Table 6.1 Summary of Maximum Predicted GLCs from the Operation of the Project – Revised October 28th, 2019

Contaminant	Averaging Period	Ambient Air Quality Criteria (µg/m³)	Limiting Effect	Predicted Concentration (µg/m³)	Location of Max. Predicted GLC UTM Coordinates[1]	
					Easting (m)	Northing (m)
Aluminum	24-hour	12	Health	0.83	522540	5055120
Antimony	24-hour	25	Health	8.40E-04	522460	5055180
Arsenic	24-hour	0.3	Health	3.05E-03	522540	5055120
Barium	24-hour	10	Health	0.02	522580	5055300
Beryllium	24-hour	0.01	Health	3.00E-05	Multiple Locations	
Boron	24-hour	120	Particulate	5.60E-03	522540	5055120
Cadmium	24-hour	0.025	Health	2.22E-03	522580	5055080
	24-hour	0.25[1]	—	2.22E-03	522580	5055080
Chromium	24-hour	0.5	Health	6.75E-03	522600	5055060
	24-hour	5[1]	—	6.75E-03	522600	5055060
Hexavalent Chromium	Annual	0.00014	Health	2.20E-04	Multiple Locations	
	24-hour	0.07[1]	—	2.89E-03	522580	5055080
Cobalt	24-hour	0.1	Health	5.60E-04	522580	5055080
Copper	24-hour	50	Health	0.01	522580	5055080
Iron	24-hour	4	Health	0.84	522540	5055120
Ferric Oxide	24-hour	25	Soiling	1.12	522580	5055300
Lead	24-hour	0.5	Health	0.01	522580	5055080
	30-day	0.2	Health	1.93E-03	522240	5055800
	24-hour	2[1]	—	0.01	522580	5055080
Lithium	24-hour	20	Health	2.70E-04	Multiple Locations	
Magnesium	24-hour	72	Health	3.76	522580	5055300
Magnesium Oxide	24-hour	120	Particulate	6.23	522580	5055300
Manganese	24-hour	0.4	Health	0.22	522600	5055280
	24-hour	4[1]	—	0.22	522600	5055280
Mercury	24-hour	2	Health	4.70E-04	522580	5055300
Nickel	Annual	0.04	Health	4.40E-04	Multiple Locations	
	24-hour	2[1]	—	5.84E-03	522580	5055080
Phosphorus	24-hour	0.5	Health	0.02	522540	5055120
Selenium	24-hour	10	Health	5.90E-04	Multiple Locations	
Silver	24-hour	1	Health	4.42E-03	522580	5055300
Strontium	24-hour	120	Particulate	0.02	522540	5055120
Titanium	24-hour	120	Particulate	0.06	522580	5055300
Vanadium	24-hour	2	Health	3.45E-03	522580	5055300
Zinc	24-hour	120	Particulate	0.57	522540	5055120
Carbon Monoxide[2]	1-hour	34600	Health	665	513777	5040300
	8-hour	12700	Health	391	522460	5055160
TSP[2]	24-hour	120	Health	91.3	522540	5055320
	Annual	70	Health	7.77	522480	5055300
$PM_{2.5}$	24-hour	27	Health	19.5	522580	5055300
	Annual	8.8	Health	1.66	522480	5055280

Table 6.1 Summary of Maximum Predicted GLCs from the Operation of the Project – Revised October 28th, 2019

