## Nevada Environmental Response Trust Site

Remediation Zone	ECA#	ECA Area Description	ECA Boundary Coordinates	Rationale for Proposing ECA	Engineering Controls In Place	Sampling Locations Relevant to ECA	LOU Areas Relevant to ECA (See Attachments B through E)	Expected Depth(s) of Contamination	Characterization of Known Discolored Soil Left In-Place (Bold indicates results above soil screening levels)	Chemicals of Potential Concern (COPCs)	Minimum Required Analyses for Soils (See SMP Table 4 for Analytical Methods)	Comments
				Unit Building 1: Remediation zone extends beneath the former Chlorination Building footprint.					Discolored soil status not known			
				Unit Building 2: Remediation zone extends beneath the former Chlorination Building footprint.		SSAQ3-02, SA03, RSAQ3, SA169, SSAR3-01, SA192,	Attachment C, LOUs II:		Discolored soil status not known	Asbestos, Metals (incl. arsenic, chromium, platimum, magnesium, manganese,		
RZ-B	B1	Soils underlying Unit Buildings 1 through 6 including soil within 50 feet of	NW Corner (826862.890; 26717277.788) NE Corner (829183.785; 26717653.684) SE Corner (829247.810; 26717229.230)	Unit Building 3: Remediation zone extends beneath a small portion of the former Chlorination Building footprint.	Concrete foundations for Unit Buildings 1 through 6	RSAR3, SA110, SA190, SA193, SSAQ3-01, SSAQ4-06, SA120, SSAQ4-07, SSAQ4-03, SA84W, SA84, SA156, SSAQ4-	11 12 26 42	Unknown	Discolored soil status not known	boron), Hexavalent Chromium, Manganese Dioxide, VOCs, SVOCs/PAHs (incl. B(a)P & HCB), Dioxins/Furans, PCBs,	Asbestos, Arsenic, Chromium, Platimum, Magnesium, Manganese, Boron, Hexavalent Chromium, Manganese Dioxide,	Remediation polygon soil remains in place. Soils under Unit Buildings are
		Unit Buildings 1 through 6	SW Corner (826932.563; 26716848.751)	Unit Building 4: Remediation zone extends beneath the electrical substation and basement portions of the building.	Bullulilys i tillough o	08, SSAR4-04, SA191, SA29, SA111, RSAR4, SSAQ5-01, SA32, RSAR7, SSAR6-04,	33, 37, 40, 44, 61  Attachment E, LOUs IV:		Discolored soil status not known	OCPs, Perchlorate, Chlorate, Ammonia, Sodium Hexametaphosphate, Sodium	VOCs, B(a)P, HCB, Dioxins/Furans, PCBs, OCPs, Perchlorate, pH	as yet uncharacterized.
				Unit Building 5: Soils uncharacterized		SSAR7-05, SA33, EE-B21-1	4, 25, 26, 27, 28, 41, 42, 65		Discolored soil status not known	Chloride, Acids, Caustics, Surfactants, Wet Chemistry		
				Unit Building 6: Soils uncharacterized					Discolored soil status not known			
				Approx. 50 ft around all Unit Buildings: Soils generally uncharacterized					Discolored soil status not known			
RZ-B	B2	Portions of Polygon RZ-B- 04C/05/09/09A/11/12/13 Extending into Avenue G	B2 East:  NW Corner (82762.135; 26717511.755)  NE Corner (827887.559; 26717555.568)  SE Corner (827889.536; 26717531.047)  SW Corner (827629.192; 26717489.818)  B2 East Central:  NW Corner (827469.227; 26717506.675)  NE Corner (827469.227; 26717521.781)  SE Corner (827596.631; 26717484.871)  SW Corner (827468.967; 26717462.725)  B2 West Central:  NE Corner (827422.984; 26717484.069)  NW Corner (827422.984; 26717440.976)  SW Corner (827364.622; 26717474.992)  SE Corner (827364.283; 26717452.619)  B2 West:  NW Corner (827396.444; 26717457.781)  NE Corner (827295.705; 26717473.640)  SE Corner (827391.101; 26717445.001)  SW Corner (827193.412; 26717445.001)	Existing roadway and utilities	Asphalt roadway	SA213, SSAQ4-09, SSAQ4-10, RSAQ5, SA204, SSAQ5-01, SA203, SA04	None	Within RZ-B-04C: <0.33' Within RZ-B-05: <5' Within RZ-B-09: <10' Within RZ-B-09A: <4' Within RZ-B-11: <12' Within RZ-B-12: <6' Within RZ-B-13: <0.33'	Discolored soil status not known	Asbestos, Arsenic, Dioxins/Furans, SVOCs/PAHs (incl. HCB & B(a)P)	Asbestos, Arsenic, Dioxins/Furans, HCB, B(a)P	Remediation polygon soil remains in place.
RZ-B	ВЗ	Fire Hydrant	NW Corner (827642.763; 26717480.804) NE Corner (827662.992; 26717482.694) SE Corner (827664.740; 26717471.729) SW Corner (827656.989; 26717470.358)	Fire hydrant and water line	Asphalt pavement partially covers the area	RSAQ5, SA156, SSAQ5-05	Attachment E, LOUs IV: 4, 28	<3'	Discolored soil status not known	Metals (incl. arsenic), Hexavalent Chromium, Perchlorate, VOCs, SVOCs/PAHs (incl. B(a)P), OCPs (incl. DDT), Acids (muriatic/hydrochloric and sulfuric), Surfactants, Wet Chemistry	Arsenic, Hexavalent Chromium, Perchlorate, VOCs, B(a)P, DDT, pH	Remediation polygon soil remains in place.
RZ-B	B4	Former Hazardous Waste Storage Area	NW Corner (827478.747; 26717466.618) NE Corner (827607.794; 26717488.297) SE Corner (827630.208; 26717339.256) SW Corner (827501.950; 26717318.220)	Current Tronox Bulk Storage Area	High density polyethylene sheeting caps most of the area	g SA203, SA04, SA148, SA84, SSA04-08, SSAR4-04, SA156	Attachment E, LOUs IV: 4, 28	10'	Discolored soil status not known	Asbestos, Metals (incl. arsenic), Hexavalent Chromium, Perchlorate, VOCs, SVOCs/PAHs (incl. B(a)P & HCB), Dioxins/Furans, OCPs (incl. DDT), Acids (muriatic/hydrochloric and sulfuric), Surfactants, Wet Chemistry	Asbestos, Arsenic, Hexavalent Chromium, Perchlorate, VOCs, B(a)P, HCB, Dioxins/Furans, DDT, pH	Remediation polygon soil remains in place.
RZ-B	B5	Sodium Chlorate Filter Cake Process Area Discolored soil is present	NW Corner (827931.237; 26717477.722) NE Corner (827994.454; 26717485.654) SE Corner (828003.092; 26717435.368) SW Corner (827938.467; 26717427.573)	A thick concrete slab used in a process operation in the sodium chlorate filter cake process area cannot be removed at this time.	Approximately 12 inch thick concre- slab underlain by 2 inches of sand and 20 mil membrane		Attachment C, LOUs II: 11	<0.33'	SSAQ6-02 analyzed for dioxins, SVOCs, Arsenic, Manganese, Magnesium.	Asbestos, Metals (incl. arsenic), Hexavalent Chromium, SVOCs/PAHs (incl. B(a)P), Wet Chemistry	Asbestos, Arsenic, Hexavalent Chromium, B(a)P, pH	Remediation polygon soil remains in place, discolored soil is present.
RZ-B	B6	Soils beneath approximately 6 feet deep in polygons RZ-B-20 and RZ-B-21	Going Clockwise  NW Corner (828359.077; 26717338.191)  NE Corner (828463.555; 26717348.452)  SE Corner (828480.431; 26717199.596)  SW Corner (828387.761; 267171789.869)  Intermediate Point (828384.825; 26717214.058)  Intermediate Point (828370.891; 26717211.701)	Access for excavation of soils beneath 6 feet (and to surface east of Tronox water line) is limited by the presence of several subgrade utilities.	Asphalt pavement for 9th Street and a minimum of 6 feet of clean backfill material	SA32, SSAR6-04, RSAR7, EE- B21-1	Attachment C, LOUs II: 43	Unknown	Discolored soil status not known	Metals (incl. arsenic, manganese, boron), Hexavalent Chromium, SVOCS/ PAHS (incl. HCB & B(a)P), Perchlorate, Chlorate, Ammonia, Wet Chemistry	Arsenic, Manganese, Boron, Hexavalent Chromium, HCB, B(a)P, Perchlorate, pH	Remediation polygon soil remains in place.



