

## APPENDIX E

<b>STANDARDS/ACTION LEVELS FOR CONFIRMATORY SAMPLES COLLECTED AT CLOSURE SITE ASSESSMENTS</b>		
<b>***No Water Encountered***</b>		
<b>Parameter</b>	<b>Unsaturated Soil Standard/Action Level<sup>1</sup> (mg/kg)</b>	<b>Standard for Reuse of Soil On-site<sup>2</sup> (mg/kg)</b>
Anthracene	350	350
Benzene	0.5	0.5
Benzo[a]anthracene	6/430	6/130
Benzo[a]pyrene	0.58/46	0.58/12
Benzo[b]fluoranthene	3.5/170	3.5/76
Benzo[g,h,i]perylene	180	180
Chrysene	35/230	35/230
Cumene	600/2,500	600/2,500
Dibromoethane, 1,2- (Ethylene dibromide)	0.005	0.005
Dichloroethane, 1,2-	0.5	0.5
Ethyl benzene	70	70
Fluorene	3,400/3,800	3,400/3,800
Indeno[1,2,3-cd]pyrene	3.5/22,000	3.5/76
Lead (total)	450	450
Methyl tert-butyl ether (MTBE)	2	2
Naphthalene	25	25
Phenanthrene	10,000	10,000
Pyrene	2,200	2,200
Toluene	100	100
Trimethyl benzene, 1,3,4- (trimethyl benzene, 1,2,4-)	8.4/35	8.4/35
Trimethyl benzene, 1,3,5-	74/210	74/210
Xylenes (total)	1,000	1,000

Note: In cases where two numbers are shown for a parameter's soil standard/action level, the lower number applies to residential sites and the higher number applies to non-residential sites.

Because only limited site characterization is required in localized contamination situations, conservative assumptions were used to determine the Unsaturated Soil Standards/Action Levels and the Standards for Reuse of Soil On-site. All values are based on the Chapter 250 Statewide Health Standards and assume used aquifers with Total Dissolved Solids (TDS) less than or equal to 2,500 mg/l. In cases where two numbers are shown, the lower number applies to residential sites and the higher number to non-residential sites.

<sup>1</sup> Residential Unsaturated Soil Standards/Action Levels are the more stringent of the residential direct contact value or the highest residential soil to groundwater value. Non-residential values are the more stringent of the non-residential subsurface soil direct contact value or the highest non-residential soil to groundwater value.

<sup>2</sup> Residential Standards for Reuse of Soil On-site are the same as the Unsaturated Soil Standards/Action levels. Non-residential Standards for Reuse of Soil On-site are the more stringent of the non-residential surface soil direct contact value or the highest non-residential soil to groundwater value.

**STANDARDS/ACTION LEVELS FOR CONFIRMATORY SAMPLES  
COLLECTED AT CLOSURE SITE ASSESSMENTS**

**\*\*\*Water Encountered\*\*\***

<b>Parameter</b>	<b>Saturated Soil Standard/Action Level<sup>1</sup> (mg/kg)</b>	<b>Unsaturated Soil Standard/Action Level<sup>2</sup> (mg/kg)</b>	<b>Water Standard/Action Level<sup>3</sup> (ug/l)</b>	<b>Standard for Reuse of Soil On-site<sup>4</sup> (mg/kg)</b>
Anthracene	35	350	66	35
Benzene	0.5	0.5	5	0.5
Benzo[a]anthracene	2.8/43	6/430	0.32	2.8/43
Benzo[a]pyrene	0.58/4.6	0.58/46	0.2	0.58/4.6
Benzo[b]fluoranthene	2.6/17	3.5/170	0.19	2.6/17
Benzo[g,h,i]perylene	18	180	0.26	18
Chrysene	23	35/230	1.9	23
Cumene	84/350	600/2,500	840	84/350
Dibromoethane, 1,2- (Ethylene dibromide)	0.005	0.005	0.05	0.005
Dichloroethane, 1,2-	0.5	0.5	5	0.5
Ethyl benzene	70	70	700	70
Fluorene	340/380	3,400/3,800	1,700	340/380
Indeno[1,2,3-cd]pyrene	3.5/2,200	3.5/22,000	0.19	3.5/76
Lead (dissolved)			5	
Lead (total)	45	450		45
Methyl tert-butyl ether (MTBE)	2	2	20	2
Naphthalene	10	25	100	10
Phenanthrene	1,000	10,000	1,100	1,000
Pyrene	220	2,200	130	220
Toluene	100	100	1,000	100
Trimethyl benzene, 1,3,4- (Trimethyl benzene, 1,2,4-)	1.5/6.2	8.4/35	15	1.5/6.2
Trimethyl benzene, 1,3,5-	42/120	74/210	420	42/120
Xylenes (total)	1,000	1,000	10,000	1,000

Note: In cases where two numbers are shown for a parameter's soil standard/action level, the lower number applies to residential sites and the higher number applies to non-residential sites.

Because only limited site characterization is required in localized contamination situations, conservative assumptions were used to determine the Soil Standards/Action Levels and the Standards for Reuse of Soil On-site. All values are based on the Chapter 250 Statewide Health Standards and assume used aquifers with Total Dissolved Solids (TDS) less than or equal to 2,500 mg/l. In cases where two numbers are shown, the lower number applies to residential sites and the higher number to non-residential sites.

<sup>1</sup> Residential Saturated Soil Standards/Action Levels are the more stringent of the: 1) residential direct contact value, **or** 2) the larger of the residential generic soil to groundwater value divided by 10 or the 100 times groundwater medium specific concentration (MSC) value for residential use. Non-residential Soil Standards/Actions Levels are the more stringent of the: 1) non-residential subsurface soil direct contact value, **or** 2) the larger of the non-residential generic soil to groundwater value divided by 10 or the 100 times the groundwater MSC value for non-residential use.

<sup>2</sup> Unsaturated Soil Standards/Action Levels are the same as those for sites where water is not encountered.

<sup>3</sup> Water Standards/Action Levels are the residential MSCs for used aquifers with TDS less than or equal to 2,500 mg/l.

<sup>4</sup> Residential Standards for Reuse of Soil On-site are the same as the residential Saturated Soil Standards/Action Levels. Non-residential Standards for Reuse of Soil On-site are the more stringent of the: 1) non-residential surface soil direct contact value, **or** 2) the larger of the non-residential generic soil to groundwater value divided by 10 or the 100 times the groundwater MSC value for non-residential use.