

**EMISSION SUMMARY AND DISPERSION MODELLING REPORT
FIELDING CHEMICAL TECHNOLOGIES INC.**

Version 12.0

Fielding Chemical Technologies Inc.
3575 Mavis Road, Mississauga, ON

Prepared by:
Fielding Chemical Technologies Inc.
Mississauga, ON.

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EXECUTIVE SUMMARY AND EMISSION SUMMARY TABLE

This Emission Summary and Dispersion Modelling (ESDM) Report was prepared to address Condition 4.1(a) of Amended Environmental Compliance Approval (8628-9N4QUG). It was in accordance with s.26 of O. Reg. 419/05. In addition, guidance in the ministry publication “*Procedure for Preparing an Emission Summary and Dispersion Modelling Report*” dated March 2009 (ESDM Procedure Document) was followed, as applicable.

Fielding Chemical Technologies Inc. (Fielding) operates a facility located at 3549 Mavis Road in Mississauga, Ontario (the Facility). Fielding recycles most common solvents and refrigerants. The main processes consist of distillation and fractionation of spent chemicals.

The North American Industry Classification System (NAICS) code that applies to this facility is 562210 - Waste Treatment and Disposal, which is part of NAICS code 5622 listed in Schedule 5 of O. Reg. 419/05. As such, s.20 of O. Reg. 419/05 currently applies. Therefore, assessment of compliance was performed using the standards listed in Schedule 3 of O. Reg. 419/05, as well as the applicable Ministry limits listed in “*Summary of Standards and Guidelines to support Ontario Regulation 419: Air Pollution – Local Air Quality*”, dated April 2012 (List of MOE POI Limits).

A site-wide emissions inventory was developed for the Facility to include all existing emission sources of contaminants of concern. It also considers a wide range of substances in addition to those the Facility are currently handling. These new substances are found in small amount in incoming waste, which we are permitted to process, or might be found in new future waste streams. Some of the sources and contaminants were considered negligible in accordance with s.8 of O. Reg. 419/05.

Dispersion modelling was performed according to O. Reg. 419/05 requirements using the U.S. EPA AERMOD dispersion modelling program. The maximum Point of Impingement (POI) concentrations are calculated based on the operating conditions defined in accordance with s.10 of O. Reg. 419/05. These operating conditions are presented in *Table 6, Operating Conditions (for each contaminant) Resulting in Highest Concentration of the Contaminant*, and *Table 7, Stream Data*. Using the data provided in the tables the maximum emission rates for each significant contaminant emitted from the significant sources are calculated in accordance with s.11 of O. Reg. 419/05, employing the methodology of mass balance and those

presented in the EPA¹ documents: *AP42, Compilation of Air Pollutant Emission Factors*, and *Emission Inventory Improvement Program*. The data quality assessment follows the process outlined in the requirements of the ESDM Procedure Document.

A POI concentration for each significant contaminant emitted from the Facility was calculated based on the calculated emission rates and the output from the approved dispersion model are presented in the following Emission Summary Table in accordance with S.26 of O. Reg. 419/05.

Contaminants released by the Facility that are not found on the List of MOE POI Limits are considered to be ‘Contaminants with No Ministry POI Limits’. There are 72 ‘Contaminants with No Ministry POI Limits’ --- 56 of them were compared against the Jurisdictional Screening Limits (JSL) listed in the MOE document, “*Jurisdictional Screening Level (JSL) List, A Screening Tool for Ontario Regulation 419: Air Pollution – Local Air Quality*” (dated February 2008), while the rest (16) were compared against the threshold concentrations in *Table B-2A, Contaminants Not Listed in the MOE document, “Summary of Standards and Guidelines to Support Ontario Regulation 419: Air Pollution – Local Air Quality” that Can be Considered Insignificant in a Specific Situation* (in MOE Procedure Document.) Each contaminant concentration at Point of Impingement (POI) is below either the respective JSL or the “de minimus” concentrations.