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Remediation Zone	ECA #	ECA Area Description	ECA Boundary Coordinates	Rationale for Proposing ECA	Engineering Controls In Place	Sampling Locations Relevant to ECA	LOU Areas Relevant to ECA (See Attachments B through E)	Expected Depth(s) of Contamination	Characterization of Known Discolored Soil Left In-Place (Bold indicates results above soil screening levels)	Chemicals of Potential Concern (COPCs)	Minimum Required Analyses for Soils (See SMP Table 4 for Analytical Methods)	Comments
RZ-B	В7	Soils within polygon RZ-B-22	Going Clockwise  NW Corner (828484.613; 26717219.587) Intermediate Point (828521.138; 26717225.519) Intermediate Point (828528.270; 26717182.443) Intermediate Point (828564.531; 26717182.443) Intermediate Point (828564.531; 26717178.065) Intermediate Point (828567.137; 26717170.406)  NE Corner (828615.047; 26717178.512) SE Corner (828635.630; 26717043.726) SW Corner (828497.664; 26717103.533)	Access for excavation of soils within this area is limited by the presence of subgrade utilities, building foundation, asphalt roadway, and other surface features.	Asphalt pavement for Avenue H covers most of the area	SSAR7-05, SA33	Attachment D, LOUs III: 61	<2'	Discolored soil status not known	Metals (incl. arsenic, manganese, boron), Hexavalent chromium, Perchlorate, Chlorate, Ammonia, Wet Chemistry	Arsenic, Manganese, Boron, Hexavalent Chromium, Perchlorate, pH	Remediation polygon soil remains in place.
RZ-C	C1	Portion of RZ-C-01A beneath 4th Street	SW Corner (826329.027; 26718372.806) NW Corner (826322.564; 26718433.917) NE Corner (826357.898; 26718438.428) SE Corner (826362.701; 26718377.208)	Existing roadway	Asphalt pavement for 4th Street	SSAN2-03, SA56	Attachment B, LOUs I: 35	<4'	Discolored soil status not known	Metals (incl. arsenic, manganese), Hexavalent Chromium, SVOCs/PAHs, VOCs, OCPs, Perchlorate, Chlorate, Ammonia, Radionuclides, Wet Chemistry	Arsenic, Manganese, Hexavalent Chromium, SVOCs/PAHs, VOCs, OCPs, Perchlorate, pH	Remediation polygon soil remains in place.
RZ-C	C2	Portion of RZ-C-03/04/05A beneath 5th Street	SW Corner (826696.826; 26718022.888)  NW Corner (826665.943; 26718261.256)  NE Corner (826747.334; 26718275.799)  E Corner (826766.587; 26718165.735)  Inside Corner (826716.017; 26718157.534)  SE Corner (826735.167; 26718027.515)	Existing roadway	Asphalt pavement for 5th Street	SA48, SSA03-02, SSA03-01	Attachment B, LOUs I: 35, 64	<5'	Discolored soil status not known	Metals (incl. arsenic), Hexavalent Chromium, SVOCs/PAHs (incl. HCB), VOCs, OCPs, Perchlorate, Chlorate, Ammonia, Radionuclides, Wet Chemistry	Arsenic, Hexavalent Chromium, HCB, VOCs, OCPs, Perchlorate, pH	Remediation polygon soil remains in place.
RZ-C	С3	Portion of RZ-C-06 beneath fire hydrant, water line, and Avenue F	SW Corner (826833.930; 26718020.812) NW Corner (826829.015; 26718055.815) NE Corner (826896.595; 26718067.560) SE Corner (826901.830; 26718033.768)	Existing roadway, hydrant, and utilities	Asphalt pavement for Avenue F covers part of the area and clean backfill material	SSA03-03	None	<9'	Discolored soil status not known	Metals (incl. magnesium), Dioxins/Furans, HCB	Magnesium, Dioxins/Furans, HCB	Remediation polygon soil remains in place. Orange snow fencing was used to demarcate ECA boundaries prior to backfilling.
RZ-C	C4	Concrete foundation	NW Corner (826875.233; 26718179.671) NE Corner (827273.281; 26718243.329) SE Corner (827301.825; 26718120.235) SW Corner (826896.452; 26718061.866)	Concrete foundation	Concrete foundation	SSA03-03, SSA04-03	Attachment B, LOUs I: 64	<9'	Discolored soil status not known	Metals, Hexavalent Chromium, SVOCs, VOCs, OCPs, Perchlorate, Wet Chemistry	Metals, Hexavalent Chromium, SVOCs, VOCs, OCPs, Perchlorate, pH	Remediation polygon soil remains in place. Additional uncharacterized soil remains in place beneath remainder of foundation. Polygon and non-polygon soils are included in the ECA.
RZ-C	C5	Water, fiber optic, and electric utility lines through and near RZ-C-11/13 Discolored soil is present	NW Corner (827469.580; 26718306.970) NE Corner (827492.378; 26718310.645) Inside E (827507.518; 26718209.457) E Corner (827546.307; 26718216.120) SE Corner (827552.577; 26718178.526) SW Corner (827449.507; 26718161.005) W Corner (827444.791; 26718198.889) Inside W Corner (827444.784; 26718205.830)	Existing below and above ground utilities	Clean backfill material covers the northern portion	SA50, SSA05-05, SSA05-03, EE-C13-1	Attachment C, LOUs II: 45	<10'	EE-C13-1 analyzed for <b>HCB</b> , SVOCs/PAHs, Arsenic, Manganese.	Asbestos, Metals, SVOCs (incl. HCB), VOCs	Asbestos, Metals, HCB, VOCs	Remediation polygon soil remains in place, discolored soil is present.
RZ-C	C6	Discolored soil at former pump house yard Discolored soil is present	NW Corner (827658.421; 26718335.303) NE Corner (827753.703; 26718349.262) SE Corner (827777.141; 26718203.193) SW Corner (827680.717; 26718188.018)	Discolored soil from ground surface down to at least 10 feet; limited access due to facility security fencing and former pump house equipment and utilities.	Facility perimeter fencing	EE-C15-1, EE-C24-2	Attachment C, LOUs II: 45	Unknown	EE-C15-1 analyzed for HCB, SVOCs/PAHs, Arsenic, Manganese. EE-C15-2 analyzed for HCB, SVOCs/PAHs, <b>Arsenic</b> , Manganese.	Asbestos, Metals (incl. arsenic), SVOCs (incl. HCB), VOCs	Asbestos, Arsenic, HCB, VOCs	Discolored soil layer extends under facility security fencing and former pump house equipment and utilities.



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Remediation Zone	ECA#	ECA Area Description	ECA Boundary Coordinates	Rationale for Proposing ECA	Engineering Controls In Place	Sampling Locations Relevant to ECA	LOU Areas Relevant to ECA (See Attachments B through E)	Expected Depth(s) of Contamination	Characterization of Known Discolored Soil Left In-Place (Bold indicates results above soil screening levels)	Chemicals of Potential Concern (COPCs)	Minimum Required Analyses for Soils (See SMP Table 4 for Analytical Methods)	Comments
RZ-C	С7	Avenue F Utilities, Railroad line, and Roadway Discolored soil is present	NW Corner (827259.596; 26718129.560) North Edge (827972.111; 26718248.926) North Edge (827970.624; 26718259.709) NE Corner (828331.450; 26718323.872) SE Corner (828344.614; 26718244.392) Inside Corner (827546.209; 26718110.813) S Corner (827553.118; 26718061.680) SW Corner (827275.033; 26718015.647)	Existing fragile utilities (water and gas), railroad line, and Avenue F roadway	Asphalt pavement for Avenue F covers most of the area and clean backfill material	SSA04-03, SSA04-04, SSA05- 03, SSAP5-03, SA187, SA188, SA41, SA40, SSA06-05, SA130, RSAP6, EE-C24-1, EE- C27-1, EE-C27-2, EE-C27-3, EE-C27-4, DS-C24-1, DS-C24- 2	Attachment B, LOUs I: 64 Attachment C, LOUs II: 45 Attachment D, LOUs III: 34 (west)	Unknown	EE-C24-1 and EE-C24-2 analyzed for HCB, SVOCs/PAHs, Arsenic, Manganese. EE-C27-1 analyzed for Arsenic, Lead, Manganese, Perchlorate. EE-C27-2 analyzed for Arsenic, Lead, Manganese, Perchlorate. EE-C27-3 analyzed for Arsenic, Lead, Manganese, Perchlorate. EE-C27-4 analyzed for Arsenic, Lead, Manganese, Perchlorate. DS-C24-1 and DS-C24-2 analyzed for HCB, SVOCs/PAHs, arsenic, manganese.	Asbestos, Metals (incl. arsenic, manganese, lead, chromium), Heavy Metal Sulfides, Hexavalent Chromium, Dioxins/Furans, SVOCs/PAHs (incl. HCB & B(a)P), VOCs, OCPs, Perchlorate, Wet Chemistry	Asbestos, Arsenic, Manganese, Lead, Chromium, Sulfide, Sulfate, Hexavalent Chromium, Dioxins/Furans, HCB, B(a)P, VOCs, OCPs, Perchlorate, pH	Remediation polygon soil remains in place and uncharacterized discolored soil extending under Avenue F. Orange snow fencing was placed as a demarcation between clean backfill material and impacted soils below.
RZ-C	C8	9th Street Utilities and Roadway Discolored soil is present	NW Corner (828211.375; 26718503.458) NE Corner (828319.022; 26718523.165) SE Corner (828354.059; 26718328.030) SW Corner (828214.257; 26718303.875) W Corner (828207.564; 26718341.245) Inside Corner (828235.173; 26718346.171)	Existing utilities and roadway	Asphalt pavement for 9th Street covers most of the area	SA51, SSA06-03, SSA07-09, SSA07-08	Attachment C, LOUs II: 14 Attachment D, LOUs III: 24, 34 (west)	<8'	Discolored soil is present but uncharacterized	Asbestos, Metals (incl. arsenic, chromium, boron, manganese), Heavy Metal Sulfides, Hexavalent Chromium, Perchlorate, Chlorate, Ammonia, Sodium hexametaphosphates, Sulfuric Acid, Wet Chemistry,	Asbestos, Arsenic, Chromium, Boron, Manganese, Sulfide, Sulfate, Hexavalent Chromium, Perchlorate, pH	Remediation polygon soil remains in place and uncharacterized discolored soil extending under Avenue F.
RZ-C	С9	Diesel Tank and Pipelines Discolored soil is present	NE Corner (827624,863; 26718665,892) NW Corner (827648,964; 26718669,389) Intermediate Point (8276667,309; 26718549,556) Intermediate Point (827686,695; 2671851,787) Intermediate Point (827686,272; 26718514,604) Intermediate Point (82765,654; 26718512,765) Intermediate Point (827701,305; 26718349,394) E Corner (827910,196; 26718379,775) Intermediate Point (828026,840; 26718325,402) SE Corner (828034,139; 26718290,482) SW Corner (827965,535; 26718278,026) Intermediate Point (827893,672; 26718315,023) Intermediate Point (827893,672; 26718367,748) W Corner (827674,173; 26718338,738)	Existing diesel tank and pipelines to Steam Plant	Concrete tank containment structure covers most of the area beneath the tank	SSAO6-05, SA130, SA39, SSAO6-02, SSAO6-03, SA43, DS-C19-1, DS-C23-1, EE-C23- 1, EE-C20-1	Attachment C, LOUs II: 7, 8, 9, 13, 45 Attachment D, LOUs III: 34	<7'	DS-C19-1 analyzed for Dioxins/Furans, HCB, SVOCs/PAHs, Arsenic, Lead, Cobalt, Manganese, Magnesium, Perchlorate. DS-C23-1 analyzed for Dioxins/Furans, SVOCs/PAHs, Arsenic, Lead, , Cobalt, Manganese, Magnesium, Perchlorate. EE-C23-1 analyzed for Arsenic, Lead, Manganese, Perchlorate. EE-C20-1 analyzed for Arsenic, Lead, Manganese, Perchlorate. EE-C20-1 analyzed for Dioxins/Furans, HCB, Arsenic, Lead, Cobalt, Manganese, Magnesium, Perchlorate.	Asbestos, Metals (incl. arsenic, boron, manganese, lead, chromium), Heavy Metal Sulfides, Manganese Sulfate, Manganese Dioxide, Hexavalent Chromium, Perchlorate, Chlorate, VOCs, SVOCs/PAHs (incl. B(a)P), Chloride, Ammonia, Sulfuric acid, Sodium Hexametaphosphates, Wet Chemistry	Asbestos, Arsenic, Boron, Manganese, Lead, Chromium, Sulfide, Sulfate, Hexavalent Chromium, Perchlorate, VOCs, B(a)P, Chloride, pH	Remediation polygon soil remains in place and discolored soil (about 4' thick) extends under the Diesel tank and pipelines.
RZ-C	C10	Areas with Discolored Soil	NW Corner (827708.254; 26718549.044) NE Corner (827838.504; 26718569.050) SE Corner (827854.408: 26718471.807) SW Corner (827836.374; 26718468.832) Inside Corner (827831.912; 2671849.559) W Corner (827717.096; 26718484.154)	Several areas with discolored soil	Six inches to one foot of clean backfill was placed in the northern portion and approximately three feet of clean backfill was placed in the southern portion	SA114, SA102, SSAO6-01,	Attachment C, LOUs II: 7, 9	Unknown	EE-C18-1 analyzed for Dioxins/Furans, HCB, SVOCs/PAHs, Arsenic, Manganese, Magnesium. DS-C17-1 analyzed for Dioxins/Furans, HCB, Arsenic, Magnesium, Perchlorate.	Asbestos, Metals (incl. arsenic, magnesium), Hexavalent Chromium, Dioxins/Furans, HCB, Perchlorate, Chlorate, Chloride, Ammonia, Wet Chemistry	Asbestos, Arsenic, Magnesium, Hexavalent Chromium, Dioxins/Furans, HCB, Perchlorate, Chloride, pH	Discolored soil remains in place.
RZ-C	C11	Natural Gas Pipeline Discolored soil is present	E Corner (828219.836; 26718447.034) SE Corner (828223.141; 26718425.219) SW Corner (827867.950; 26718362.776) NW Corner (827819.703; 26718678.488) NE Corner (827848.890; 26718683.466) Inside Corner (827895.840; 26718390.576)	Existing natural gas pipeline to Steam Plant	None currently	SSAN6-06, SSAO6-01, SSAO6-02, SSAO6-03, SA51, SA43, EE-C20-1, EE-C21-1, EE-C21-2		>5'	EE-C20-1 analyzed for <b>Arsenic</b> , <b>Lead</b> , Manganese, <b>Perchlorate</b> . EE-C21-1 and duplicate EE-C21-2 analyzed for SVOCS/ <b>PAHs</b> , <b>Arsenic</b> , Manganese, <b>Perchlorate</b> .	Asbestos, Metals (incl. arsenic, boron, chromium, lead, manganese), Heavy Metal Sulfates, Manganese Sulfate, Manganese Dioxide, Hexavalent Chromium, Dioxins/Furans, Perchlorate, Chlorate, SVOCs/PAHs (incl. B(a)P), Sulfuric Acid, Ammonia, Sodium Hexametaphosphates, Wet Chemistry	Asbestos, Arsenic, Boron, Chromium, Lead, Manganese, Sulfate, Sulfide, Hexavalent Chromium, Dioxins/Furans, Perchlorate, B(a)P, pH	Remediation polygon soil remains in place and discolored soil (about 4' thick) extends under the natura I gas pipelines.
RZ-C	C12	Steam Plant and Associated Features	NW Corner (827705.254; 26718752.860) NE Corner (828091.530; 26718815.721) SE Corner (828108.717; 26718714.581) SW Corner (827720.272; 26718650.047)	Existing Steam Plant, pipe-racks, piping south of Plant, power pole & vault, and transformer pad	Existing Steam Plant building foundation and associated features cover most of the area	SSAN6-06, SSAN6-08	None	<2'	Discolored soil status not known	Dioxins/Furans	Dioxins/Furans	Remediation polygon soil remains in place.



