Table C-2. Surface Soil Human Health Screening Results for Samples Collected in July 2011, Gorst Creek - Bremerton Auto Wrecking Landfill.

Analyte[a]	Minimum Detect	Maximum Detect	FoD	Health-Based Screening Level Comparison				COPC?	Rationale
				USEPA RSL Industrial		MTCA CUL Industrial			
				Value	FoE	Value	FoE		
Metals (mg/kg)									
Aluminum	9160	19300	7/7	9.9E+05	0/7	3.5E+09	0/7	N	< SLs
Arsenic	1.25	10.1	7/7	1.6	0/7	20	0/7	N	< SLs
Barium	47.4	194	7/7	1.9E+05	0/7	7.0E+05	0/7	N	< SLs
Beryllium	0.132	0.269	7/7	2000	0/7	7000	0/7	N	< SLs
Cadmium	0.0942	3.24	7/7	800	0/7	NA	--	N	< SLs
Calcium	3150	14100	7/7	NA	--	NA	--	N	NUT
Chromium[b]	**19.6**	**47.8**	**7/7**	**5.6**	**7/7**	**19**	**7/7**	**Y**	**> SLs**
Cobalt	5.08	9.93	7/7	300	0/7	NA	--	N	< SLs
Copper	10.7	83.1	7/7	4.1E+04	0/7	1.4E+05	0/7	N	< SLs
Iron	9940	23500	7/7	7.2E+04	0/7	2.5E+06	0/7	N	< SLs
Lead	3.21	691	7/7	800	0/7	1000	0/7	N	< SLs
Mercury	0.00943	1.28	7/7	310	0/7	1100	0/7	N	< SLs
Magnesium	3170	5520	7/7	NA	--	NA	--	N	NUT
Manganese	168	654	7/7	2.3E+04	0/7	4.9E+05	0/7	N	< SLs
Nickel	21.8	44.8	7/7	2.0E+04	0/7	7.0E+04	0/7	N	< SLs
Potassium	382	868	7/7	NA	--	NA	--	N	NUT
Selenium	0.405	0.405	1/7	5100	0/7	1.8E+04	0/7	N	< SLs
Sodium	74.2	358	7/7	NA	--	NA	--	N	NUT
Zinc	31.1	836	7/7	3.1E+05	0/7	1.1E+06	0/7	N	< SLs
Volatile Organic Compounds (µg/kg)									
Acetone	5.12	30.3	3/7	6.3E+08	0/7	3.2E+09	0/7	N	< SLs
2-Butanone (MEK)	2.13	2.13	1/7	2.0E+08	0/7	2.1E+09	0/7	N	< SLs
Ethylbenzene	0.51	0.51	1/7	2.7E+04	0/7	6000	0/7	N	< SLs
4-Isopropyltoluene[c]	0.315	0.956	2/7	4.5E+07	0/7	7000	0/7	N	< SLs
m,p-Xylene	0.416	0.5	2/7	2.6E+06	0/7	7.0E+08	0/7	N	< SLs
Methylene chloride	4.18	4.18	1/7	5.3E+04	0/7	20	0/7	N	< SLs
Styrene	0.305	1.3	7/7	3.6E+07	0/7	7.0E+08	0/7	N	< SLs
Toluene	0.429	1.12	3/7	4.5E+07	0/7	7000	0/7	N	< SLs
Xylenes (total)	0.416	0.5	2/7	2.7E+06	0/7	9000	0/7	N	< SLs
Polychlorinated Biphenyls (PCBs) (µg/kg)									
Aroclor-1248	243	243	1/7	740	0/7	NA	--	N	Similar PCB <SL
Aroclor-1254	345	345	1/7	740	0/7	6.6E+04	0/7	N	< SLs
Aroclor-1260	136	171	1/7	740	0/7	6.6E+04	0/7	N	< SLs
Pesticides (µg/kg)									
alpha-BHC	25.2	25.2	1/7	2.7E+05	0/7	2.1E+04	0/7	N	< SLs
4,4'-DDD	6.37	6.37	1/7	7200	0/7	5.5E+05	0/7	N	< SLs
4,4'-DDT	9.1	89.9	3/7	700	0/7	4000	0/7	N	< SLs
endosulfan sulfate	42.1	42.1	1/7	3.7E+06	0/7	2.1E+07	0/7	N	< SLs
Polycyclic Aromatic Hydrocarbons (PAHs) (µg/kg)									
Anthracene	56.7	56.7	1/7	1.7E+08	0/7	1.1E+09	0/7	N	< SLs
Benzo(a)anthracene	151	164	2/7	2100	0/7	1.8E+05	0/7	N	< SLs
Benzo(a)pyrene	145	155	2/7	210	0/7	2000	0/7	N	< SLs
Benzo(b)fluoranthene	291	291	1/7	2100	0/7	1.8E+05	0/7	N	< SLs
Benzo(ghi)perylene	89.5	117	2/7	NA	0/7	NA	--	N	Similar PAH <SL
Chrysene	204	210	2/7	2.1E+05	0/7	1.8E+07	0/7	N	< SLs
Fluoranthene	250	254	2/7	2.2E+07	0/7	1.4E+08	0/7	N	< SLs
Fluorene	42.7	42.7	1/7	2.2E+07	0/7	1.4E+08	0/7	N	< SLs
Indeno(1,2,3-cd)pyrene	78.8	117	2/7	2.1E+06	0/7	1.8E+05	0/7	N	< SLs
Phenanthrene	91.1	409	2/7	NA	0/7	NA	--	N	Similar PAH <SL
Pyrene	351	425	2/7	1.7E+07	0/7	1.1E+08	0/7	N	< SLs
HPAH sum	218.15	1723.6	3/7	NA	0/7	NA	--	N	PAHs < SL
LPAH sum	326.9	672.6	2/7	NA	0/7	NA	--	N	PAHs < SL
Other Semivolatile Organic Compounds (µg/kg)									
bis(2-Ethylhexyl)phthalate	335	568	2/7	1.2E+05	0/7	9.4E+06	0/7	N	< SLs
Butylbenzylphthalate	1230	1230	1/7	9.1E+05	0/7	6.9E+07	0/7	N	< SLs

[a]Includes only analytes detected at least once in soil samples; bold type indicates chemical is a COPC

[b]In the absence of speciated site data for chromium RSL and MTCA CUL are for hexavalent chromium (Cr VI) (see text). The RSL and MTCA CUL for trivalent chromium (Cr III) are 1.5E+06 mg/kg and 2,000 mg/kg, respectively.

[c]No specific screening levels are available for this chemical; therefore, the screening level for toluene was used as a substitute.

Key:
NA = not available
COPC = chemical of potential concern
CUL = cleanup level
FoD = frequency of detection (number of detects over total number of samples)
FoE = frequency of exceedence (number of samples that exceed screening level over total number of samples)
HPAH = high molecular weight PAH
LPAH = low molecular weight PAH
mg/kg = milligrams per kilogram
MTCA = Model Toxics Control Act (value is the lowest of Methods A and C)
NUT = considered essential nutrient for humans
PAH = polycyclic aromatic hydrocarbon
RSL = regional screening level
µg/kg = micrograms per kilogram
USEPA = United States Environmental Protection Agency
? = status as COPC uncertain
-- = not applicable