Of the 163 contaminants assessed, 91 have limits in the List of MOE POI Limits; except the 10-minute averaging concentrations of Isobutyl alcohol (CAS# 78-83-1) and Xylene (CAS# 1330-20-7), all the predicted POI concentrations, are below the corresponding limits. The highest maximum POI concentration is 85% of the 24-hour Limit for Methylene chloride.

Isobutyl alcohol and Xylene having 10-minute averaging POI limits are evaluated according to MOE’s document, *Methodology for Modelling Assessments of Contaminants with 10-minute Average Standards under O. Reg. 419/05*, dated April 2008. The modelled frequencies of exceedence are below 0.5% annually at the location of all receptors within the modelling domain, thus the facility is deemed to be in compliance.

¹ U.S. Environmental Protection Agency

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Emission Summary Table

Contaminant Name	Contaminant CAS Number	Total Facility Emission Rate (g/s)	Air Dispersion Model Used	Max. POI Concentration (µg/m ³)	Averaging Period (hours)	MOE POI Limit (µg/m ³)	Limiting Effect	Regulation Schedule #	Percentage of MOE POI Limit
Lactic Acid	50-21-5	1.15E-03	AERMOD	1.05	24hr	7		JSL	Below JSL
1,2-Propylene glycol	57-55-6	6.67E-03	AERMOD	5.41	24hr	120	Particulate	Guideline	5%
Ethanol	64-17-5	6.22E-01	AERMOD	2,184	1hr	19,000	Odour	Guideline	11%
Formic Acid	64-18-6	8.37E-02	AERMOD	140	24hr	500	Health	Schedule 3	28%
Methanol (Methyl alcohol)	67-56-1	1.17E+00	AERMOD	1,062	24hr	4,000	Health	Schedule 3	27%
Acetone	67-64-1	7.69E+00	AERMOD	6,984	24hr	11,880	Health	Schedule 3	59%
N,N-Dimethylformamide	68-12-2	9.18E-03	AERMOD	12.1	24hr	80		JSL	Below JSL
1-Butanol	71-36-3	1.93E-02	AERMOD	18.3	24hr	870	Health	Schedule 3	2%
1-Butanol	71-36-3	8.14E-02	AERMOD	475.2	10min	2,100	Odour	Guideline	23%
Vinyl chloride	75-01-4	1.20E-06	AERMOD	2.80E-05	24hr	1	Health	Schedule 3	0%
Acetonitrile	75-05-8	2.13E-01	AERMOD	22.7	24hr	70	Health	Schedule 3	32%
Methylene chloride	75-09-2	2.08E-01	AERMOD	181	24hr	220	Health	Schedule 3	82%
Isobutyl alcohol	78-83-1	7.60E-01	AERMOD	3,706	10min	2,340	Odour	Guideline	Max. annual frequency of exceedence 0.35%, below Ministry's 0.5% limit
Isobutyl alcohol	78-83-1	1.92E-01	AERMOD	513	24hr	4,600	Health	Schedule 3	11%
Methyl ethyl ketone	78-93-3	8.15E-01	AERMOD	539	24hr	1,000	Health	Schedule 3	54%
Trichloroethylene	79-01-6	1.04E-02	AERMOD	8.5	24hr	12	Health	Schedule 3	71%
Methyl acetate	79-20-9	4.42E-01	AERMOD	735	24hr	2,400		JSL	Below JSL
Methyl methacrylate	80-62-6	7.57E-02	AERMOD	125	24hr	860	Odour	Guideline	15%
Naphthalene	91-20-3	3.10E-03	AERMOD	13.4	10min	50	Odour	Guideline	27%
Naphthalene	91-20-3	2.43E-03	AERMOD	3.42	24hr	22.5	Health	Guideline	15%
Diphenyl	92-52-4	3.49E-03	AERMOD	12.3	1hr	60	Odour	Guideline	21%
1,2,4-Trimethylbenzene	95-63-6	7.36E-03	AERMOD	8.8	24hr	220	Health	Schedule 3	4%
Gamma-Butyrolactone	96-48-0	4.56E-03	AERMOD	4.24	24hr	28		JSL	Below JSL
Ethyl methacrylate	97-63-2	4.68E-03	AERMOD	7.53	24hr	12		JSL	Below JSL
Ethyl lactate	97-64-3	9.02E-03	AERMOD	11.7	24hr	20		JSL	Below JSL
Parachlorobenzotrifluoride	98-56-6	3.85E-02	AERMOD	58.6	24hr	70		JSL	Below JSL
p-Cymene	99-87-6	6.41E-02	AERMOD	37.8	24hr	110		JSL	Below JSL
Ethylbenzene	100-41-4	1.43E-01	AERMOD	1,224	10min	1,900	Odour	Guideline	64%