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RZ-C	C13	Steam Line Discolored soil is present	Going Clockwise  NW Corner (828255.541; 26718761.080)  NE Corner (828280.131; 26718765.670)  Intermediate Point (828303.738; 26718638.785)  Intermediate Point (828302.523; 26718641.041)  Intermediate Point (828326.215; 26718617.325)  Intermediate Point (828304.553; 26718613.586)  SE Corner (828307.900; 26718592.764)  SW Corner (828287.198; 26718589.169)	Active Steam Line for facility process support	None currently	SA137, EE-14A-1	Attachment D, LOUs III: 24	<10'	EE-14A-1 analyzed for <b>Dioxins/Furans</b> , HCB, Arsenic, Magnesium, VOCs	Metals (incl. arsenic, cobalt, manganese), trace Heavy Metal Sulfides, HCB, Wet Chemistry	Arsenic, Cobalt, Manganese, Sufide, Sulfate, HCB, pH	Remediation polygon soil remains in place, discolored soil is present.
RZ-C	C14	Process Road	Going Clockwise  NW Corner (827265.616; 26718875.892) Intermediate Point (827674.546; 26718941.163) Intermediate Point (827674.546; 26718941.163) Intermediate Point (827683.232; 26718941.182) Intermediate Point (828064.216; 26718971.523) Intermediate Point (828164.271; 26719032.921) Intermediate Point (828164.271; 26719032.921) Intermediate Point (82829.27.26719194.662) SE Corner (828329.527; 26719194.662) Intermediate Point (82829.240; 26718932.476) Intermediate Point (82829.240; 26718932.476) Intermediate Point (828114.219; 26718972.406) Intermediate Point (828090.793; 26718953.318) Intermediate Point (828047.965; 26718920.837) Intermediate Point (82782.072; 26718823.723) Intermediate Point (827762.221; 26718813.824) Intermediate Point (827762.2011; 26718823.723) Intermediate Point (827762.2011; 26718803.99) SW Corner (827274.357; 26718804.939)	Existing process roadway	Process road is partially paved with asphalt and covered with approximately 3 inches of clean crushed limestone backfill material	SSAN5-02, SA60, SSAN6-02, SSAN6-01, SA49, SSAM7-03, SA58, SSAN5-05, SA196, SA105, SA150, RSAN6, SA63, SSAN5-03, SA94, SA15	Attachment C, LOUs II: 53, 57	<4'	Discolored soil status not known	Asbestos, Metals (incl. arsenic, chromium, iron), Hexavalent Chromium, Dioxins/Furans, HCB, Perchlorate, Ammonium Perchlorate, Chlorate, Ammonia, Caustics (Sodium hydroxide), Sodium chloride, Sodium hypochlorite, Wet Chemistry	Asbestos, Arsenic, Chromium, Iron, Hexavalent Chromium, Dioxins/Furans, HCB, Perchlorate, pH	Remediation polygon soil remains in place.
RZ-C	C15	Steam Plant Roadway	NW Corner (828012.014; 26718821.250) NE Corner (828076.378; 26718839.675) SE Corner (828088.906; 26718796.193) SW Corner (828024.297; 26718778.259)	Existing Steam Plant roadway	Steam Plant asphalt roadway covers most of the area	RSAN6	None	<1'	Discolored soil status not known	Arsenic	Arsenic	Remediation polygon soil remains in place.
RZ-C	C16	BT Tanks Discolored soil is present	NW Corner (827516.302; 26719183.981)  NE Corner (827744.777; 26719214.138)  SE Corner (827764.785; 26719113.985)  Intermediate Point (827557.681; 26719089.532)  SW Corner (827526.210; 26719105.922)	BT Tanks and containment structure in use by Veolia	Tanks and concrete containment structure cover most of the area	RSAM5, SSAM5-05, SA104, SSAM6-06, SSAM6-02, SSAM6 05, SSAM5-04, EE-E08A-1, EE E08A-2, EE-E09-1, CS-C30-1		Unknown	EE-E08A-1 and EE-E08A-2 analyzed for Dioxins/Furans, HCB, Arsenic, Lead, OCPs, Perchlorate. EE-E09-1 analyzed for Dioxins/Furans, HCB, Arsenic, Lead, OCPs, Perchlorate. CS-C30-1 analyzed for Dioxins/Furans and Perchlorate.	Asbestos, Metals (incl. chromium, iron), Hexavalent Chromium, Cyanide, Dioxins/Furans, OCPs, Perchlorate, Ammonium Perchlorate, Ammonia, Sodium Chloride, Sodium Hypochlorite, Sulfates, Carbonates, Phosphates, Chloride, Sulfide, Wet Chemistry	Asbestos, Chromium, Iron, Hexavalent Chromium, Cyanide, Dioxins/Furans, OCPs, Perchlorate, Chloride, pH	Remediation polygon soil remains in place, discolored soil is present.
RZ-C	C17	MN-1 Pond	NW Corner (828530.933; 26719146.567) NE Corner (828867.348; 26719208.835) SE Corner (828926.841; 26718866.75) SW Corner (828583.760; 26718798.21)	Existing MN-1 Pond currently in use. Berm north of MN-2 Pond.	MN-1 pond and pond liner cover most of the area. MN-2 Pond berm covered with fill.	SKTMn-2-1, SKTMn-2-2, SKTMn-2-3, SKTMn-2-4 (SKTMn-2-Comp)	Attachment C, LOUs II: 20 Attachment D, LOUs III: 21	Unknown	Discolored soil status not known for area under MN-1. MN-2 berm analyzed for Metals, <b>Arsenic</b> , VOCs, SVOCs, PAHs, Dioxins/Furans, PCBs, Inorganic Anions, Sulfide, Asbestos, and OCPs.	Metals (incl. arsenic, manganese, magnesium, boron), Hexavalent Chromium, Perchlorate, Chlorate, Borates, Boron Trichloride, Sodium, Calcium, Phosphates, Sulfates, Carbonates, Potassium, Potassium Oxide, Sodium Hexamertaphosphate, Wet Chemistry	Manganese, Magnesium, Boron, Hexavalent Chromium, Perchlorate, Phosphates, Sulfates, pH	Uncharacterized soil under existing MN-1 Pond. Discolored soil south of MN-1 was discovered during the construction of Tronox's Waste Water Pond MN-2. Soil remain in place and covered by fill to construct the MN-2 berm.
RZ-C	C18	Leach Plant Equipment and Facilities	SW Corner (828420.523; 26717708.494) NW Corner (828337.943; 26718284.217) NE Corner (829068.998; 26718411.494) SE Corner (829154.957; 26717819.112)	Existing Leach Plant Equipment and Facilities	Asphalt pavement covers portions of the area	SSA08-02	Attachment D, LOUS III: 24, 34 (east), 47, 48, 49, 50, 51	Unknown	Discolored soil status not known	Asbestos, Metals (incl. manganese), trace Heavy Metal Sulfides, Manganese Sulfate, Manganese Dioxide, Sulfuric Acid, Acid Solutions, Wet Chemistry	Asbestos, Manganese, Sulfide, Sulfate, pH	Remediation polygon soil remains in place.
RZ-C	C19	Storm Water Conveyance Modification Project	NW Corner (828900.842; 26719202.056) NE Corner (828925.537; 26719206.245)	Discolored soil left in place north of the headwall at base and northern sidewall of excavation.	Clean backfill covers the discolored	Base01, Base02, North, South, West01, West02, TR-Sidewall,	Attachment D, Lous III:	>8,	Confirmation samples analyzed for PAHs, SVOCs, TPH, <b>PCBs</b> , Perchlorate, Dioxins/Furans, and <b>Metals</b> . Characterization samples of excavated discolored soil collected prior to confirmation samples were	Ammonia, Asbestos, Chlorate, Chlorides, Metals (inc. boron, chromium, magnesium, manganese, platinum, tungsten), Hexavalent	Asbestos, Metals (inc. Platinum), Hexavalent Chromium,	Discolored soil is present or suspected to be present within
NZ-U	C19	Discolored soil is present	SE Corner (828939.638; 26719120.882) SW Corner (828915.296; 26719117.050)	Discolored soil left in place south of the headwall, including beneath existing storm water pipeline.	soil.	TR-Base	59	>7'	also analyzed for Organochlorine Herbicides, Organochlorine Pesticides, VOCs, Cyanide, Platinum, Inorganic Anions, Asbestos, pH, and Ignitability.	Chromium, Organochlorine Pesticides, PCBs, Perchlorate, SVOCs, TPH-DRO/ORO, VOCs,	Organochlorine Pesticides, PCBs, Perchlorate, SVOCs, VOCs	ECA boundary.



