Soil Sampling and Analytical Plan for LOUs 30 and 56 in Area II

Phase B Source Area Investigation Work Plan Tronox Facility - Henderson, Nevada Page 1 of 1

Grid Location	LOU Number	Phase B Boring No.	Sample ID Number	Sample Depths <sup>1.</sup> (ft. bgs)	Perchlorate (EPA 314.0)			TPH- DRO/ORO (EPA 8015B)	TPH-GRO (EPA 8015B)		Wet Chemistry <sup>3.</sup>	Total Cyanide (EPA 9012A)	OCPs <sup>4.</sup> (EPA 8081A)	SVOCs <sup>5.</sup> (EPA 8270C)	Radio- nuclides <sup>6.</sup>	Dioxins/ Furans <sup>7.</sup>	Asbestos <sup>9.</sup> EPA/540/R-97/028	Geo- technical Tests <sup>10.</sup>	Rationale
Borings are organized by grid location as shown on Plate A - Starting point is on the northwestern most grid in Area 2 (M-2) and ending with the southeastern most grid in Area 2 (S-7)																			
L-5	30, 56, 57	SA123	SA123-0.0	0.0													X		Boring located to evaluate LOU 30 (AP Area Pad 35), LOU 56 (AP Plant Area
L-5	30, 56, 57		SA123-0.5	0.5	Х	Х	Χ			Х	Х		Х		Х	Х			Old D-1 Building Wash-Down), and LOU 57 (AP Plant Transfer Lines to Sodium Chlorate
L-5	30, 56, 57		SA123-10	10	Х	Х	Х			Х	Х		Hold		Х				Process, AP Plant SI's and Transfer Lines). Located at logical runoff point for releases from LOU 30 pad as an upslope stepout
L-5	30, 56, 57		SA123-20	20	Х	Х	Χ			Х	Х		Hold		Х				for LOU 56 and downslope stepout for LOU 57.
L-5	30, 56, 57		SA123-30	30	X	X	Χ			X	X		Hold		X				
L-5	30, 56, 57		SA123-40	40	X	X	Χ			X	X		X		X				
L-5	56	SA173	SA173-0.0	0.0													Х		Boring located to evaluate LOU 56 (AP Plant Area Old D-1 Building Wash-Down). Located adjacent to LOU 56 bourndary to
L-5	56		SA173-0.5	0.5	Х	Χ	Χ			X	X		Х		X	Х			evaluate potiential runoff releases to the west. Phase A boring SA19 is located downslope of the drum storage area.
L-5	56		SA173-10	10	Х	X	Χ			Х	X		Х		X				
L-5	56	SA179	SA179-0.0	0.0													Х		Boring located to evaluate LOU 56 (AP Plant Area Old D-1 Building Wash-Down). Located adjacent to the LOU 56 boundary to
L-5	56		SA179-0.5	0.5	Х	Χ	Χ			Х	Х		X		X	Х			evaluate potiential runoff releases to the east. Phase A boring SA19 is located downslope of the drum storage area.
L-5	56		SA179-10	10	Х	Χ	Χ			Х	Х		Х		X				
Numl	Number of Samples:				9	9	9	0	0	9	9	0	6	0	9	3	3	0	

## otes:

- n/a Not applicable - boring is not associated with a specific LOU but is located to evaluate soil for general area-wide coverage.
- Χ
- Sample will be collected and analyzed.

  No sample collected under Phase B sampling program.
- DD\* Sample depth to be determined in the field where DD = sample depth (ft).

  PH-DRO/ORO Total petroleum hydrocarbons Diesel-Range Organics/Oil-Range Organics.
  - The 0.5 ft bgs sample will be collected from the 0.0 to 0.5 ft bgs interval, unless the area is paved. If area is paved, samples will be collected at 0.5 feet below or from a representative depth beneath the pavement. Alternately, if an unpaved area is within a reasonable distance, the sample will be moved to the unpaved area.
- Samples for VOC analysis will be preserved in the field using sodium bisulfate (or DI water) and methanol preservatives per EPA Method 5035.
- Consists of wet chemistry parameters (including pH) listed on Table 1 of the Phase B Source Area Work Plan.
- Organochlorine Pesticides (includes analysis for hexachlorobenzene).
- Semi-volatile Organic Compounds
- Radionuclides consists of alpha spec reporting for isotopic thorium and isotopic uranium, and Radium-226, plus Radium-228 by beta counting (per NDEP).
- Dioxins/furans will be analyzed by EPA Method 8290 for all samples. Screening reports will be provided for 90% of the samples and full data packages for 10% of the samples.
- Polychlorinated biphenyls
- Soil samples for asbestos analyses will be collected from a depth of 0 to 2-inches bgs.
- Geotechnical Tests consist of: moisture content (ASTM D-2216), grain size analysis (ASTM D-422 and C117-04), Soil Dry Bulk Density (ASTM D-2937), Grain Density (ASTM D-854, Soil-Water Filled Porosity (ASTM D-2216); Vertical Hydraulic Conductivity (ASTM D-5084/USEPA 9100).
- SPLP samples will be analyzed by EPA method 1312 using two preparation methods: 1) with extraction fluid #2 (reagent water at pH 5.0£0.05), and 2) with extraction method #3 (reagent water); per NDEP.

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