Contaminant Name	Contaminant CAS Number	Total Facility Emission Rate (g/s)	Air Dispersion Model Used	Max. POI Concentration (µg/m3)	Averaging Period (hours)	MOE POI Limit (µg/m3)	Limiting Effect	Regulation Schedule #	Percentage of MOE POI Limit
Ethylbenzene	100-41-4	3.53E-02	AERMOD	39.3	24hr	1,000	Health	Schedule 3	4%
Styrene	100-42-5	1.54E-02	AERMOD	14.3	24hr	400	Health	Schedule 3	4%
Diphenyl ether	101-84-8	8.74E-03	AERMOD	9.38	24hr	17		JSL	Below JSL
2-Ethylhexyl Acetate	103-09-3	2.88E-03	AERMOD	3.59	24hr	15		JSL	Below JSL
Ethyl propionate	105-37-3	1.55E-02	AERMOD	25.7	24hr	52		JSL	Below JSL
Dimethyl succinate	106-65-0	1.52E-02	AERMOD	8.03	24hr	40		JSL	Below JSL
Diisobutylene	107-39-1	9.29E-02	AERMOD	154	24hr	720		JSL	Below JSL
Methyl propyl ketone	107-87-9	8.09E-02	AERMOD	134	24hr	2,120		JSL	Below JSL
1-Propanol	71-23-8	8.13E-01	AERMOD	617	24hr	16,000	Health	Guideline	4%
Methyl isobutyl ketone	108-10-1	3.88E-01	AERMOD	448	24hr	1,200	Odour	Guideline	37%
Isopropyl acetate	108-21-4	4.46E-01	AERMOD	1,543	10min	2,000	Odour	Guideline	77%
Propylene Carbonate	108-32-7	3.52E-03	AERMOD	3.56	24hr	40		JSL	Below JSL
Propylene glycol monomethyl ether acetate	108-65-6	2.33E-01	AERMOD	127	24hr	5,000	Odour	Guideline	3%
Diisobutyl ketone	108-83-8	2.05E-02	AERMOD	113	10min	649	Odour	Guideline	17%
Diisobutyl ketone	108-83-8	5.79E-04	AERMOD	6.34	24hr	3,500	Health	Guideline	0%
Toluene	108-88-3	9.47E-01	AERMOD	730	24hr	2,000	Odour	Guideline	37%
Chlorobenzene	108-90-7	1.37E-01	AERMOD	835	10min	4,500	Odour	Guideline	19%
Chlorobenzene	108-90-7	1.37E-01	AERMOD	506	1hr	3,500	Health	Guideline	14%
Cyclohexanol	108-93-0	3.22E-02	AERMOD	18.5	24hr	240		JSL	Below JSL
Cyclohexanone	108-94-1	1.70E-01	AERMOD	92.3	24hr	192		JSL	Below JSL
n-Propyl acetate	109-60-4	1.11E+00	AERMOD	916	24hr	6,600	Health	Guideline	14%
Tetrahydrofuran	109-99-9	3.26E+00	AERMOD	3,502	24hr	93,000	Odour	Guideline	4%
Methyl isoamyl ketone	110-12-3	4.66E-02	AERMOD	277	10min	630	Odour	Guideline	44%
Isobutyl acetate	110-19-0	2.19E-01	AERMOD	1,322	10min	1,660	Odour	Guideline	80%
Methyl-n-amyl ketone	110-43-0	2.09E-01	AERMOD	113	24hr	4,600	Health	Guideline	2%
n-hexane	110-54-3	2.84E+00	AERMOD	3,292	24hr	7,500	Health	Schedule 3	44%
Cyclohexane	110-82-7	1.53E+00	AERMOD	1,926	24hr	6,100	Health	Schedule 3	32%
Morpholine	110-91-8	4.60E-03	AERMOD	7.09	24hr	16		JSL	Below JSL
2-butoxy-1-ethanol	111-76-2	1.67E-02	AERMOD	83.0	10min	500	Odour	Guideline	17%
2-butoxy-1-ethanol	111-76-2	5.97E-03	AERMOD	6.45	24hr	2,400	Health	Guideline	0%
1-Octanol	111-87-5	1.34E-03	AERMOD	1.34	24hr	4		JSL	Below JSL
1-heptyl acetate	112-06-1	1.37E-02	AERMOD	13.7	24hr	16		JSL	Below JSL
Diacetone alcohol	123-42-2	1.91E-02	AERMOD	98.7	10min	1,350	Odour	Guideline	7%
Isoamyl alcohol	123-51-3	8.38E-02	AERMOD	47.4	24hr	265		JSL	Below JSL
n-Butyl acetate	123-86-4	2.38E-01	AERMOD	711	10min	1,000	Odour	Guideline	71%

