

Table 6 Chemicals of Potential Concern in North Pasture

Chemical of Potential Concern	Maximum Detected Concentration (1) (mg/kg)	CSSA Soil Background Concentration (2) (mg/kg)	Ecological Benchmark for Soil (3) (mg/kg)	Residential PCL Combined Tier 1 Soil ^{Tot} Soil _{Comb} (4) (mg/kg)	Residential PCL Groundwater Protection ^{GW} Soil _{Ing} (4) (mg/kg)
Barium	15,493	186	330 (f, h)	7,840.5 [n]	221.9 [m, >S]
Copper	1,515.6	23.2	61 (f, g)	547.6 [n]	521.2 [a, >S]
Lead	156,640	84.5	120 (f, n)	500 [n]	1.5 [a, >S] †
Zinc	406.4	73.2	120 (f, g)	9,921.5 [n]	1,180.2 [n, >S]
2,4-DNT	550	---	NA	6.9 [c]	0.0027 [c]

--- = Not applicable.

NA = Not available.

(1) Represents the maximum detected concentration of COPC in soil for all SWMUs in North Pasture. Highest concentrations of lead, barium, copper and zinc were at SWMU B-8; highest concentration of 2,4-DNT was at SWMU B-2.

(2) Parsons, 2002. *Second Revision, Evaluation of Background Metals Concentrations in Soils and Bedrock at CSSA*. February 2002.

(3) TCEQ, 2006. *Update to Guidance for Conducting Ecological Risk Assessments at Remediation Sites in Texas*. RG-263 (Revised). January 2006. Values from Table 3-4 (Ecological Benchmarks for Soil). Lower of the earthworm or plant benchmark is used (most conservative value).

Footnotes from Table 3-4:

(f) Screening values for soil invertebrates.

(n) USEPA, 2005. *Ecological Soil Screening Levels for Lead*. Interim Final. OSWER Directive 9285.7-70. March 2005.

(h) USEPA, 2005. *Ecological Soil Screening Levels for Barium*. Interim Final. OSWER Directive 9285.7-63. February 2005.

(g) USEPA, 2000. *Ecological Soil Screening Level Guidance*. Draft. Office of Emergency and Remedial Response. July 10, 2000.

(4) TCEQ, 2007. *TRRP Protective Concentration Levels*. Tier 1 PCL Tables (revised June 26, 2007).

Values from Table 1 (^{Tot}Soil_{Comb} and ^{GW}Soil_{Ing} for a 30-acre source area).

^{Tot}Soil_{Comb} is a surface soil PCL for residential land use for combined soil ingestion, dermal contact, inhalation of volatiles and particulates, and ingestion of above-ground and below-ground vegetables.

^{GW}Soil_{Ing} is a PCL for surface and subsurface soil to protect groundwater.

If a chemical is both carcinogenic and noncarcinogenic, the lower of the carcinogenic or noncarcinogenic PCL values is used (most conservative value).

Footnotes from Table 1:

a EPA Action Level-based.

c Carcinogenic.

m Primary MCL-based.

n Noncarcinogenic.

>S Solubility limit exceeded during calculation.