

**Table 5**  
**Emission Summary Table**

Contaminant	CAS No.	Total Facility Emission Rate [g/s]	Air Dispersion Model Used	Maximum POI Concentration [ $\mu\text{g}/\text{m}^3$ ]	Averaging Period	MOECC POI Limit [ $\mu\text{g}/\text{m}^3$ ]	Limiting Effect	Schedule	Source	Benchmark	Percentage of MOECC Limit [%]	Notes	Version of Date of ACB List
Calcium Carbonate	1317-85-3	1.49E-02	AERMOD (v. 14134)	4.91	24-hour	24	Health	Sch. 3	SL-JSL	B2	20%	—	12/13/2016
Calcium Oxide	1305-78-8	1.63E-03	AERMOD (v. 14134)	0.79	24-hour	10	Corrosion	Sch. 3	Standard	B1	8%	—	12/13/2016
Calcium Sulphate	7778-18-9	6.91E-03	AERMOD (v. 14134)	3.36	24-hour	20	Health	Sch. 3	SL-JSL	B2	17%	—	12/13/2016
Crystalline Silica	14808-60-7	1.30E-03	AERMOD (v. 14134)	0.63	24-hour	5	Health	Sch. 3	Guideline	B1	13%	—	12/13/2016
Distillates, petroleum, hydrotreated light	64742-47-8	1.41E-02	AERMOD (v. 14134)	6.31	24-hour	24	Health	Sch. 3	SL-JSL	B2	26%	—	12/13/2016
Ferric Oxide	1309-37-1	7.10E-03	AERMOD (v. 14134)	21.14	24-hour	25	Soiling	Sch. 3	Standard	B1	85%	—	12/13/2016
Hexavalent chromium	7440-47-3	2.74E-06	AERMOD (v. 14134)	0.000076	Annual	0.00014	Health	Sch. 3	Standard	B1	54%	ACB List (Notes 11, 19, Table 2, 3, URT - Note 4, Table 4)	12/13/2016
Hexavalent chromium <sup>(1)</sup>	7440-47-3	7.43E-06	AERMOD (v. 14134)	0.0018	24-hour	0.07	—	Sch. 6	URT	—	3%	—	12/13/2016
Hexavalent chromium <sup>(1)</sup>	7440-47-3	7.43E-06	AERMOD (v. 14134)	0.00048	Annual	0.0014	—	—	AAV	—	34%	—	12/13/2016
Manganese	7439-96-5	2.12E-03	AERMOD (v. 14134)	0.30	24-hour	0.4	Health	Sch. 3	Standard	B1	75%	ACB List (URT - Note 4, Table 4)	12/13/2016
Manganese	7439-96-5	2.12E-03	AERMOD (v. 14134)	0.30	24-hour	4	—	Sch. 6	URT	—	8%	—	12/13/2016
Natural Aluminosilicate	1332-58-7	6.10E-03	AERMOD (v. 14134)	2.96	24-hour	8	Health	Sch. 3	SL-JSL	B2	37%	—	12/13/2016
Nitrogen oxides	10102-44-0	1.07E+00	AERMOD (v. 14134)	98.64	24-hour	200	Health	Sch. 3	Standard	B1	49%	ACB List (Notes 2, 17)	12/13/2016
Nitrogen oxides	10102-44-0	1.07E+00	AERMOD (v. 14134)	264.79	1-hour	400	Health	Sch. 3	Standard	B1	66%	ACB List (Notes 2, 17)	12/13/2016
Portland Cement	65997-15-1	7.72E-02	AERMOD (v. 14134)	37.53	24-hour	37.53	—	—	Performance Limit	—	At or Below Performance Limit	ECA No. 7822-AHPP8G	8/10/2017
Silicon Dioxide	69012-64-2	5.69E-02	AERMOD (v. 14134)	27.66	24-hour	27.66	—	—	Performance Limit	—	At or Below Performance Limit	ECA No. 7822-AHPP8G	8/10/2017
Slag	65996-69-2	4.06E-02	AERMOD (v. 14134)	19.75	24-hour	19.75	—	—	Performance Limit	—	At or Below Performance Limit	ECA No. 7822-AHPP8G	8/10/2017
SPM	N/A	1.42E-01	AERMOD (v. 14134)	60.09	24-hour	120	Visibility	Sch. 3	Standard	B1	50%	—	12/13/2016
Zinc Oxide	1314-13-2	1.50E-04	AERMOD (v. 14134)	0.07	24-hour	0.1	—	—	De Minimus	—	67%	—	12/13/2016

### Appendix C Negligibility Screening

**Description** The ESDM procedure document lists procedures for screening out negligible contaminants using emission threshold calculations. This methodology was used to identify contaminants which do not require modelling.

**Emission Threshold Calculation** The Emission Threshold Calculation is in accordance with section 7.1.2 of the MOECC's Procedure for Preparing an ESDM Report (February 2017).

If the total facility emission rate is found to be less than the emission threshold, the contaminant is assumed to be negligible.