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Contaminant Name	Contaminant CAS Number	Total Facility Emission Rate (g/s)	Air Dispersion Model Used	Max. POI Concentration (µg/m3)	Averaging Period (hours)	MOE POI Limit (µg/m3)	Limiting Effect	Regulation Schedule #	Percentage of MOE POI Limit
n-Butyl acetate	123-86-4	2.38E-01	AERMOD	431	1hr	15,000	Health	Guideline	3%
Tetrachloroethylene	127-18-4	9.90E-02	AERMOD	149	24hr	360	Health	Schedule 3	41%
Dimethylacetamide	127-19-5	1.56E-02	AERMOD	9.03	24hr	300	Health	Guideline	3%
2-Methyl-1-butanol	137-32-6	8.57E-03	AERMOD	11.1	24hr	13		JSL	Below JSL
Diisobutyl adipate	141-04-8	1.73E-05	AERMOD	0.00371	24hr	0.1		Table B-2A	Below de minimus level
Ethanolamine	141-43-5	1.11E-02	AERMOD	5.18	24hr	32		JSL	Below JSL
Ethyl acetate	141-78-6	9.92E-01	AERMOD	3,524	1hr	19,000	Odour	Guideline	19%
n-Heptane	142-82-5	9.43E-01	AERMOD	921	24hr	11,000	Health	Schedule 3	8%
Di-N-Butyl Ether	142-96-1	1.63E-02	AERMOD	24.2	24hr	148		JSL	Below JSL
Calcium Carbonate	471-34-1	7.02E-02	AERMOD	1.36	24hr	24		JSL	Below JSL
tert-Butyl acetate	540-88-5	9.74E-02	AERMOD	162	24hr	2300		JSL	Below JSL
n-Butyl Propionate	590-01-2	1.26E-02	AERMOD	17.9	24hr	92		JSL	Below JSL
n-Amyl propionate	624-54-4	4.21E-03	AERMOD	3.89	24hr	21		JSL	Below JSL
Dimethyl adipate	627-93-0	1.30E-03	AERMOD	0.685	24hr	40		JSL	Below JSL
Ethyl-n-butyl ether	628-81-9	2.40E-01	AERMOD	703	24hr	936		JSL	Below JSL
Ethyl 3-ethoxypropionate	763-69-9	1.63E-02	AERMOD	79.4	10min	200	Odour	Guideline	40%
Propylene Glycol Phenyl Ether	770-35-4	2.29E-03	AERMOD	3.41	24hr	8		JSL	Below JSL
Diisobutyl succinate	925-06-4	4.07E-04	AERMOD	0.0871	24hr	0.1		Table B-2A	Below de minimus level
Dimethyl glutarate	1119-40-0	8.21E-03	AERMOD	4.36	24hr	40		JSL	Below JSL
Xylene (mixed isomers)	1330-20-7	1.21E+00	AERMOD	3,610	10min	3,000	Odour	Guideline	Max. annual frequency of exceedence 0.29%, below Ministry's 0.5% limit
Xylene (mixed isomers)	1330-20-7	3.91E-01	AERMOD	166	24hr	730	Health	Schedule 3	23%
Methyl tert-butyl ether	1634-04-4	5.14E-01	AERMOD	856	24hr	7,000	Health	Guideline	12%
Ethylene glycol monopropyl ether	2807-30-9	8.12E-03	AERMOD	10.3	24hr	148		JSL	Below JSL
d-Limonene	5989-27-5	5.08E-02	AERMOD	40	24hr	625		JSL	Below JSL
Sulphur dioxide	7446-09-5	1.55E+00	AERMOD	105	1hr	690	Health&Vegetation	Schedule 3	15%
Sulphur dioxide	7446-09-5	1.55E+00	AERMOD	78.5	24hr	275	Health&Vegetation	Schedule 3	29%
Sulphur trioxide	7446-11-9	2.18E-02	AERMOD	1.11	24hr	4		JSL	Below JSL
Hydrogen chloride	7647-01-0	5.90E-01	AERMOD	1.14E+01	24hr	20	Health	Schedule 3	57%