## Nevada Environmental Response Trust Site

Remediation Zone	ECA#	ECA Area Description	ECA Boundary Coordinates	Rationale for Proposing ECA	Engineering Controls In Place	Sampling Locations Relevant to ECA	LOU Areas Relevant to ECA (See Attachments B through E)	Expected Depth(s) of Contamination	Characterization of Known Discolored Soil Left In-Place (Bold indicates results above soil screening levels)	Chemicals of Potential Concern (COPCs)	Minimum Required Analyses for Soils (See SMP Table 4 for Analytical Methods)	Comments
RZ-D	D1	NV Energy Transmission Line Towers Discolored soil is present	Northern D1  NE Corner (826220.879; 26720878.355) SE Corner (826220.879; 26720837.832) SW Corner (826166.565; 26720837.832) NW Corner (826166.565; 26720837.832) NW Corner (826166.777; 26720837.8991) North Central D1  NE Corner (826225.830; 26720445.908) SE Corner (826232.913; 26720403.015) SW Corner (826194.687; 26720399.569) NW Corner (826194.687; 26720399.569) NW Corner (826190.742; 26720039.532) South Central D1  NE Corner (826244.702; 26720022.402) SE Corner (826251.203; 26719978.146) SW Corner (826251.670; 26720016.563) Southern D1  NE Corner (826206.70; 26720016.563) Southern D1  NE Corner (826255.607; 26719535.577) SE Corner (826275.367; 26719546.810) SW Corner (8262275.667; 26719535.947) NW Corner (8262275.251; 26719585.508)	Existing NV Energy Transmission Line Towers. Excavation can not be performed within 10 ft of towers. Must slope excavation away from towers.	None currently	RSAI3, SSAI3-06, SSAJ2-02, SSAI3-02-SW-E, RSAL2, SSAJ2-07, EE-D02-1	Attachment B, LOUs I: 1, 2 □	<16'	EE-D02-1 analyzed for <b>Dioxins/Furans, HCB, Arsenic</b> , Perchlorate.	Asbestos, Metals (incl. Arsenic), Hexavalent Chromium, Dioxins/Furans, VOCs, SVOCs/PAHs (incl. HCB), OCPs (incl. DDT), Perchlorate, Chlorate, Ammonia, Acids (muriatic/hydrochloric), Surfactants, Sodium Hydroxide, Wet Chemistry	Asbestos, Arsenic, Hexavalent Chromium, Dioxins/Furans, VOCs, HCB, DDT, Perchlorate, pH	Remediation polygon soil remains in place, discolored soil is present.
RZ-D	D2	Asphalt Pavement Area Discolored soil is present	NE Corner (826504.378; 26719487.850) SE Corner (826523.593; 26719369.813) SW Corner (826411.732; 26719351.627) NW Corner (826395.262; 26719473.782)	Discolored soil beneath asphalt pavement	Asphalt pavement partially covers the area	SSAL3-05, DS-D14-1	Attachment B, LOUs I: 2	<3'	DS-D14-1 analyzed for Dioxins/Furans, HCB, OCPs.	Metals, Hexavalent Chromium, Dioxins/Furans, VOCs, SVOCs (incl. HCB), OCPs (incl. 4,4'-DDE), Hydrochloric acid, Sodium Hydroxide, Wet Chemistry	Metals, Hexavalent Chromium, Dioxins/Furans, VOCs, HCB, 4,4'- DDE, pH	Discolored gray layer (6" to 3' thick) remains about 6" below ground surface.
RZ-D	D3	GW-11 and WC Ponds and Berms Discolored soil is present	NW Corner (826463.220; 26720950.66) NE Corner (828372.105; 26720797.52) (828374.5768; 26720765.32) Upper SE Corner (828338.0903; 26720280.66) (827526.5946; 26720370.77) (827383.7812; 26720208.12) Lower SE Corner (827406.5469; 26719940.18) SW Corner (826474.5376; 26719790.15)	Existing GW-11 and WC ponds and berms; soils uncharacterized; discolored soil in berm on west side of GW-11	Cement treated aggregate covers th portions of the berms where discolored soil was observed and within and adjacent to previously defined remediation polygons; pond and pond liners cover most of the area	SSAK7-02, BERM-J7-01, BERM J7-02, RSAJ7, SA127, BERM-J6 01, RSAJ6, SSAJ6-01, SSAJ6- 02, RSAJ5, BERM-K5-01,		Unknown	DS-DB-1 and DS-DB-2 analyzed for Dioxins/Furans, HCB, SVOCs/PAHs, Arsenic, Lead, Cobalt, Manganese, Magnesium, Perchlorate. EE-DB-1, EE-DB-2, and EE-D10-1 analyzed for Dioxins/Furans, HCB, Magnesium	Asbestos, Metals (incl. arsenic, boron, chromium, iron, magnesium, manganese), Manganese Dioxide, Iron Oxide, Hexavalent Chromium, Dioxins/Furans, VOCs, SVOCs (incl. HCB), OCPs (incl. DDT and Beta-BHC), Perchlorate, Chlorate, Ammonia, Acids (muriatic/hydrochloric), Surfactants, Sodium Hexametaphosphate, Sodium Hydroxide, Hypochlorite, Wet Chemistry	Asbestos, Arsenic, Boron, Chromium, Magnesium, Manganese, Iron, Iron Oxide, Hexavalent Chromium, Dioxins/Furans, VOCs, HCB, DDT, Beta-BHC, Perchlorate, pH	GW-11 and WC ponds and berms; discolored soil in berm on west side of GW-11.
RZ-D	D4	Groundwater Treatment System Equalization Tanks & Associated Piping	Nerthern D4  NE Corner (827440.425; 26720302.615) SE Corner (827442.031; 26720215.212) SW Corner (827381.495; 26720215.575) NW Corner (827380.140; 26720301.599) Southern D4  NE Corner (827391.283; 26719877.025) SW Corner (827320.703; 26719877.025) SW Corner (827320.703; 26719877.025) NW Corner (827386.745; 26720109.654)	Existing treatment system equalization tanks and associated piping	Concrete containment structure covers soils beneath the tanks; approximately 1 foot of clean crushe limestone backfill material covers th area with utilities.		Attachment B, LOUs I: 1, 32	<9'	Discolored soil status not known	Asbestos, Metals (incl. chromium, iron), Iron Oxide, Hexavalent Chromium, Dioxins/Furans, VOCs, SVOCs (incl. HCB), OCPs (incl. DDT), Perchlorate, Chlorate, Ammonia, Surfactants, Acids (muriatic/hydrochloric), Sodium Hydroxide, Wet Chemistry	Asbestos, Chromium, Iron, Iron Oxide, Hexavalent Chromium, Dioxins/Furans, VOCs, HCB, DDT, Perchlorate, pH	Remediation polygon soil remains in place. Orange snow fencing was used to demarcate ECA boundaries prior to backfilling.
RZ-D	D5	Treatment Plant Chemical Storage Area	NE Corner (827187.632; 26719531.503) SE Corner (827193.389; 26719486.797) SW Corner (826998.312; 26719453.946) NW Corner (826992.893; 26719498.312)	Asphalt paved chemical storage area	Asphalt pavement covers the area	SA189, SA19, SA173, SA179	None	Unknown	Discolored soil status not known	Asbestos, Perchlorate	Asbestos, Perchlorate	Remediation polygon soil remains in place.
RZ-D	D6	Facility Roadway	NE Corner (827377.528; 26719603.239) SE Corner (827381.482; 26719523.163) SW Corner (827206.084; 26719509.769) NW Corner (827202.359; 26719587.326)	Existing roadway	Asphalt pavement covers the area	SA189, SA19, SA173, SA179	Attachment B, LOUs I: 58 Attachment C, LOUs II: 30, 56	Unknown	Discolored soil status not known	Asbestos, Metals, Hexavalent Chromium, Perchlorate, Ammonium Perchlorate, Chlorate, Ammonia, Wet Chemistry	Asbestos, Metals, Hexavalent Chromium, Perchlorate, pH	Remediation polygon soil remains in place.
RZ-D	D7	Asphalt Pavement, Office Trailers, Cr Treatment Plant, Quonset Hut, and Utilities	SW Corner (827500.140; 26719576.911) NW Corner (827449.416; 26719975.180) NE Corner (827532.569; 26719987.895) Inner corner (827558.985; 26719796.882) E Corner (827703.092; 26719817.287) SE Corner (827730.440; 26719608.070)	Existing paved area, office trailers, and treatment plant facilities	: Asphalt pavement and facility structures cover most of the area	SSAK5-04, SSAL6-01	Attachment B, LOUs I: 32 Attachment C, LOUs II: 31, 55	<0.33'	Discolored soil status not known	Asbestos, Metals (incl. chromium, iron), Iron Oxide, Hexavalent Chromium, Dioxins/Furans, VOCs, SVOCs, Perchlorate, Ammonium Perchlorate, Crystalline Perchlorate, Crystalline Chlorate, Chlorate, Hydrogen Chloride, Wet Chemistry	Asbestos, Chromium, Iron, Iron Oxide, Hexavalent Chromium, Dioxins/Furans, VOCs, SVOCs, Perchlorate, Chloride, pH	Remediation polygon soil remains in place.



