Table 23-3
Total Project Point and Fugitive Source Emissions
Full Mine Development (20 Years)

Pollutant	PTE - Uncontr. (lb/hr)	PTE Uncontr. (tpy)	PTE w/control (lb/hr) [1]	PTE w/control (tpy) [1]	Proj. Act. Emiss. (tpy) [2]
Criteria Polutants					
PM10	15326.33	54577.23	1949.89	3625.20	2902.01
SO2	27.20	41.14	21.19	14.78	4.01
H2SO4/SO3	273.39	1197.43	2.79	12.20	9.46
PM	26603.85	67279.25	6544.70	9175.44	8451.20
NOx	56.40	247.02	56.40	247.02	94.91
VOC	6.92	20.84	6.68	19.79	6.82
CO	10.83	47.42	10.83	47.42	14.65
Pb	1.0501	4.9616	0.0108	0.4097	0.3975
Toxic Air Pollutants					
Antimony	0.0512	0.2241	0.0015	0.0064	0.0032
Arsenic	0.1048	0.5350	0.0033	0.0905	0.0834
Beryllium	0.0058	0.0255	0.0002	0.0008	0.0004
Cadmium	0.0102	0.0446	0.0004	0.0018	0.0012
Chromium	1.6278	7.4226	0.0497	0.5107	0.4040
Cobalt	9.0919	39.9170	0.1040	0.5502	0.4139
Manganese	14.4717	64.7089	0.4502	3.2949	2.3032
Mercury	0.0003	0.0011	0.0002	0.0007	0.0006
Nickel	183.2173	802.9738	1.9389	8.9745	6.6243
Phosphorus	5.0227	22.7269	0.1672	1.4600	1.1166
Selenium	0.0556	0.2434	0.0020	0.0087	0.0049
Barium	3.7648	16.6882	0.1096	0.6785	0.4194
Boron	1.0716	4.7503	0.0124	0.1112	0.0953
Copper	247.3256	1083.8030	3.0949	14.0725	9.4106
Molybdenum	0.0545	0.2387	0.0016	0.0068	0.0037
Vanadium	1.7371	7.8071	0.0510	0.4220	0.3048
Zinc	20.0108	88.1652	0.2153	1.4610	1.2106
Tellurium	0.4850	2.1646	0.0139	0.1013	0.0714
Hafnium	0.0208	0.0927	0.0005	0.0041	0.0028
POM	0.0015	0.0064	0.0015	0.0064	0.0009
2-Methylnaphthalene	2.51E-06	1.10E-05	2.51E-06	1.10E-05	1.10E-05
3-Methylchloranthrene	9.43E-08	4.13E-07	9.43E-08	4.13E-07	4.13E-07
7,12-Dimethylbenz(a)anthracene	8.38E-07	3.67E-06	8.38E-07	3.67E-06	3.67E-06
Acenaphthene	6.31E-06	2.76E-05	6.31E-06	2.76E-05	3.13E-06
Acenaphthylene	2.22E-05	9.74E-05	2.22E-05	9.74E-05	1.01E-05
Anthracene	1.65E-05	7.22E-05	1.65E-05	7.22E-05	7.72E-06
Benz(a)anthracene	1.48E-05	6.48E-05	1.48E-05	6.48E-05	6.85E-06
Benzo(a)pyrene	8.85E-07	3.88E-06	8.85E-07	3.88E-06	6.36E-07
Benzo(b)fluoranthene	5.28E-07	2.31E-06	5.28E-07	2.31E-06	6.03E-07

Benzo(g,h,i)perylene	4.34E-06	1.90E-05	4.34E-06	1.90E-05	2.15E-06
Benzo(k)fluoranthene	7.72E-07	3.38E-06	7.72E-07	3.38E-06	7.10E-07
Chrysene	3.18E-06	1.39E-05	3.18E-06	1.39E-05	1.77E-06
Dibenzo(a,h)anthracene	2.61E-06	1.14E-05	2.61E-06	1.14E-05	1.39E-06
Fluoranthene	6.69E-05	2.93E-04	6.69E-05	2.93E-04	3.05E-05
Fluorene	2.56E-04	1.12E-03	2.56E-04	1.12E-03	1.13E-04
Ideno(1,2,3-cd)pyrene	1.73E-06	7.60E-06	1.73E-06	7.60E-06	1.13E-06
Phenanthrene	2.59E-04	1.13E-03	2.59E-04	1.13E-03	1.20E-04
Pyrene	4.23E-05	1.85E-04	4.23E-05	1.85E-04	2.06E-05
Benzene	0.0084	0.0367	0.0084	0.0367	0.0045
Cumene	0.1532	0.1572	0.1532	0.1572	0.1354
Trimethylbenzene	1.2143	1.5970	1.2143	1.5970	1.3758
Dichlorobenzene	0.0001	0.0006	0.0001	0.0006	0.0006
Formaldehyde	0.0182	0.0796	0.0182	0.0796	0.0389
Hexane	0.1886	0.8259	0.1886	0.8259	0.8259
Toluene	0.0039	0.0172	0.0039	0.0172	0.0031
Naphthalene	0.0008	0.0035	0.0008	0.0035	0.0006
Xylene	0.1114	0.0896	0.1114	0.0896	0.0689
MIBC	0.0745	0.2596	0.0745	0.2596	0.2013
Isopropyl Alc.	1.0872	0.1329	1.0872	0.1329	0.1031
C8-C12 Isoalkanols	0.0063	0.0000	0.0063	0.0000	0.0000
HF	0.0416	0.1823	0.0004	0.0018	0.0014
HCl	56.3573	228.1750	4.9493	3.0081	2.3324
H2S	0.1079	0.4725	0.0295	0.1290	0.1001
CS2	1.6198	7.0947	0.5993	2.6250	2.0354
Crystalline Silica	0.0367	0.1608	0.0367	0.1608	0.1247
Fluorides (as F)	2.0339	8.9085	0.0564	0.2472	0.1218
Acetaldehyde	0.0067	0.0294	0.0067	0.0294	0.0029
Acrolein	0.0004	0.0018	0.0004	0.0018	0.0002
1,3-Butadiene	0.0002	0.0007	0.0002	0.0007	0.0001
Total HAP	273.22	1180.49	8.77	22.19	16.80
Green House Gasses					
CO2	45492	199256	45492	199256	162622
N2O	0.23	1.01	0.23	1.01	1.01
CH4	0.24	1.06	0.24	1.06	1.06

Notes:

[1] Assumes existing control equipment for crushing plant and control equipment included in process design as well as intended measures to control fugitive dust. Control levels may be increased to meet BACT and/or MACT requirements.

[2] Assumes crushing and hydrometallurgical plants process projected high end daily ore output from mine, 32,000 tpd. Also assumes 10% utilization for diesel mine dewatering pumps.