Contaminant Name	Contaminant CAS Number	Total Facility Emission Rate (g/s)	Air Dispersion Model Used	Max. POI Concentration (µg/m ³)	Averaging Period (hours)	MOE POI Limit (µg/m ³)	Limiting Effect	Regulation Schedule #	Percentage of MOE POI Limit
Nitrogen oxides	10102-44-0	8.68E-01	AERMOD	56.1	1hr	400	Health	Schedule 3	14%
Nitrogen oxides	10102-44-0	8.68E-01	AERMOD	37.2	24hr	200	Health	Schedule 3	19%
Tripropylene glycol methyl ether	25498-49-1	2.29E-03	AERMOD	3.41	24hr	11		JSL	Below JSL
Dipropylene Glycol n-Propyl Ether	29911-27-1	2.43E-03	AERMOD	3.42	24hr	5		JSL	Below JSL
Dipropylene Glycol n-Butyl Ether	29911-28-2	2.35E-03	AERMOD	3.41	24hr	11		JSL	Below JSL
Tripropylene Glycol n-Butyl Ether	55934-93-5	2.29E-03	AERMOD	3.41	24hr	11.6		JSL	Below JSL
Distillates, petroleum, hydrotreated light	64742-47-8	1.86E-02	AERMOD	16.8	24hr	24		JSL	Below JSL
Light aromatic solvent naphtha	64742-95-6	1.27E-02	AERMOD	11.5	24hr	305		JSL	Below JSL
Heavy aliphatic solvent naphtha	64742-96-7	8.86E-03	AERMOD	5.82	24hr	24		JSL	Below JSL
Alcohols, C9-11, ethoxylated, liquids	68439-46-3	1.52E-05	AERMOD	0.0207	24hr	0.1		Table B-2A	Below de minimus level
Diisobutyl glutarate	71195-64-7	1.51E-04	AERMOD	0.0323	24hr	0.1		Table B-2A	Below de minimus level
2-Propanol	67-63-0	7.83E-01	AERMOD	681	24hr	7,300	Health	Schedule 3	9%
Oxo-heptyl acetate	90438-79-2	4.30E-02	AERMOD	38.7	24hr	85	Health	Guideline	46%
Acetic Acid, Alkyl (C8-C10) Esters Mixture	108419-33-6	9.69E-03	AERMOD	8.79	24hr	17		JSL	Below JSL
Mineral spirits	MS-001	1.45E-01	AERMOD	84.3	24hr	2,600	Health	Schedule 3	3%
Suspended particulate matter (< 44 µm diameter)	NA-PM	3.06E-01	AERMOD	33.7	24hr	120	Visibility	Schedule 3	28%
Dioxins, Furans and Dioxin-like PCBs		3.02E-10	AERMOD	6.07E-09	24hr	1.00E-07	Health	Guideline	6%
Benzene	71-43-2	2.80E-05	AERMOD	5.43E-04	24hr	100	Health	Schedule 6	0%
Carbon tetrachloride	56-23-5	1.30E-06	AERMOD	2.52E-05	24hr	2.4	Health	Schedule 3	0%
Benzo(a)pyrene	50-32-8	6.80E-08	AERMOD	1.32E-06	24hr	0.0011	Health	Guideline	0%
Dibenz(a,h)anthracene	53-70-3	8.60E-10	AERMOD	1.67E-08	24hr	0.1		Table B-2A	Below de minimus level
3-Methylcholanthrene	56-49-5	6.99E-09	AERMOD	1.35E-07	24hr	0.1		Table B-2A	Below de minimus level
Benz(a)anthracene	56-55-3	1.90E-10	AERMOD	3.68E-09	24hr	0.1		Table B-2A	Below de minimus level
7,12-Dimethylbenz(a)anthracene	57-97-6	5.70E-10	AERMOD	1.10E-08	24hr	0.1	0	Table B-2A	Below de minimus level
Acetic Acid	64-19-7	3.84E-03	AERMOD	5.78	24hr	2,500	Odour	Guideline	0%
1-methoxy-2-propanol	107-98-2	9.30E-02	AERMOD	519	10min	121,000	Odour	Guideline	0%

