investigation issues associated with known areas of potential contamination, NDEP has requested a general screening of the site for other constituents. The Phase A analytical plan for the Tronox site will be governed by the following guidelines.

Constituent	Frequency of Analysis	Comments
Metals	Analyze all soil and groundwater samples for standard metals suite including Hg.	No need to analyze for Si since sand background is very high.
Methyl mercury	Analyze soil and groundwater samples for methyl mercury only if total Mercury is >5 ppm, and other indicators such as DO warrant.	Anaerobic conditions are necessary for the formation of methyl mercury.
VOCs	Analyze all soil and groundwater samples for VOCs.	
SVOCs	Analyze all soil and groundwater samples for SVOCs as follows (do not run constituents covered in VOC analysis): - Run for 26 SRCs.	
PCBs	Analyze all soil and groundwater samples for PCBs.	
Radionuclides	Analyze 100% of soil and water samples with gamma spec reporting for Ra^{226} and Ra^{228}. Analyze 10% of samples with alpha spec reporting for Th^{232}, Th^{230}, U^{238}, U^{235}, and U^{234} to demonstrate secular equilibrium/calibration.	Water analyses for Ra-226 and Ra-228 will be performed using the approved EPA methods 903.1 and 904.0, respectively
Perchlorate	Analyze all soil and groundwater samples for perchlorate.	
Pesticides	Analyze all surficial soil samples (0.5 ft. bgs) and groundwater samples for OCP and OPP. Samples from 10 feet will also be collected at SA-2, SA-4, SA-16, SA-17, SA-18, SA-21, SA-22, and SA-23. If OCPs or OPPs are detected in the 0.5 foot sample, the 10 foot sample will be analyzed for the detected constituents.	
General Chemistry	Analyze all soil and groundwater samples for general chemistry parameters	
Dioxins/Furans	Analyze all surficial soil samples (0.5 ft. bgs) using a modified EPA 8290 screening method and confirm with laboratory analysis for 10% of total samples using EPA method 8290. No groundwater analysis.	Limit dioxin/furan soil analyses to surficial samples only. No groundwater analysis because of low solubility.
Ethylene Glycol	Limit Ethylene Glycol analyses to areas historically used for auto parts storage/maintenance.	
TPH	Limit TPH analyses to areas historically used for auto parts storage/maintenance.	TPH analyses will not be performed on water samples
Fuel Alcohols	Limit fuel alcohols analyses to areas historically used for auto parts storage/maintenance.	
Asbestos	Analyze all surficial soil samples (0.5 ft. bgs) for asbestos.	

VOCs = Volatile organic compounds.
TPH = Total Petroleum Hydrocarbons.
SVOCs = Semi-volatile organic compounds.
PCBs = Polychlorinated biphenyls.
DO = Dissolved oxygen.

ATTACHMENT B

Tronox Response to January 14, 2008 NDEP
Request for Revised Site-Related Chemical (SRC) List

NDEP Comment

The NDEP has reviewed the file for the TRX facility and has noted that the SRC list was last submitted by TRX in March 2006 in an electronic format. It is unclear whether the March 2006 SRC list was updated from the October 2004 version or just modified to include laboratory and analysis information. As stated in a NDEP October 27, 2004 approval letter, the SRC list is considered a living document and should be updated periodically. In the March 2006 SRC list, the table labeled "Alphabetical Site Related Chemicals List" has several discrepancies when compared to the tables labeled "SRC" and "SRC by Method". For example, the Alphabetical Site Related Chemicals List contains broad items (e.g. synthetic detergent, various lab wastes, etc.) while the other two tables contain specific chemicals only. The Alphabetical table should be modified to include more detail about the broad items (perhaps as a supplemental table). Additionally, TRX should also revise the SRC lists as necessary based on data collected from Site investigations completed since the last update. The modified and updated SRC lists should be submitted **by March 14, 2008**. Please contact the undersigned with any questions at sharbour@ndep.nv.gov or (702) 486-2850 x 240.

Tronox Response

The Tronox SRC list has been modified and updated. The revised SRC list has three tables. Table 1 titled "Alphabetical Site Related Chemicals List" includes all the chemicals identified by Tronox as having been used on the site plus chemicals requested by NDEP as additional analytes. The table footnote provides the revision history. Table 2 titled "Site Related Chemical and Investigation Analyte Correlations" lists the analytes used in the Tronox Upgradient and Source Area Phase A Investigations. This table correlates the SRC list and analytes in the column headed "Applicable SRCs other than analyte" for those broad items such as synthetic detergent, paint, etc. Detailed information about some of these broadly described SRCs was not available and Tronox has made reasonable assumptions to translate them into chemical analytes available in standard EPA methods. Some very broad SRCs such as "unknowns", and "various lab wastes" could not be translated into specific analytes but it is assumed the total analyte list covers them. The SRCs chelant (Nalco 1745) and chlorinated paraffins could not be translated into specific analytes or analyte groups quantifiable by EPA methods. As new data become available, updates to the SRC list or analyte list will be provided to NDEP on a periodic basis. Table 3 titled "General Investigation Parameters," is from the Phase A Source Area October 2006 Workplan and provides the rationale why some analytes were not included in the analytical suite.