## Nevada Environmental Response Trust Site

Remediation Zone	ECA#	ECA Area Description	ECA Boundary Coordinates	Rationale for Proposing ECA	Engineering Controls In Place	Sampling Locations Relevant to ECA	LOU Areas Relevant to ECA (See Attachments B through E)	Expected Depth(s) of Contamination	Characterization of Known Discolored Soil Left In-Place (Bold indicates results above soil screening levels)	Chemicals of Potential Concern (COPCs)	Minimum Required Analyses for Soils (See SMP Table 4 for Analytical Methods)	Comments
RZ-D	D8	AP-5 Pond and Associated Utilities Discolored soil is present	SE Corner (827771.063; 26719275.097) SW Corner (827336.478; 26719203.149) NW Corner (827291.450; 26719572.921) NE Corner (827720.111; 26719632.200)	Existing pond and existing subgrade and overhead utilities related to AP-5 pond; soils beneath pond uncharacterized	Pond and pond liner, and clean crushed limestone backfill material cover most of the area	SSAL5-05, SA72, SSAM5-01, SA179	Attachment B, LOUs I: 58 Attachment C, LOUs II: 19, 30, 31, 55, 56, 57	Unknown	Discolored soil is present but was not sampled	Asbestos, Metals, Hexavalent Chromium, Dioxins/Furans, SVOCs, Perchlorate, Ammonium Perchlorate, Crystalline Perchlorate, Crystalline Chlorate, Chlorate, Ammonia, Hydrogen Chloride, Sodium Chloride, Sodium Hypochlorite, Wet Chemistry	Asbestos, Metals, Hexavalent Chromium, Dioxins/Furans, SVOCs, Perchlorate, Chloride, pH	Remediation polygon soil remains in place; AP-5 Pond and berm soils. Crushed limestone used to demarcate ECA boundaries prior to backfilling.
RZ-D	D9	Dioxin TEQ above Site-Specific BCL approximately 9-10 feet deep Discolored soil is present at property boundary	NW Corner (828709.587; 26720108.132) NE Corner (828730.167; 26720119.572) SE Corner (828781.298; 26720032.585) SW Corner (828761.143; 26720022.189)	Dioxin TEQ above Site-Specific BCL approximately 9-10 feet deep	Approximately 9-10 feet of clean backfill material covers the area	CS-D25A-2, EE-D25A-2, EE- D25A-3	None	9'-10'	EE-D25A-2 and EE-D25A-3 (located at property boundary) analyzed for Dioxins/Furans and Arsenic.	Arsenic, Dioxins/Furans	Arsenic, Dioxins/Furans	Soil with Dioxin TEQ > BCL remains at depth of 9-10 ft, discolored soil is present. Orange snow fencing was used to demarcate ECA boundaries prior to backfilling.
RZ-D	D10	Groundwater Extraction Well and Related Piping Discolored soil is present	SW Corner (828793.960; 26719855.820) NW Corner (828762.991; 26719899.313) NE Corner (828782.182; 26719912.918) SE Corner (828813.277; 26719870.146)	Existing groundwater extraction well and related piping, with discolored soil observed in southwest sidewall of polygon RZ-D-25A	Approximately 1 foot of native soils overlie the discolored soils	SSAL8-03, EE-D25A-1	None	<3'	EE-D25A-1 analyzed for Dioxins/Furans and <b>Arsenic</b> .	Arsenic	Arsenic	Discolored soil layer with debris near groundwater extraction well.
RZ-E	E1	Portions of RZ-E-01 and RZ-E-03 beneath 4th Street and Facility Roadway	NE corner (826277.519; 26718907.439) SE corner (826285.239; 26718864.891) SW corner (826257.274; 26718860.087) NW corner (826251.012; 26718901.434)	Existing roadways	Asphalt pavement for 4th Street and clean crushed limestone for facility roadway	SSAM2-01, BDT-1-N-15, BDT 1-N-10	- Attachment C, LOUs II: 5	<8'	Discolored soil status not known	Metals, Hexavalent Chromium, Cyanide, Dioxins/Furans, HCB, OCPs (incl. 4,4-DDE, 4,4-DDT, aldrin, alpha-BHC, dieldrin), Perchlorate, Chlorate, Ammonia, Sulfates, Carbonates, Phosphates, Chloride, Sulfide, Wet Chemistry	Metals, Hexavalent Chromium, Cyanide, Dioxins/Furans, HCB, 4,4- DDE, 4,4-DDT, Aldrin, alpha-BHC, Dieldrin, Perchlorate, Sulfate, Phosphate, Chloride, Sulfide, pH	Remediation polygon soil remains in place.
RZ-E	E2	Tronox Process Water Lines Discolored soil is present	Going Clockwise  NW Point (828401.614; 26719519.207)  NE Point (828427.851; 26719523.773)  E Point (828465.906; 26719292.072)  S Point (828232.379; 26718985.521)  SW Point (828225.192; 26719038.434)  Inside corner (828428.217; 26719333.712)	Existing process water lines	None currently	SA107, SSAN7-04, SSAM7-07 SSAM7-06, SA155, SA86, EE- E14B-1, EE-E14B-2, EE-E14-1 EE-E14C-1	- Attachment C, LOUs II:	<9'	EE-E14B-1, EE-E14B-2, EE-E14-1 analyzed for <b>Dioxins/Furans</b> , <b>HCB</b> , <b>Arsenic</b> , Perchlorate. EE-E14C-1 analyzed for Dioxins/Furans, HCB, SVOCs, Arsenic, OCPs, Perchlorate.	Asbestos, Metals (incl. arsenic), Hexavalent Chromium, Cyanide, Dioxins/Furans, HCB, B(a)P, OCPs (4,4-DDE, 4,4-DDT, aldrin, alpha-BHC), PCBs, Perchlorate, Chlorate, Ammonia, Sulfates, Carbonates, Phosphates, Chloride, Sulfide, Wet Chemistry	Asbestos, Arsenic, Hexavalent Chromium, Cyanide, Dioxins/Furans, HCB, B(a)P, 4,4- DDE, 4,4-DDT, Aldrin, alpha-BHC, PCBs, Perchlorate, Sulfate, Phosphate, Chloride, Sulfide, pH	Remediation polygon soil remains in place; Discolored soil along the western sidewall of the excavation performed within RZ-E-14B.

a - COPCs compiled from LOU packets and existing soil data within the ECA.



Table A-2. ECA #C17 Expansion Area Sample Nevada Environmental Response Trust Site Henderson, Nevada

Parameter of Interest	Item #	Chemical	Unit	NDEP Site Screening Level	Basis	Sample Results	Unit	Comments 1	Comments 2
	1	Aluminum	mg/kg	100,000	max	14,000	mg/Kg		
	2	Antimony	mg/kg	454	N	ND	mg/Kg		
	3	Arsenic	mg/kg	7.2 <sup>h</sup>	-	19	mg/Kg		
	4	Barium	mg/kg	100,000	max	610	mg/Kg		
	5	Beryllium	mg/kg	2,230	С	ND	mg/Kg		
	6	Boron	mg/kg	100,000	max	ND	mg/Kg		
	7	Cadmium	mg/kg	560	N	ND	mg/Kg		
	8	Chromium (Total)	mg/kg	100,000	max	20	mg/Kg		
	9	Chromium (VI) (by EPA Method 7196A or 7199/3060A	mg/kg	1,230	С	1.6	mg/Kg		
	10	Cobalt	mg/kg	337	С	100	mg/Kg		
	11	Copper	mg/kg	42,200	N	160	mg/Kg		
	12	Iron	mg/kg	100,000	max	21,000	mg/Kg		
	13	Lead	mg/kg	800	-	25	mg/Kg		
	14	Magnesium	mg/kg	100,000	max	5,100	mg/Kg		
Metals by EPA Methods	15	Manganese	mg/kg	24,927	N	22,000	mg/Kg		
6010 and 6020	16	Mercury (by EPA Method 7470/7471	mg/kg	341	N	ND	mg/Kg		
0010 and 0020	17	Molybdenum	mg/kg	5,680	N	2.7	mg/Kg		
	18	Nickel	mg/kg	21,800	N	45	mg/Kg		
	19	Platinum	mg/kg			ND	mg/Kg		
	20	Potassium	mg/kg			2,400	mg/Kg		
	21	Selenium	mg/kg	5,680	N	1.5	mg/Kg		
	22	Silver	mg/kg	5,680	N	ND	mg/Kg		
	23	Sodium	mg/kg			790	mg/Kg		
	24	Strontium	mg/kg	100,000	max	210	mg/Kg		
	25	Thallium	mg/kg	79.5	N	ND	mg/Kg		
	26	Tin	mg/kg	100,000	max	ND	mg/Kg		
	27	Titanium	mg/kg	100,000	max	510	mg/Kg		
	28	Tungsten	mg/kg	8,510	N	15	mg/Kg		
	29	Uranium	mg/kg	3,400	N	1.2	mg/Kg		
	30	Vanadium	mg/kg	5,680	N	45	mg/Kg		
	31	Zinc	mg/kg	100,000	max	140	mg/Kg		
	1	Cyanide (by EPA Method 9012)	mg/kg	13,700	N	0.7	mg/Kg		
General Chemistry	2	Perchlorate (by EPA Method 314.0 or 6950)	mg/kg	795	N	63,000	μg/Kg		
,	3	pH (by EPA Method 9045)				7.2	pH Units		



Table A-2. ECA #C17 Expansion Area Sample Nevada Environmental Response Trust Site Henderson, Nevada