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Contaminant Name	Contaminant CAS Number	Total Facility Emission Rate (g/s)	Air Dispersion Model Used	Max. POI Concentration ($\mu\text{g}/\text{m}^3$)	Averaging Period (hours)	MOE POI Limit ($\mu\text{g}/\text{m}^3$)	Limiting Effect	Regulation Schedule #	Percentage of MOE POI Limit
Dimethyl sulfoxide	67-68-5	3.79E-03	AERMOD	3.61	24hr	2,100	Health	Guideline	0%
1-methyl-(1-propoxy)-2-propanol acetate	88917-22-0	2.58E-03	AERMOD	3.44	24hr	3,104		JSL	Below JSL
1,1,1-Trichloroethane	71-55-6	2.00E-06	AERMOD	3.88E-05	24hr	115,000	Health	Schedule 3	0%
Methyl bromide	74-83-9	5.60E-06	AERMOD	1.09E-04	24hr	1,350	Health	Guideline	0%
Bromoform	75-25-2	3.00E-06	AERMOD	5.81E-05	24hr	55	Health	Guideline	0%
Bromodichloromethane	75-27-4	4.00E-07	AERMOD	7.75E-06	24hr	0.01		Table B-2B	Below de minimus level
Vinylidene Chloride	75-35-4	1.00E-06	AERMOD	1.94E-05	24hr	10	Health	Schedule 3	0%
tert-Butanol	75-65-0	1.01E-01	AERMOD	196	24hr	30,300	Health	Guideline	1%
Dichlorodifluoromethane (R12)	75-71-8	2.70E-05	AERMOD	5.23E-04	24hr	500,000	Health	Guideline	0%
Isophorone	78-59-1	3.42E-03	AERMOD	3.55	24hr	92		JSL	Below JSL
Propylene Dichloride	78-87-5	4.00E-07	AERMOD	7.75E-06	24hr	2,400	Odour	Guideline	0%
Isobutyl isobutyrate	97-85-8	1.55E-02	AERMOD	26.5	24hr	1,200		JSL	Below JSL
Cumene	98-82-8	2.90E-06	AERMOD	5.62E-05	24hr	400	Health	Schedule 3	0%
Benzyl alcohol	100-51-6	1.83E-02	AERMOD	17.7	24hr	880	Health	Guideline	2%
Triethanolamina	102-71-6	5.42E-06	AERMOD	3.14E-03	24hr	20		JSL	Below JSL
2-Ethyl-1-hexanol	104-76-7	5.08E-03	AERMOD	10.8	1hr	600	Odour	Guideline	2%
1,2-Dibromoethane	106-93-4	4.00E-07	AERMOD	7.75E-06	24hr	3	Health	Guideline	0%
