APPENDIX 9.2
Statistical Summary Tables

TABLE 9.2.1
STATISTICAL SUMMARY TABLE - SOIL - 0- 5 FEET DEPTH INTERVAL
MISSION BAY LANDFILL
SEA WORLD DRIVE
SAN DIEGO, CALIFORNIA

Constituent	# of Detections	# of Samples	Frequency of Detection (FOD)	Range of Detected Concentrations			Average Concentration[1]	Standard Deviation[1]	95% Upper Confidence Limit on the Arithmetic Mean (UCLM)[1,2]	EPC_S[3]
				Minimum	-	Maximum				
Organics (µg/kg)										
Anthracene	1	9	11%	4.3	-	4.3	1.3300	1.0436	1.98E+00	**1.98E+00**
Benzo(a)anthracene	1	9	11%	20	-	20	4.2500	5.5340	7.68E+00	**7.68E+00**
Benzo(a)pyrene	1	9	11%	27	-	27	4.9500	7.7476	9.75E+00	**9.75E+00**
Benzo(a)pyrene Equivalent	10	10	100%	3.23		32.75	6.22	9.3229	1.16E+01	**1.16E+01**
Benzo(b)fluoranthene	2	9	22%	3	-	24	3.7000	7.1810	8.15E+00	**8.15E+00**
Benzo(ghi)perylene	1	9	11%	37	-	37	6.8500	10.5936	1.34E+01	**1.34E+01**
Benzo(k)fluoranthene	1	9	11%	9	-	9	1.8000	2.5298	3.37E+00	**3.37E+00**
Chrysene	1	9	11%	20	-	20	4.2500	5.5340	7.68E+00	**7.68E+00**
Dibenzo(a,h)anthracene	1	9	11%	18	-	18	9.4500	3.0042	1.13E+01	**1.13E+01**
Fluoranthene	1	9	11%	35	-	35	5.7500	10.2774	1.21E+01	**1.21E+01**
Phenanthrene	1	9	11%	14	-	14	3.2000	3.7947	5.55E+00	**5.55E+00**
Pyrene	1	9	11%	39	-	39	8.4000	10.7517	1.51E+01	**1.51E+01**
Inorganics (mg/kg)										
Antimony	6	14	43%	0.6	-	1.5	0.57	0.42	7.64E-01	**7.64E-01**
Arsenic	12	14	86%	0.4	-	7.7	2.13	2.27	3.21E+00	**3.21E+00**
Barium	14	14	100%	12.1	-	417.0	96.69	101.91	1.45E+02	**1.45E+02**
Chromium	14	14	100%	3.7	-	34.4	15.83	9.02	2.01E+01	**2.01E+01**
Hexavalent Chromium	10	10	100%	0.2	-	0.8	0.34	0.16	4.30E-01	**4.30E-01**
Cobalt	14	14	100%	1.2	-	13.0	6.71	3.45	8.34E+00	**8.34E+00**
Copper	14	14	100%	0.8	-	47.7	13.41	12.51	1.93E+01	**1.93E+01**
Lead	14	14	100%	0.5	-	17.9	8.03	4.95	1.04E+01	**1.04E+01**
Molybdenum	5	14	36%	0.5	-	1.6	0.51	0.46	7.28E-01	**7.28E-01**
Nickel	14	14	100%	1.5	-	13.4	7.84	3.63	9.56E+00	**9.56E+00**
Vanadium	14	14	100%	6.6	-	76.6	36.61	21.67	4.69E+01	**4.69E+01**
Zinc	14	14	100%	6.0	-	193.0	45.86	45.73	6.75E+01	**6.75E+01**

Abbreviations:

BGS = Below ground surface

EPC_s = Exposure point concentration in soil

mg/kg = Milligrams per kilogram

NA = Not applicable, number of samples not adequate to determine UCLM

µg/kg = micrograms per kilogram

UCLM = Upper confidence limit of the arithmetic mean

"--" = Not available

Notes:

[1] 1/2 PQL values used for analytical results PQL.

[2] Data assumed normal. 95% UCLM calculated as follows: $UCL_{1-\alpha} = Average\ Concentration + t_{\alpha, n-1}\ S / sqrt\ n$ (USEPA, 2002)

[3] EPC is lesser of maximum concentration and 95% UCLM.

TABLE 9.2.2
STATISTICAL SUMMARY TABLE - NEAR-SURFACE SOIL VAPOR SAMPLES
MISSION BAY LANDFILL
SEA WORLD DRIVE
SAN DIEGO, CALIFORNIA

Constituent	# of Detections	# of Samples	Frequency of Detection (FOD)	Range of Detected Concentrations (µg/m³)			Average Detected Concentration[1] (µg/m³)	Standard Deviation of Detected Concentrations[1] (µg/m³)	95% Upper Confidence Limit on the Arithmetic Mean (UCLM)[1,2]	EPC_S (µg/m³)[3]
				Minimum	-	Maximum				
Organics										
1,2-Dichlorobenzene	8	10	80%	80	-	236	171	82	2.19E+02	**2.19E+02**
1,4-Dichlorobenzene	7	10	70%	50	-	2,787	782	944	1.33E+03	**1.33E+03**
2-Butanone (MEK)	1	10	10%	150	-	421	248	105	3.09E+02	**3.09E+02**
Acetone	10	10	100%	329	-	1,695	790	437	1.04E+03	**1.04E+03**
Bromodichloromethane	1	10	10%	89	-	89	89	--	NA	**8.87E+01**
Chlorobenzene	4	10	40%	84	-	258	141	79	1.87E+02	**1.87E+02**
Chlorodifluoromethane	6	10	60%	28	-	1,240	355	503	6.46E+02	**6.46E+02**
Chloroform	2	10	20%	274	-	448	361	123	4.32E+02	**4.32E+02**
Dichlorodifluoromethane	3	10	30%	73	-	2,217	1,175	1,073	1.80E+03	**1.80E+03**
Dichlorofluoromethane	1	10	10%	4,433	-	4,433	4,433	--	NA	**4.43E+03**
Ethylbenzene	3	10	30%	115	-	3,363	1,039	1,499	1.91E+03	**1.91E+03**
Trichloroethene	7	10	70%	83	-	83	83	--	NA	**8.32E+01**
Vinyl chloride	10	10	100%	63	-	169	118	47	1.46E+02	**1.46E+02**
Total Xylenes	9	10	90%	279	-	10,245	3,703	4,338	6.22E+03	**6.22E+03**

Abbreviations:

ppmv = parts per million volume

EPC_{sv} = Exposure point concentration in soil vapor

UCLM = Upper confidence limit of the arithmetic mean

Notes:

[1] 1/2 PQL values used for analytical results.

[2] Data assumed normal. 95% UCLM calculated as follows: $UCL_{1-\alpha} = Average\ Concentration + t_{\alpha, n-1}\ S / sqrt\ n$ (USEPA, 2002)

[3] EPC is lesser of maximum concentration and 95% UCLM. Based on OEHHA comments (May 14, 2005), detected concentrations of each contaminant multiplied by number of composite samples.