<b>Geographic Area Type</b>	Rural
<b>Distance from Source (m)</b>	35

<b>Averaging Period</b>	<b>Dispersion Factor (µg/m³ per g/s)</b>
1-hour	8,575
10-minute	14,162
1/2-hour	10,412
24-hour	3,522
Annual	675
30-day	1,359

<b>Distance from Source (m)</b>	<b>Dispersion Factor (µg/m³ per g/s)</b>	
	<b>Urban</b>	<b>Rural</b>
20	8,700	10,000
40	6,300	8,100
60	4,600	5,900
80	3,400	5,100
100	2,600	4,500
150	1,400	3,500
200	900	2,800
250	600	2,300
300	450	1,900
350	350	1,700
400	300	1,500
450	250	1,300
500	200	1,150
600	150	950
700	120	800
800	90	650
900	80	575
1000	70	500

ref: Table B-1 Procedure for Preparing an ESDM Report

Emission Threshold (g/s) =

$$\frac{0.5 \times \text{MOE POI Limit } (\mu\text{g}/\text{m}^3)}{\text{Dispersion Factor } (\mu\text{g}/\text{m}^3 \text{ per g/s emission})}$$

**Table C1  
Screening for Negligibility Summary**

<b>Contaminant</b>	<b>CAS No.</b>	<b>Total Facility Emission Rate [g/s]</b>	<b>Averaging Period</b>	<b>MOECC POI Limit [µg/m³]</b>	<b>Regulation Schedule</b>	<b>Emission Threshold [g/s]</b>	<b>Negligibility Assessment</b>
2-Methyl-1-Propanol	78-83-1	1.53E-04	24-hour	4600	Sch. 3	6.53E-01	Negligible
2-Methyl-1-Propanol	78-83-1	1.53E-04	10-minute	2340	Sch. 3	8.26E-02	Negligible
2-Methyl-1-Propanol	78-83-1	1.53E-04	24-hour	16000	Sch. 6	2.27E+00	Negligible
Acetone	67-64-1	2.00E-02	24-hour	11880	Sch. 3	1.69E+00	Negligible
Acetone	67-64-1	2.00E-02	24-hour	118800	Sch. 6	1.69E+01	Negligible
Aluminum	7429-90-5	1.84E-07	24-hour	4.8	Sch. 3	6.81E-04	Negligible
Calcium Carbonate	1317-65-3	1.55E-02	24-hour	24	Sch. 3	3.41E-03	Not Negligible
Calcium Oxide	1305-78-8	1.63E-03	24-hour	10	Sch. 3	1.42E-03	Not Negligible
Calcium Strontium Zinc Phosphosilicate	66402-68-4	4.35E-06	24-hour	0.1	—	1.42E-05	Negligible
Calcium Sulphate	7778-18-9	6.91E-03	24-hour	20	Sch. 3	2.84E-03	Not Negligible
Carbon Black	1333-86-4	1.05E-04	24-hour	10	Sch. 3	1.42E-03	Negligible
Chromium	7440-47-3	3.33E-05	24-hour	0.5	Sch. 3	7.10E-05	Negligible
Chromium	7440-47-3	3.33E-05	24-hour	5	Sch. 6	7.10E-04	Negligible
Cobalt	7440-48-4	1.69E-06	24-hour	0.1	Sch. 3	1.42E-05	Negligible
Copper	7440-50-8	4.19E-07	24-hour	50	Sch. 3	7.10E-03	Negligible
Crystalline Silica	14808-60-7	1.30E-03	24-hour	5	Sch. 3	7.10E-04	Not Negligible
Distillates, petroleum, hydrotreated light	64742-47-8	1.41E-02	24-hour	24	Sch. 3	3.41E-03	Not Negligible
Ethyl alcohol	64-17-5	9.36E-05	1-hour	19000	Sch. 3	1.11E+00	Negligible
Ethylbenzene	100-41-4	1.62E-03	24-hour	1000	Sch. 3	1.42E-01	Negligible
Ethylbenzene	100-41-4	1.62E-03	10-minute	1900	Sch. 3	6.71E-02	Negligible
Ethylbenzene	100-41-4	1.62E-03	24-hour	10000	Sch. 6	1.42E+00	Negligible
Ferric Oxide	1309-37-1	7.19E-03	24-hour	25	Sch. 3	3.55E-03	Not Negligible
Hexanes	110-54-3	2.04E-03	24-hour	7500	Sch. 3	1.06E+00	Negligible
Hexanes	110-54-3	2.04E-03	24-hour	25000	Sch. 6	3.55E+00	Negligible
Hexanes	110-54-3	2.04E-03	24-hour	25000	Sch. 6	3.55E+00	Negligible
Hexavalent chromium	7440-47-3	2.86E-06	Annual	0.00014	Sch. 3	1.04E-07	Not Negligible
Hexavalent chromium	7440-47-3	7.43E-06	24-hour	0.07	Sch. 6	9.94E-06	Not Negligible
Hexavalent chromium <sup>(1)</sup>	7440-47-3	7.43E-06	Annual	0.0014	—	1.04E-06	Not Negligible