Parameter of Interest	Item #	Chemical	Unit	NDEP Site Screening Level	Basis	Sample Results	Unit	Comments 1	Comments 2
	1	1,1,1,2-Tetrachloroethane	mg/kg	19.9	С	ND	μg/Kg		
	2	1,1,1-Trichloroethane	mg/kg	1,390	С	ND	μg/Kg		
	3	1,1,2,2-Tetrachloethane	mg/kg	2.54	C	ND	μg/Kg		
	4	1,1,2-Trichloroethane	mg/kg	5.51	С	ND	μg/Kg		
	5	1,1-Dichloroethane	mg/kg	21.4	С	ND	μg/Kg		
	6	1,1-Dichloroethene	mg/kg	1,270	N	ND	μg/Kg		
	7	1,1-Dichloropropene	mg/kg			ND	μg/Kg		
	8	1,2,3-Trichlorobenzene	mg/kg			ND	μg/Kg		
	9	1,2,3-Trichloropropane	mg/kg	1.59	С	ND	μg/Kg		
	10	1,2,4-Trichlorobenzene	mg/kg	707	N	ND	μg/Kg		
	11	1,2,4-Trimethylbenzene	mg/kg	604	N	ND	μg/Kg		
	12	1,2-Dibromo-3-chloropropane	mg/kg	0.0529	С	ND	μg/Kg		
		1,2-Dichlorobenzene	mg/kg	373	sat	ND	μg/Kg		
	14	1,2-Dichloroethane	mg/kg	2.24	С	ND	μg/Kg		
	15	1,2-Dichloropropane	mg/kg	4.29	С	ND	μg/Kg		
		1,3,5-Trimethylbenzene	mg/kg	246	N	ND	μg/Kg		
	17	1,3-Dichlorobenzene	mg/kg	373	sat	ND	μg/Kg		
		1,3-Dichloropropane	mg/kg	64.6	sat	ND	μg/Kg		
	19	1,4-Dichlorobenzene	mg/kg	13.5	C	ND	μg/Kg		
		2,2-Dichloropropane	mg/kg			ND	μg/Kg		
	21	2-Butanone	mg/kg	34,100	sat		P-0/0	Not included in lab report.	
VOCs by EPA Method 8260	22	2-Chlorotoluene	mg/kg	511	sat	ND	μg/Kg		
	23	2-Hexatone	mg/kg	1,930	N	.,,,	P-6/ 1.6	Not included in lab report.	
	24	2-Methoxy-2-methyl-butane	mg/kg					Not included in lab report.	
	25	4-Chlorotoluene	mg/kg			ND	μg/Kg	Not medded in idd report.	
	26	4-Isopropyltoluene	mg/kg			ND	μg/Kg		
	27	4-Methyl-2-pantanone	mg/kg	17,200	sat		P-0/0	Not included in lab report.	
	28	Acetone	mg/kg	100,000	max			Not included in lab report.	
	29	Benzene	mg/kg	4.21	С	ND	μg/Kg		
	30	Bromobenzene	mg/kg	276	N	ND	μg/Kg		
	31	Bromochloromethane	mg/kg	-	-		P-0/ · · 0	Not included in lab report.	
	32	Bromodichloromethane	mg/kg	51.3	С	ND	μg/Kg		
	33	Bromoform	mg/kg	242	С	ND	μg/Kg		
	34	Bromomethane	mg/kg	39.1	N	ND	μg/Kg		
	35	Carbon tetrachloride	mg/kg	1.55	C	ND	μg/Kg		
	36	Chlorobenzene	mg/kg	695	N	ND	μg/Kg		
	37	Chloroethane	mg/kg	1,100	С	ND	μg/Kg		
	38	Chloroform	mg/kg	1.55	С	ND	μg/Kg		
	39	Chloromethane	mg/kg	8.05	C	ND	μg/Kg		
	40	cis-1,2-Dichloroethene	mg/kg	737	sat	ND	μg/Kg		
	41	cis-1,3-Dichloropropene	mg/kg			ND	μg/Kg		
	42	Dibromochloromethane	mg/kg	6.03	С	ND	μg/Kg		
	43	Dibromomethane	mg/kg	191	<	ND	μg/Kg		



Table A-2. ECA #C17 Expansion Area Sample Nevada Environmental Response Trust Site Henderson, Nevada

Parameter of Interest	Item #	Chemical	Unit	NDEP Site Screening Level	Basis	Sample Results	Unit	Comments 1 Comments 2
	44	Dichlorodifluoromethane	mg/kg	340	N	ND	μg/Kg	
	45	Ethyl t-butyl ether	mg/kg					Not included in lab report.
	46	Ethylbenzene	mg/kg	19.6	С	ND	μg/Kg	
	47	Ethylene dibromide	mg/kg	0.177	С			Not included in lab report.
	48	Hexachlorobutadiene	mg/kg	24.6	С	ND	μg/Kg	
	49	Isopropyl ether	mg/kg					Not included in lab report.
	50	Isopropylbenzene	mg/kg	647	N	ND	μg/Kg	
	51	m p-Xylene	mg/kg	214	sat	ND	μg/Kg	
	52	Methyl tert butyl ether	mg/kg	208	С			Not included in lab report.
	53	Methylene chloride	mg/kg	58.5	С	ND	μg/Kg	
	54	Naphthalene	mg/kg	15.6	С	ND	μg/Kg	
	55	N-Butylbenzene	mg/kg	237	sat	ND	μg/Kg	
VOCs by EPA Method 8260	56	N-Propylbenzene	mg/kg	237	sat	ND	μg/Kg	
(Cont'd)	57	o-Xylene	mg/kg	282	sat	ND	μg/Kg	
	58	sec-Butylbenzene	mg/kg	223	sat	ND	μg/Kg	
	59	Styrene	mg/kg	1,730	sat	ND	μg/Kg	
	60	t-Butyl alcohol	mg/kg					Not included in lab report.
	61	tert-Butylbenzene	mg/kg	393	sat	ND	μg/Kg	
	62	Tetrachloroethene	mg/kg	3.28	С	ND	μg/Kg	
	63	Toluene	mg/kg	521	sat	ND	μg/Kg	
	64	trans-1,2-Dichloroethylene	mg/kg	547	N	ND	μg/Kg	
	65	trans-1,3-Dichloropropene	mg/kg					Not included in lab report.
	66	Trichloroethene	mg/kg	5.49	С	ND	μg/Kg	
	67	Trichlorofluoromethane	mg/kg	1,980	N	ND	μg/Kg	
	68	Vinyl Chloride	mg/kg	1.86	С	ND	μg/Kg	
	69	Xylenes, total	mg/kg	214	sat			Not included in lab report.
	1	1,4-Dioxane	mg/kg	174	С			Not included in lab report.
	2	2-Methylnaphthalene	mg/kg			ND	μg/Kg	
	3	bis(2-Ethylhexyl)phthalate	mg/kg	137	С	ND	μg/Kg	
	4	Butyl benzyl phthalate	mg/kg	240	sat	ND	μg/Kg	
	5	Dibenz(a,h)anthracene	mg/kg	0.234	С			Not included in lab report.
0,400	6	Diethyl phthalate	mg/kg	100,000	max			Not included in lab report.
SVOCs incl. Hexachlorobenzene and Benzo(a)Pyrene) by EPA	7	Dimethyl phthalate	mg/kg	100,000	max			Not included in lab report.
Method 8270	8	Di-N-Butyl phthalate	mg/kg	68,400	N	ND	μg/Kg	
. 150.150 52.75	9	Di-N-Octyl phthalate	mg/kg			ND	μg/Kg	
	10	Hexachlorobenzene <sup>c</sup>	mg/kg	1.2	С	ND	μg/Kg	
	11	Naphthalene	mg/kg	15.6	С	ND	μg/Kg	
	12	Nitrobenzene	mg/kg	13.6	С	ND	μg/Kg	
	13	Octachlorostyrene	mg/kg					Not included in lab report.
	14	Pyridine	mg/kg	667	N			Not included in lab report.



Table A-2. ECA #C17 Expansion Area Sample Nevada Environmental Response Trust Site Henderson, Nevada

Parameter of Interest	Item #	Chemical	Unit	NDEP Site Screening Level	Basis	Sample Results	Unit	Comments 1	Comments 2
	1	Acenaphthene	mg/kg	2,560	N	ND	μg/Kg		
	2	Acenaphthylene	mg/kg	147	sat	ND	μg/Kg		
	3	Anthracene	mg/kg	9,060	N	ND	μg/Kg		
	4	Benz(a)anthracene	mg/kg	2.34	С	ND	μg/Kg		
	5	Benzo(a)pyrene	mg/kg	0.234	С	ND	μg/Kg		
	6	Benzo(b)fluoranthene	mg/kg	2.34	С	ND	μg/Kg	ND by GC/MS; 6.3 µg/Kg by GC/MS-SIN	
PAHs by EPA Method	7	Benzo(g,h,i)perylene	mg/kg	34,100	N	ND	μg/Kg		PAHs are not listed on the Soil
8310 or 8270	8	Benzo(k)fluoranthene	mg/kg	23.4	С	ND	μg/Kg		Screening Level Table
	9	Chrysene	mg/kg	234	С	ND	μg/Kg		
	10	Fluoranthene	mg/kg	24,400	N	ND	μg/Kg	ND by GC/MS; 7.0 µg/Kg by GC/MS-SIN	1
	11	Fluorene	mg/kg	3,440	N	ND	μg/Kg		
	12	Indeno(1,2,3-cd)pyrene	mg/kg	2.34	С	ND	μg/Kg		
	13	Phenanthrene	mg/kg	24.5	sat	ND	μg/Kg		
	14	Pyrene	mg/kg	19,300	N	ND	μg/Kg	ND by GC/MS; 5.7 µg/Kg by GC/MS-SIN	
Dioxins/Furans by EPA Method 8290	1	TCDD TEQg	pg/g	2,700 <sup>f</sup>	С	27	pg/g		
	1	Aroclor-1016	mg/kg	23.6	С	ND	μg/Kg		
	2	Aroclor-1221	mg/kg	0.826	С	ND	μg/Kg		
	3	Aroclor-1232	mg/kg	0.826	С	ND	μg/Kg		
	4	Aroclor-1242	mg/kg	0.826	С	ND	μg/Kg		
PCBs by EPA Method 8082	5	Aroclor-1248	mg/kg	0.826	С	ND	μg/Kg		
·	6	Aroclor-1254	mg/kg	0.826	С	ND	μg/Kg		
	7	Aroclor-1260	mg/kg	0.826	С	ND	μg/Kg		
	8	Total PCBs	mg/kg	0.826	С	ND	μg/Kg		
	9	TCDD TEQ <sup>e</sup>	pg/g	2,700 <sup>f</sup>	С	ND	μg/Kg		
	1	Bromide				ND	mg/Kg		
	2	Chloride				1500	mg/Kg		1
	3	Fluroide				ND	mg/Kg		1
Inorganic Anions by EPA Method	4	Nitrate as nitrate				ND	mg/Kg		Inorganic Anions are not listed on the Soil Screening Level
9056	5	Sulfate				15000	mg/Kg		
	6	Nitrite as N				81	mg/Kg		Table
	7	Nitrate as nitrate				ND	mg/Kg		1
	8	Orthophosphate as phosphate				ND	mg/Kg		1
Sulfide by EPA Method 9034	1	Sulfide				ND	mg/Kg		Not on Soil Screening Level Table
Asbestos by Modified EPA		Long amphibole fibers	fibers	1 or more <sup>i</sup> More than 5 <sup>i</sup>	-	ND	5, 9		
Method 540/R-97/028	2	Long chrysotile fibers	fibers	1 or more <sup>i</sup> More than 5 <sup>i</sup>	-	ND			



