\\01_Projects\2027_Tronox\Phase_B\Remediation\RZ_Polygons\Figure_1-1-RemediationZones-ALL_R01.mxd

REMEDIATION ZONES (A-E)

RZ-D
RZ-E
RZ-C
RZ-B
RZ-A

Remediation Zones
- RZ-A
- RZ-B
- RZ-C
- RZ-D
- RZ-E

ACTIVE AREA NO SAMPLING

Legend

Proposed Sampling Locations
- Proposed Deeper Sampling Location
- Proposed Horizontal Delineation Sample
- Proposed Bioaccessibility Sampling Location

Existing Soil Sample Locations and Results
- Phase A Sample Location (2006)
- Phase B Sample Location (2008-2009)
- Analytes Detected Above BCL in Soil Samples From Less Than 10 bgs (chemicals identified by posted code numbers)
- Impacted by compounds that exceed BCL at 2 feet bgs (2,200 ppt criteria used for Dioxin).
- Analyte Not Detected Above BCL (less than 10 ft bgs)

Parcels C,D,F,G,& H
- No BCL Exceedance at 0 ft bgs
- BCL Exceedance(s) at 0 ft bgs (identified by posted number)
- LOU Boundaries
- Groundwater recharge trenches to be retained
- Groundwater barrier wall to be retained
- Associate LOU Pipelines
- LOU #60 Acid Drain System
- LOU #59 Storm Sewer System
- Site Boundary
- 4 Acre Grid
- Site features (Buildings and Tanks)
- Tronox Facilities to be retained
- ChemStar Property to be retained
- Parcels
- Proposed Scrape Areas

Polygon Interpolation Areas (Soil less than 10 ft bgs) (Voronoi/Thiessen Polygons)
- Polygon area based on single sample location above Criteria 1*
- 1 long amphibole fiber with no other risk drivers
- Polygon area based on single sample location above Criteria 2*

*Polygon Area Exceedance Criteria

Criteria 1 [Dark Blue]: Analytes detected above NDEP Worker BCLs or following criteria:
Arsenic greater than 18 milligrams per kilogram (mg/kg)
Chrysotile long fiber count greater than 13
Amphibole long fiber count greater than 1
Dioxin greater than 2,200 parts per trillion (ppt)

Criteria 2 [Light Blue]: Analytes detected above NDEP Worker BCLs or following criteria:
Arsenic greater than 7.2 mg/kg and less than 18 mg/kg,
Chrysotile long fiber count greater than 5 and less than or equal to 13,
Dioxin greater than 1,000 ppt and less than 2,200 ppt, and/or
low levels of PAHs

N

0 100 200 400 Feet

Code	Group	Analyte	BCL
1	Dioxin	Total TEQ	1,000 ppt
2	Hexachlorobenzene	Hexachlorobenzene (HCB)	1.2 mg/kg
3	Asbestos	Long Chrysotile Fiber Count	> 5 long fibers
3	Asbestos	Long Amphibole Fiber Count	1 or greater
4	Arsenic	Arsenic	1.77 mg/kg*
5	Metals	Cobalt	331 mg/kg
5	Metals	Lead	800 mg/kg
5	Metals	Magnesium	100,000 mg/kg
5	Metals	Manganese	13,700 mg/kg
6	Perchlorate	Perchlorate	795 mg/kg
7	Metals	Chromium (total)	409 mg/kg
8	SVOCs	Benzo(a)pyrene B(a)P	0.234 mg/kg
9	SVOCs	Benzo(a)anthracene B(a)A	2.34 mg/kg
9	SVOCs	Benzo(b)fluoranthene B(b)F	2.34 mg/kg
9	SVOCs	Dibenzo(a,h)anthracene D(a,h)A)	0.234 mg/kg
9	SVOCs	Indeno(1,2,3-cd)pyrene (IP)	2.34 mg/kg
10	OCPs	Alpha-BHC	0.399 mg/kg
10	OCPs	Beta-BHC	1.4 mg/kg
10	OCPs	4-4-DDE, 4,4-DDT	7.8 mg/kg
10	OCPs	Aldrin	0.113 mg/kg
10	PCBs	Aroclor-1260	0.826 mg/kg

* BCL for arsenic is less than background polygons for arsenic >7.2 in upper 10 feet

SHEET NUMBER: 1

FIGURE NUMBER: 1-1

EXCEEDANCE POLYGONS FOR SHALLOW SOILS (<10 FT BGS) DIRECT CONTACT EXPOSURE

Tronox LLC
Henderson, Nevada

SCALE:	DATE:	PROJECT NUMBER:
1"= 200'	03/19/2010	2027.01

DESIGNED BY:	REVISIONS			
	NO.:	DESCRIPTION:	DATE:	BY:
DRAWN BY: NGEM				
CHECKED BY: NGEM				
APPROVED BY: NGEM				

northgate environmental management, inc.
TRONOX
http://www.ngem.com