Contaminant	Averaging Period	Ambient Air Quality Criteria (µg/m³)	Limiting Effect	Predicted Concentration (µg/m³)	Location of Max. Predicted GLC UTM Coordinates[1]	
					Easting (m)	Northing (m)
PM_{10}[2]	24-hour	50	Health	47.1	522580	5055300
Nitrogen Dioxide[2]	Annual	100	Health	1.93	522350	5056000
	1-hour	400	Health	43.3	522440	5055180
Sulphur Dioxide[2]	24-hour	300	Health	22.9	522440	5055200
	1-hour	900	Health	87.4	522600	5055140
	Annual	60	Health	1.98	522380	5055780
Ammonia	24-hour	100	Health	**406**	522400	5055220
	24-hour	1000[1]	—	406	522400	5055220
Hydrochloric Acid	24-hour	20	Health	1.27	522650	5055200
	24-hour	200[1]	—	1.27	522650	5055200
Dioxins and Furans	24-hour	0.1[3]	Health	0.013[3]	522580	5055300
Acetaldehyde	24-hour	500	Health	10.7	522200	5055840
	1/2-hour	500	Health	106	522180	5055860
	24-hour	5000[1]	—	10.7	522200	5055840
Acetone	24-hour	11880	Health	919	522400	5055220
	24-hour	118800[1]	—	919	522400	5055220
Acrolein	24-hour	0.4	Health	0.11	522200	5055840
	1-hour	4.5	Odour	0.78	522240	5055820
	24-hour	4[1]	—	0.11	522400	5055220
Benzene	Annual	0.45	Health	0.01	522200	5055840
	24-hour	100[1]	—	0.14	522200	5055840
1,3-Butadiene	Annual	2	Health	0.04	522379	5055250
	24-hour	300[1]	—	0.19	522400	5055220
Butanol, n	10-minute	2100	Health	1413	522420	5055200
Chloroform	24-hour	1	Health	**2.55**	522400	5055220
	24-hour	100[1]	—	2.55	522400	5055220
Chloromethane	24-hour	320	Odour	0.04	522700	5055250
	24-hour	3200[1]	—	0.04	522700	5055250
Cyclohexane	24-hour	6100	Health	32.2	522400	5055220
	24-hour	61,000[1]	—	32.2	522400	5055220
Dichloromethane	24-hour	220	Health	0.80	522480	5055280
	24-hour	22000[1]	—	0.80	522480	5055280
Ethyl Benzene	10-minute	1900	Health	2.84E-03	522650	5055100
Ethylene Dichloride (1,2-Dichloroethane)	24-hour	2	Health	0.02	522400	5055220
	24-hour	200[1]	—	0.02	522400	5055220
Formaldehyde	24-hour	65	Health	0.50	522700	5055250
Hexane, n	24-hour	7500	Odour	919	522400	5055220
	24-hour	25,000[1]	—	919	522400	5055220
Methanol[1]	24-hour	4000	Health	38.0	522540	5055020
Methyl Ethyl Ketone	24-hour	1000	Odour	1.16	522400	5055220
	24-hour	10,000	—	1.16	522400	5055220
Methyl Isobutyl Ketone	24-hour	1200	Health	0.43	522400	5055220

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Contaminant	Averaging Period	Ambient Air Quality Criteria (µg/m³)	Limiting Effect	Predicted Concentration (µg/m³)	Location of Max. Predicted GLC UTM Coordinates[1]	
					Easting (m)	Northing (m)
Phenol	24-hour	30	Health	10.0	522200	5055840
	24-hour	300[1]	—	10.0	522200	5055840
Propionaldehyde	10-minute	10	Odour	5.27	522240	5055820
a-pinene	24-hour	1350	Odour	965	522400	5055220
b-pinene	24-hour	1350	Health	244	522400	5055220
Toluene	24-hour	2000	Health	0.14	522600	5055280
Xylenes	10-minute	3000	Health	1.02	522650	5055200
	24-hour	730	Health	0.14	522600	5055280
Hexachlorobenzene	24-hour	0.011	Health	1.20E-06	522450	5055120
Naphthalene	24-hour	22.5	Health	0.88	522400	5055220
	10-minute	50	Health	8.43	522420	5055200
Quinoline	24-hour	0.005	Odour	6.00E-05	522580	5055060
Benzo(a)pyrene[4]	Annual	0.00001	Health	7.82E-06	522320	5055740
	24-hour	0.005[1]	—	0.07	522600	5055080
Total Reduced Sulphur[5]	24-hour	14	Health	**64.5**	522439	5055151
	10-minutes	13	Odour	**528**	522474	5055103
	24-hour	70[1]	—	**64.5**	522433	5055159
Hydrogen Sulphide[2]	24-hour	8	Health	3.85	522626	5055535
	1-hour	42	Health	17.4	522420	5055200

Bold indicates exceedance of ambient air quality criteria.
1 – Upper Risk Threshold
2 – Nova Scotia provincial limits without defined limiting effects - assumed standards were based on health effects.
3 – Units for dioxins and furans results are presented as pg TEQ/m³
4 – Project PAHs surrogated by B[a]P include: Acenaphthene, Acenaphthylene, Benz(a)anthracene, Benzo(a)phenanthrene (Chrysene), Benzo(b)fluoranthene, Benzo(b,j) fluoranthene, Benzo(e)pyrene, Benzo(g,h,i)perylene, Benzo(j)fluoranthene, Benzo(k)fluoranthene, Dibenz(a,j)acridine, Indeno(1,2,3-c,d)pyrene, Phenanthrene, Fluorene, Perylene, Pyrene, and Fluoranthene.
5 – Total Reduced Sulphur is a combination of hydrogen sulphide, dimethyl disulphide, dimethyl sulphide, methyl mercaptan, and carbon disulphide