#### Table A-2. ECA #C17 Expansion Area Sample Nevada Environmental Response Trust Site Henderson, Nevada

Parameter of Interest	Item #	Chemical	Unit	NDEP Site Screening Level	Basis	Sample Results	Unit	Comments 1	Comments 2
	1	4,4'-DDD	mg/kg	11.1	С	ND	μg/Kg		
	2	4,4'-DDE	mg/kg	7.81	С	2.6	μg/Kg		
	3	4,4'-DDT	mg/kg	7.81	С	ND	μg/Kg		
	4	Aldrin	mg/kg	0.113	С	ND	μg/Kg		
	5	Alpha-BHC	mg/kg	0.399	С	ND	μg/Kg		
	6	Alpha-chlordane	mg/kg			ND	μg/Kg		
	7	Beta-BHC	mg/kg	1.4	С	2	μg/Kg		
	8	Delta-BHC	mg/kg			ND	μg/Kg		
	9	Dieldrin	mg/kg	0.12	С	ND	μg/Kg		
	10	Endosulfan I	mg/kg			ND	μg/Kg		
OCPs by EPA Method 8081A	11	Endosulfan II	mg/kg			ND	μg/Kg		
OCFS by LFA Method 8081A	12	Endosulfan Sulfate	mg/kg			ND	μg/Kg		
	13	Endrin	mg/kg	205	N	ND	μg/Kg		
	14	Endrin Aldehyde	mg/kg			ND	μg/Kg		
	15	Endrin Ketone	mg/kg			ND	μg/Kg		
	16	Gamma-BHC (Lindane)	mg/kg	1.93	С	ND	μg/Kg		
	17	Gamma-chlordane	mg/kg			ND	μg/Kg		
	18	Heptachlor	mg/kg	0.426	С	ND	μg/Kg		
	19	Heptachlor Epoxide	mg/kg	0.21	С	ND	μg/Kg		
	20	Methoxychlor	mg/kg	3420	N	ND	μg/Kg	_	
	21	Tech-Chlordane	mg/kg	7.19	С	ND	μg/Kg	Lab reported Chlordane	
	22	Toxaphene	mg/kg	1.74	С	ND	μg/Kg		

Notes

Analysis was performed on a composite sample made from 4 conformation samples gathered on January 9, 2013.

With the exception of the OCP analysis which was performed on a composite sample made from the 4 conformation samples gathered on Feb. 1, 2013.

The lab was unable to complete the analysis on the original sample before the expiration date for EPA Method 8081A.

: Result exceeds the NDEP site screening level.

 $\label{thm:continuous} \mbox{There were } \mbox{ 20 VOC / SVOCs } \mbox{ listed on the Soil Screening Level Table (SMP) that were not reported in the lab report.$ 

 $There were 43 \ VOC/SVOCs \ included \ in \ the \ lab \ report \ that \ weren't \ listed \ in \ the \ Soil \ Screening \ Level \ Table \ (SMP).$ 

Footnotes:

- c Hexachlorobenzene analyzed using both EPA Methods 8081 and 8270. Data reported based on EPA 8270 as it was deemed to be the superior method.
- ${\rm e}$  TCDD equivalents based on WHO 2005 TEFs for the 12 co-planer PCBs; the detection limit was used for non-detect values.
- f Site-specific value (from NDEP, Letter to Tronox LLC re: Response to: Results of Bioaccessibility Study for Dioxin/Furins in Soil, Tronox LLC, Henderson, Nevada (Revised), May 25, 2010. (NDEP, 2010b)).
- g -TCDD equivalents based on WHO 2005 TEFs for the 17 dioxin and furan cogeners.
- h Based on regional background concentrations.
- i Site-specific value.
- C = Cancer
- N = Noncancer
- sat = soil saturation
- max = risk-based value is greater than 100,000 mg/kg
- -- = undefined



Table A-3. Confirmation Soil Sample Results for Former ECA #E3 Nevada Environmental Response Trust Site Henderson, Nevada

Analyte Group	Analyte	Bottom	North Sidewall	West Sidewall	South Sidewall	Site-Specific Criteria <sup>1</sup>
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	Arsenic	4.3	5.4	5.4	7.3	7.2
Metals	Manganese	470	550	740	1,100	24,900
	Chromium VI	ND<0.8	0.25 J	ND<0.79	0.52 J	1,360
Perchlorate	Perchlorate	0.92	46	42	6.2	795
PCBs	Total PCBs	ND<0.05	ND<0.049	ND<0.049	ND<0.99	0.826
	4,4-DDT	0.015	0.023	0.003 J	0.94	7.81
	4,4-DDD	ND<0.005	ND<0.0049	ND<0.0049	0.013	11.1
	4,4-DDE	0.044	0.021	0.0049	1.3	7.81
Organochlorine	alpha-BHC	ND<0.005	ND<0.0049	ND<0.0049	0.0028 J	270
Pesticides	beta-BHC	0.0021 J,p	0.017	0.0082	0.037	53.9
	Endrin ketone	ND<0.005	ND<0.0049	ND<0.0049	0.011	na
	Endosulfan II	ND<0.005	ND<0.0049	ND<0.0049	0.2	4,100
	Other Pesticides	ND	ND	ND	ND	N/A
	Nitrate	2.6	16	16	9.6	100,000
	Nitrite	ND<1.5	ND< 1.5	ND<1.5	ND<1.5	100,000
Inorganic Ions	Orthophosphate	ND<1.6 *	ND< 1.6 *	ND<1.6 *	ND<1.6 *	na
	Sulfide	ND<40	ND<40	ND<40	ND<40	na
	Cyanide	ND<0.5	ND<0.5	ND<0.5	ND<0.49	29.3
Wet Chemistry	рН	8.77	8.49	8.49	8.63	na
Asbestos	Bulk Asbestos	No Fibers Detected	No Fibers Detected	No Fibers Detected	No Fibers Detected	na

### Notes

Analysis was performed on conformation samples gathered on October 7, 2013.

: Result exceeds site specific cleanup criteria (BCL or arsenic background value).

mg/kg: milligrams per kilogram

na: not available N/A: not applicable

ND<##: not detected at or above the laboratory reporting limit shown

- 1: based on August 2013 NDEP Basic Comparison Levels (BCLs) except for arsenic, the criteria for which is based on typical natural background concentration.
- J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
- p: The % RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
- \*: LCS or LCSD exceeds control limits.



Analyte Group	Analyte	Confirmation Sample TR-Sidewall TR-SIDEWALL- 20160406	Confirmation Sample TR-Base TR-BASE- 20160406	Confirmation Sample North SO-SW-NORTH- 20160406	Confirmation Sample South SO-SW-SOUTH- 20160406	Confirmation Sample West01 SO-SW-WEST01 20160406	Confirmation Sample West02 SO-SW-WEST02- 20160406	Confirmation Sample Base01 SO-SW-BASE01- 20160406	Confirmation Sample Base02 SO-SW-BASE02- 20160406	NDEP 2015 Worker BCL or Site- Specific Screening Level <sup>a</sup>	Unit
		4/6/2016	4/6/2016	4/6/2016	4/6/2016	4/6/2016	4/6/2016	4/6/2016	4/6/2016	Levei	İ
	Acenaphthene (by 8270C)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	2,360	//
	Acenaphthene (by 8270C-SIM)	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	2,360	mg/kg
	Acenaphthylene (by 8270C)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	147	ma/ka
	Acenaphthylene (by 8270C-SIM)	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	14/	mg/kg
	Anthracene (by 8270C)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	9,080	ma/lea
	Anthracene (by 8270C-SIM)	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	9,080	mg/kg
	Benz(a)anthracene (by 8270C)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	3.23	mg/kg
	Benz(a)anthracene (by 8270C-SIM)	0.019	ND < 0.005	0.026	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005		
	Benzo(a)pyrene (by 8270C)	ND < 0.2	ND < 0.330	ND < 2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	0.323	mg/kg
	Benzo(a)pyrene (by 8270C-SIM)	0.015	ND < 0.005	ND < 0.050	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005		
	Benzo(b)fluoranthene (by 8270C)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	3.23 38,900 32.3	mg/kg mg/kg mg/kg
	Benzo(b)fluoranthene (by 8270C-SIM)	0.040	ND < 0.005	0.070	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005		
	Benzo(g,h,i)perylene (by 8270C)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330		
	Benzo(g,h,i)perylene (by 8270C-SIM)	0.0065	ND < 0.005	ND < 0.050	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005		
	Benzo(k)fluoranthene (by 8270C)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330		
PAHS	Benzo(k)fluoranthene (by 8270C-SIM)	0.012	ND < 0.005	ND < 0.050	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005		
	Chrysene (by 8270C)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	323	mg/kg
	Chrysene (by 8270C-SIM)	0.026	ND < 0.005	0.027	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005		
	Dibenz(a,h)anthracene (by 8270C)	ND < 0.200	ND < 0.330	ND < 2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2		
	Dibenz(a,h)anthracene (by 8270C-SIM)	ND < 0.005	ND < 0.005	ND < 0.050	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	0.323	mg/kg
	Fluoranthene (by 8270C)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	33,700 3,460 3.23	mg/kg mg/kg mg/kg
	Fluoranthene (by 8270C-SIM)	0.099	ND < 0.005	0.053	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005		
	Fluorene (by 8270C)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330		
	Fluorene (by 8270C-SIM)	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005		
	Indeno(1,2,3-cd)pyrene (by 8270C)	ND < 0.330	ND < 0.330	ND < 3.33	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330		
	Indeno(1,2,3-cd)pyrene (by 8270C-SIM)	0.0065	ND < 0.005	ND < 0.050	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005		
	Naphthalene (by 8270C)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	15.6 24.5	mg/kg mg/kg
	Naphthalene (by 8270C-SIM)	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005		
	Phenanthrene (by 8270C)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330		
	Phenanthrene (by 8270C-SIM)	0.087	ND < 0.005	0.019	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005		
	Pyrene (by 8270C)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	20,800	mg/kg
	Pyrene (by 8270C-SIM)	0.094	ND < 0.005	0.046	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005		
	Butyl benzyl phthalate	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	240	mg/kg
SVOCs	o-Cresol	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330		mg/kg
	m-Cresol	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330		mg/kg
	p-Cresol	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330		mg/k
	Di-N-Butyl phthalate	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	91,600	mg/k
	Diethyl phthalate	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	100,000	mg/k
	2,4-Dinitrotoluene	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330		mg/kg
	Dimethyl phthalate	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	100,000	mg/kg
	bis(2-Ethylhexyl)phthalate	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	183	mg/kg
	Hexachlorobenzene (by 8270D)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	1.2	1.6	mg/kg
	Hexachloroethane	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330		mg/kg
	2-Methylnaphthalene (by 8270C)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330		
	2-Methylnaphthalene (by 8270C-SIM)	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005		mg/kg
	Nitrobenzene	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	13.6	mg/k
	Di-N-Octyl phthalate	ND < 0.330	ND < 0.330	ND < 3.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	11,000	mg/k
	Pentachlorophenol	ND < 1.6	ND < 1.6	ND < 1.6	ND < 1.7	ND < 1.7	ND < 1.6	ND < 1.7	ND < 1.6		mg/k
	Pyridine	ND < 1.6	ND < 1.6	ND < 1.6	ND < 1.7	ND < 1.7	ND < 1.6	ND < 1.7	ND < 1.6	886	mg/k
	2,4,5-Trichlorophenol	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330		mg/kg
	2,4,6-Trichlorophenol	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330		mg/kg



