

APPENDIX L

FUGITIVE EMISSIONS: COMPARISON TO USEPA REGION 9 PRELIMINARY REMEDIATION GOALS

Comparison of Modeled Ambient Air Concentrations at Residential Assessment Receptor Location R_6 with USEPA Region 9 Preliminary Remediation Goals

Fugitive Emissions Associated with Spent Carbon Unloading

Calculated Air Concentrations at Receptor R_6			USEPA Region 9 Preliminary Remediation Goals (PRGs) (a)				Comparison of Concentrations to PRGs
Compound (as listed in IRAP software)	CAS Number	Annual Average Air Concentration (ug/m ³)	Compound (as listed in PRG Table)	CAS Number	Ambient Air PRG (ug/m ³)		Air Concentration Ratio: modeled concentration/PRG
					Air Concentration	Basis	
1,3-Butadiene	106-99-0	2.08E-03	1,3-Butadiene	106-99-0	6.1E-02	ca*	3.E-02
1-Hexane (n-hexane)	110-54-3	6.84E-04	n-Hexane	110-54-3	2.1E+02	nc	3.E-06
Acrylonitrile	107-13-1	1.68E-04	Acrylonitrile	107-13-1	2.8E-02	ca*	6.E-03
Arsenic	7440-38-2	2.34E-11	Arsenic	7440-38-2	4.5E-04	ca	5.E-08
Benzene	71-43-2	4.79E-05	Benzene	71-43-2	2.5E-01	ca	2.E-04
Beryllium	7440-41-7	1.95E-12	Beryllium and compounds	7440-41-7	8.0E-04	ca*	2.E-09
Cadmium	7440-43-9	1.08E-11	Cadmium and compounds	7440-43-9	1.1E-03	ca	1.E-08
Chloroform (Trichloromethane)	67-66-3	2.34E-06	Chloroform	67-66-3	8.3E-02	ca	3.E-05
Cobalt	7440-48-4	3.74E-11	Cobalt	7440-48-4	6.9E-04	ca*	5.E-08
Copper	7440-50-8	3.89E-10	Copper and compounds	7440-50-8	NA		NC
Cyclohexane	110-82-7	8.89E-04	Cyclohexane	110-82-7	6.2E+03	nc	1.E-07
Dichlorobenzene,1,4-	106-46-7	6.56E-06	1,4-Dichlorobenzene	106-46-7	3.1E-01	ca	2.E-05
Ethylbenzene	100-41-4	1.40E-05	Ethylbenzene	100-41-4	1.1E+03	nc	1.E-08
Ethylene dibromide (1,2-dibromoethane)	106-93-4	3.14E-07	1,2-Dibromoethane (EDB)	106-93-4	3.4E-03	ca	9.E-05
Ethylene Glycol	107-21-1	3.31E-07	Ethylene glycol	107-21-1	7.3E+03	nc	5.E-11
Naphthalene	91-20-3	6.87E-08	Naphthalene	91-20-3	3.1E+00	nc	2.E-08
Nickel	7440-02-0	1.27E-10	Nickel (soluble salts)	7440-02-0	NA		NC
Styrene	100-42-5	1.55E-05	Styrene	100-42-5	1.1E+03	nc	1.E-08
Tetrachloroethylene (Perchloroethylene)	127-18-4	2.81E-05	Tetrachloroethylene (PCE)	127-18-4	3.2E-01	ca	9.E-05
Toluene	108-88-3	2.25E-05	Toluene	108-88-3	4.0E+02	nc	6.E-08
Trichloroethylene	79-01-6	1.65E-05	Trichloroethylene (TCE)	79-01-6	1.7E-02	ca	1.E-03
Vinyl Chloride	75-01-4	2.64E-05	Vinyl chloride	75-01-4	1.1E-01	ca	3.E-04

NA = PRG not available.

(a) Source: <http://www.epa.gov/region09/waste/sfund/prg/files/prgtable2004.xls>

Notes from USEPA Region IX PRG Table: ca=Cancer PRG; nc= Noncancer PRG; ca* (where: nc PRG < 100X ca PRG)