Table 9-1

Comparisons of EPCs, Cancer Risk Estimates, and Hazard Indices from the Baseline Risk Assessment

Upland Area Fill Material

Investigation Area H1 Feasibility Study

Mare Island, Vallejo, California

Baseline Risk Estimates								Residual Risk from Fill Material					
		Recreational				Construction Worker				Recreational		Construction Worker	
Chemical	EPC (0-2 ft bgs)	Cancer Risk	Hazard Quotient	Chemical	EPC (0-10 ft bgs)	Cancer Risk	Hazard Quotient	Chemical	EPC (Fill Material)	Cancer Risk	Hazard Quotient	Cancer Risk	Hazard Quotient
ALUMINUM	16,867	NA	0.0190	ALUMINUM	21,171	NA	0.1586	ALUMINUM	33214	NA	0.0374	NA	0.2488
ANTIMONY	6.0	NA	0.0163	ANTIMONY	5.2	NA	0.0420	ANTIMONY	2.11	NA	0.0058	NA	0.0170
ARSENIC	15.6	4.45E-05	0.0647	ARSENIC	16.1	7.67E-06	0.2001	ARSENIC	5.97	1.70E-05	0.0248	2.84E-06	0.0742
BARIUM	154	NA	0.0025	BARIUM	169	NA	0.0148	BARIUM	167	NA	0.0027	NA	0.0147
BERYLLIUM	0.63	5.91E-11	0.0004	BERYLLIUM	0.72	5.15E-10	0.0033	BERYLLIUM	0.199	1.86E-11	0.0001	1.42E-10	0.0009
CADMIUM	2.6	3.11E-07	0.0067	CADMIUM	3.39	7.09E-08	0.0281	CADMIUM	3.02	3.61E-07	0.0078	6.31E-08	0.0250
CHROMIUM	109	NA	0.0001	CHROMIUM	137	NA	0.0003	CHROMIUM	34.4	NA	0.0000	NA	0.0001
COBALT	14.2	1.55E-09	0.0009	COBALT	13.1	1.09E-08	0.0158	COBALT	12.1	1.32E-09	0.0008	1.01E-08	0.0146
COPPER	226	NA	0.0062	COPPER	189	NA	0.0153	COPPER	31.8	NA	0.0009	NA	0.0026
HEXAVALENT CHROMIUM	NA	NA	NA	HEXAVALENT CHROMIUM	0.09	3.91E-09	0.0001	HEXAVALENT CHROMIUM	NA	NA	NA	NA	NA
LEAD	228	5.14E-07	NA	LEAD	169	6.69E-08	NA	LEAD	7.75	1.75E-08	NA	3.07E-09	NA
MANGANESE	672	NA	0.0074	MANGANESE	726	NA	0.3196	MANGANESE	782	NA	0.0086	NA	0.3441
MERCURY	2.50	NA	0.0091	MERCURY	2.4	NA	0.0264	MERCURY	0.324	NA	0.0012	NA	0.0036
MOLYBDENUM	10.7	NA	0.0023	MOLYBDENUM	7.6	NA	0.0049	MOLYBDENUM	1.30	NA	0.0003	NA	0.0008
NICKEL	113	1.15E-09	0.0065	NICKEL	115	8.92E-09	0.0666	NICKEL	47.9	4.86E-10	0.0028	3.71E-09	0.0277
SELENIUM	0.75	NA	0.0002	SELENIUM	0.7	NA	0.0005	SELENIUM	0.280	NA	0.0001	NA	0.0002
SILVER	4.90	NA	0.0011	SILVER	3.9	NA	0.0025	SILVER	0.221	NA	0.0000	NA	0.0001
THALLIUM	0.65	NA	0.0108	THALLIUM	0.60	NA	0.0294	THALLIUM	4.22	NA	0.0699	NA	0.2067
TIN	41.1	NA	0.0001	TIN	25	NA	0.0001	TIN	NA	NA	NA	NA	NA
VANADIUM	79.2	NA	0.0124	VANADIUM	106	NA	0.0489	VANADIUM	38.8	NA	0.0061	NA	0.0179
ZINC	348	NA	0.0013	ZINC	296	NA	0.0032	ZINC	34.6	NA	0.0001	NA	0.0004
TOTAL		4.5E-05	0.17			7.8E-06	0.98			1.7E-05	0.17	2.9E-06	1.00

Reduction of Cancer Risk (%):

Recreational User: **62**

Construction Worker: **63**