Analyte Group	Analyte	Confirmation Sample TR-Sidewall TR-SIDEWALL- 20160406 4/6/2016	Confirmation Sample TR-Base TR-BASE- 20160406 4/6/2016	Confirmation Sample North SO-SW-NORTH- 20160406 4/6/2016	Confirmation Sample South SO-SW-SOUTH- 20160406 4/6/2016	Confirmation Sample West01 SO-SW-WEST01 20160406 4/6/2016	Confirmation Sample West02 SO-SW-WEST02- 20160406 4/6/2016	Confirmation Sample Base01 SO-SW-BASE01- 20160406 4/6/2016	Confirmation Sample Base02 SO-SW-BASE02- 20160406 4/6/2016	NDEP 2015 Worker BCL or Site- Specific Screening Level <sup>a</sup>	Unit
	1,2-Dichlorobenzene (by 8260B)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	373	mg/kg
VOCs	1,3-Dichlorobenzene (by 8260B)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	373	mg/kg
	1,4-Dichlorobenzene (by 8260B)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	13.7	mg/kg
	1,2,4-Trichlorobenzene (by 8270C)	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	ND < 0.330	125	mg/kg
TPH⁵	Oil Range Organics (TPH-oil)	16	ND < 10	190	ND < 10	ND < 10	ND < 9.9	ND < 10	ND < 9.9		mg/kg
	TPH-diesel	12	ND < 10	150	ND < 10	ND < 10	ND < 9.9	ND < 10	ND < 9.9		mg/kg
	TPH-gasoline	ND < 1.0	ND < 1.0	ND < 1.0	ND < 1.0	ND < 1.0	ND < 1.0	ND < 1.0	ND < 1.0		mg/kg
	Aroclor-1016	ND < 0.016	ND < 0.016	ND < 0.016	ND < 0.017	ND < 0.016	ND < 0.016	ND < 0.017	ND < 0.016	32.8	mg/kg
	Aroclor-1221	ND < 0.033	ND < 0.033	ND < 0.033	ND < 0.033	ND < 0.033	ND < 0.033	ND < 0.033	ND < 0.330	1.15	mg/kg
	Aroclor-1232	ND < 0.016	ND < 0.016	ND < 0.016	ND < 0.017	ND < 0.016	ND < 0.016	ND < 0.017	ND < 0.016	1.15	mg/kg
PCBs  General Chemistry	Aroclor-1242	ND < 0.016	ND < 0.016	ND < 0.016	ND < 0.017	ND < 0.016	ND < 0.016	ND < 0.017	ND < 0.016	1.15	mg/kg
	Aroclor-1248	ND < 0.016	ND < 0.016	ND < 0.016	ND < 0.017	ND < 0.016	ND < 0.016	ND < 0.017	ND < 0.016	1.15	mg/kg
	Aroclor-1254	ND < 0.016	ND < 0.016	ND < 0.016	ND < 0.017	ND < 0.016	ND < 0.016	ND < 0.017	ND < 0.016	1.15	mg/kg
	Aroclor-1260	ND < 0.016	ND < 0.016	1.4	ND < 0.017	ND < 0.016	ND < 0.016	ND < 0.017	ND < 0.016	1.15	mg/kg
	Perchlorate	31	19	5	0.1	0.11	0.69	0.12	0.77	908	mg/kg
, , ,	2,3,7,8-TCDD	11	ND < 1.0	13	ND < 1.0	ND < 1.0	ND < 1.0	ND < 1.0	17		pg/g
	2,3,7,8-TCDF	340	ND < 1.0	440	2.4	ND < 1.0	ND < 1.0	ND < 1.0	740		pg/g
	1,2,3,7,8-PeCDD	40	ND < 5.0	46	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	59		pg/g
	1,2,3,7,8-PeCDF	500	ND < 5.0	640	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	960		pg/g
	2,3,4,7,8-PeCDF	300	ND < 5.0	400	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	580		pg/g
	1,2,3,4,7,8-HxCDD	24	ND < 5.0	41	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	42		pg/g
	1,2,3,6,7,8-HxCDD	52	ND < 5.0	92	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	94		pg/g pg/g
	1,2,3,7,8,9-HxCDD	47	ND < 5.0	81	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	91		pg/g
	1,2,3,4,7,8-HxCDF	780	ND < 5.0	1,400	8.3	ND < 5.0	ND < 5.0	ND < 5.0	2,100		pg/g
Dioxins/Furans	1,2,3,6,7,8-HXCDF	570	ND < 5.0	990	6.0	ND < 5.0	ND < 5.0	ND < 5.0	1,500		pg/g pg/g
	2,3,4,6,7,8-HxCDF	310	ND < 5.0	490	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	760		pg/g pg/g
	1,2,3,7,8,9-HxCDF	230	ND < 5.0	340	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	610		pg/g pg/g
	1,2,3,4,6,7,8-HpCDD	150	ND < 5.0	350	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	350		pg/g pg/g
	1,2,3,4,6,7,8-HpCDF	1,700	ND < 5.0	4,100	25.0	ND < 5.0	ND < 5.0	ND < 5.0	5,700		
		670	ND < 5.0	1,400	9.1	ND < 5.0	ND < 5.0	ND < 5.0	2,300		pg/g
	1,2,3,4,7,8,9-HpCDF OCDD	210	ND < 10.0	980	ND < 10.0	ND < 10.0	ND < 3.0	ND < 3.0	420		pg/g
	OCDF	5,200		22,000	66.0	11	ND < 10.0	41	17,000		pg/g
		418.1	ND < 10.0 < <b>85.0</b>	651.0	7.9 J	5.1 J	< 85.0	5.1 J	961.2		pg/g
	TCDD TEQ <sup>c</sup> Aluminum	418.1 NA	< 85.0 NA	NA	NA	NA NA	< 85.0 NA	NA	961.2 NA	2,700 <sup>d</sup> 100,000	pg/g mg/kg
Metals	Antimony	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		5
	Arsenic	31	3.6	430	4.7	4.8	3.6	5.1	12	519 7.2 <sup>e</sup>	mg/kg mg/kg
	Barium	1,100	130	4,400	160	160	170	130	380	100,000	
				<b>NA</b>		NA NA				-	mg/kg
	Beryllium Boron	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	2,540 100,000	mg/kg mg/kg
	Cadmium	1.3	NA ND < 1.0	3.8	NA ND < 1.0	NA ND < 1.0	NA ND < 1.0	NA ND < 1.0	NA ND < 1.0	1,270	mg/kg mg/kg
	Chromium (III)	29	8.8	150	ND < 1.0	ND < 1.0	9.6	ND < 1.0	ND < 1.0	1,270	mg/kg mg/kg
	Chromium (III) Chromium (VI)	2.0	ND < 0.20	52	ND < 0.20	ND < 0.20	ND < 0.20	0.21	2.6	1.230	5
	Lead	320	6.5	1,400	7.6	5.8	7.4	6.0	82	800	mg/kg mg/kg
	Lead (organic)	NA	NA	1,400 NA	7.6 NA	NA	NA	NA	NA	800	mg/kg mg/kg
		12,000	6,200	1,500	9,100	9,400	5,700	7,500	6,700		
	Magnesium		6,200 410	·	7,000	1,400	5,700	7,500 9,800	20,000	100,000 28,100	mg/kg
	Manganese	13,000		180,000	,	,			,		mg/kg
	Mercury	0.18 3.7	ND < 0.10	1.4	ND < 0.10	ND < 0.10	ND < 0.10	ND < 0.10 <b>2.4</b>	0.14	208	mg/kg
	Selenium		ND < 1.0	45 20	1.1	ND < 1.0	ND < 1.0		8.8	6,490	mg/kg
	Silver	ND < 1.0	ND < 1.0	20	ND < 1.0	ND < 1.0	ND < 1.0	ND < 1.0	1.2	6,490	mg/kg



#### Table A-4. ECA #C19 Soil Results for Discolored Soil Left In Place Nevada Environmental Response Trust Site Henderson, Nevada

#### Notes:

- <sup>a</sup> From User's Guide and Background Technical Document for Nevada Division of Environmental Protection (NDEP) Basic Comparison Levels (BCLs) for Human Health for the BMI Complex and Common Areas, Revision 13, February 2015. Values for the worker are the lower of the indoor and outdoor worker soil BCLs. Any user of Table 1 should use the most current version of the BCLs. Please check the NDEP website (at http://ndep.nv.gov/bmi/technical.htm) for the most current version of the BCLs.
- <sup>b</sup> 100 mg/kg total TPH value used for screening.
- $^{\rm c}$  TCDD equivalents based on WHO 2005 TEFs for the 17 dioxin and furan congeners.
- <sup>d</sup> Site-specific value: from NDEP, Letter to Tronox LLC re: Response to: Results of Bioaccessibility Study for Dioxin/Furans in Soil, Tronox LLC, Henderson, Nevada (Revised), May 25, 2010. (NDEP, 2010a).
- <sup>e</sup> Based on regional background concentrations as approved by NDEP on August 20, 2010 (NDEP, 2010d).

Red shading indicates concentrations exceeds NDEP 2015 Worker BCL or Site-Specific Screening Level.

**Bold** = analyte was detected above the detection limit

BCL = Basic comparison level

J = Approximate value

ND = Not detected

NA = Not analyzed

-- = undefined or no value

mg/kg = milligrams per kilogram

pg/g = picogram per gram