Isobutane	75-28-5	3.16E-03	24-hour	618	Sch. 3	8.77E-02	Negligible
Isobutyl Acetate	110-19-0	1.24E-02	10-minute	1660	Sch. 3	5.86E-02	Negligible
Magnesium Oxide	1309-48-4	6.10E-03	24-hour	120	Sch. 3	1.70E-02	Negligible
Manganese	7439-96-5	2.22E-03	24-hour	0.4	Sch. 3	5.68E-05	Not Negligible
Manganese	7439-96-5	2.22E-03	24-hour	4	Sch. 6	5.68E-04	Not Negligible
Methyl Ethyl Ketone	78-93-3	3.16E-03	24-hour	1000	Sch. 3	1.42E-01	Negligible
Methyl Ethyl Ketone	78-93-3	3.16E-03	24-hour	10000	Sch. 6	1.42E+00	Negligible
Mineral spirits <sup>(2)</sup>	N/A	3.56E-03	24-hour	2600	Sch. 3	3.69E-01	Negligible
Molybdenum	7439-98-7	9.22E-07	24-hour	120	Sch. 3	1.70E-02	Negligible
Natural Aluminosilicate	1332-58-7	6.10E-03	24-hour	8	Sch. 3	1.14E-03	Not Negligible
n-butane	106-97-8	7.51E-03	24-hour	7600	Sch. 3	1.08E+00	Negligible
Nickel	7440-02-0	7.43E-06	Annual	0.04	Sch. 3	2.96E-05	Negligible
Nickel	7440-02-0	1.74E-05	24-hour	2	Sch. 6	2.84E-04	Negligible
Nickel	7440-02-0	1.74E-05	Annual	0.4	—	2.96E-04	Negligible
Nitrogen oxides	10102-44-0	1.08E+00	24-hour	200	Sch. 3	2.84E-02	Not Negligible
Nitrogen oxides	10102-44-0	1.08E+00	1-hour	400	Sch. 3	2.33E-02	Not Negligible
Portland Cement	65997-15-1	7.72E-02	24-hour	20	Sch. 3	2.84E-03	Not Negligible
Propane	74-98-6	2.38E-02	24-hour	7200	Sch. 3	1.02E+00	Negligible
Propylene Glycol Methyl Ether Acetate	108-65-6	2.13E-03	24-hour	5000	Sch. 3	7.10E-01	Negligible
Selenium	7782-49-2	4.19E-08	24-hour	10	Sch. 3	1.42E-03	Negligible
Silica, hydrated	112926-00-8	7.38E-04	24-hour	24	Sch. 3	3.41E-03	Negligible
Silicon	7440-21-3	9.02E-05	24-hour	20	Sch. 3	2.84E-03	Negligible
Silicon Dioxide	69012-64-2	5.69E-02	24-hour	8	Sch. 3	1.14E-03	Not Negligible
Slag	65996-69-2	4.06E-02	24-hour	0.1	—	1.42E-05	Not Negligible
SPM	N/A	1.52E-01	24-hour	120	Sch. 3	1.70E-02	Not Negligible
Titanium	7440-32-6	2.68E-07	24-hour	120	Sch. 3	1.70E-02	Negligible
Titanium Dioxide	13463-67-7	1.19E-06	24-hour	34	Sch. 3	4.83E-03	Negligible
Toluene	108-88-3	3.02E-02	24-hour	2000	Sch. 3	2.84E-01	Negligible
Tungsten	7440-33-7	1.59E-06	24-hour	4	Sch. 3	5.68E-04	Negligible
Tungsten	7440-33-7	1.59E-06	24-hour	20	Sch. 3	2.84E-03	Negligible
Vanadium	7440-62-2	1.51E-06	24-hour	2	Sch. 3	2.84E-04	Negligible
Xylene	1330-20-7	3.34E-03	24-hour	730	Sch. 3	1.04E-01	Negligible
Xylene	1330-20-7	3.34E-03	10-minute	3000	Sch. 3	1.06E-01	Negligible
Xylene	1330-20-7	3.34E-03	24-hour	7300	Sch. 6	1.04E+00	Negligible
Zinc	7440-66-6	1.46E-02	24-hour	120	Sch. 3	1.70E-02	Negligible
Zinc Distearate, pure	557-05-1	2.82E-04	24-hour	35	Sch. 3	4.97E-03	Negligible
Zinc Oxide	1314-13-2	1.50E-04	24-hour	0.1	—	1.42E-05	Not Negligible

<sup>(1)</sup> Hexavalent chromium was modelled for both 24-hour and annual averaging periods, for comparison against the Schedule 3 annual standard, daily assessment value, and annual assessment value. The 24-hour emission rate was applied to annual modelling to yield a point-of-impingement concentration for comparison to the Annual Assessment Value.

<sup>(2)</sup> VM&P Naptha and Stoddard Solvent classify as Mineral Spirits, therefore their emission rates were summed and the combined emission rate was assessed against the Emission Threshold for Mineral Spirits.