1,2-Dichloroethane	107-06-2	1.00E-06	AERMOD	1.94E-05	24hr	2	Health	Schedule 3	0%
Ethylene glycol	107-21-1	1.26E-01	AERMOD	398	24hr	12,700	Health	Guideline	3%
Hexylene glycol	107-41-5	1.34E-02	AERMOD	102	1hr	12,000	Health	Guideline	1%
Diisopropyl ether	108-20-3	3.81E-01	AERMOD	753	24hr	110,000	Health	Guideline	1%
1,3,5-Trimethylbenzene	108-67-8	3.20E-04	AERMOD	6.20E-03	24hr	220	Health	Schedule 3	0%
Phenol	108-95-2	6.17E-04	AERMOD	0.696	24hr	30	Health	Schedule 3	2%
Succinic Acid	110-15-6	4.04E-09	AERMOD	0	24hr	0.1		Table B-2A	Below de minimus level
Glutaric acid	110-94-1	1.18E-08	AERMOD	1.00E-05	24hr	0.1		Table B-2A	Below de minimus level
Diethylene glycol	111-46-6	2.96E-03	AERMOD	3.44	24hr	40		JSL	Below JSL
Heptyl alcohol	111-70-6	3.95E-03	AERMOD	3.95	24hr	760		JSL	Below JSL
Diethylene glycol monomethyl ether	111-77-3	2.91E-03	AERMOD	3.47	24hr	1,200	Health	Guideline	0%
Diethylene glycol monoethyl Ether	111-90-0	5.16E-03	AERMOD	17.66	10min	1,100	Odour	Guideline	2%

Contaminant Name	Contaminant CAS Number	Total Facility Emission Rate (g/s)	Air Dispersion Model Used	Max. POI Concentration (µg/m ³)	Averaging Period (hours)	MOE POI Limit (µg/m ³)	Limiting Effect	Regulation Schedule #	Percentage of MOE POI Limit
2-Butoxyethyl acetate	112-07-2	5.59E-03	AERMOD	20.13	10min	700	Odour	Guideline	3%
2-Butoxyethyl acetate	112-07-2	3.09E-03	AERMOD	3.49	24hr	3,250	Health	Guideline	0%
Diethylene glycol monoethyl ether acetate	112-15-2	2.92E-03	AERMOD	3.47	24hr	1,800	Health	Guideline	0%
Triethylene glycol	112-27-6	2.30E-03	AERMOD	3.4	24hr	40		JSL	Below JSL
Diethylene glycol monobutyl ether	112-34-5	2.44E-03	AERMOD	3.42	24hr	65	Health	Guideline	5%
Ethylene Glycol Phenyl Ether	122-99-6	2.41E-03	AERMOD	3.42	24hr	68		JSL	Below JSL
Amyl acetate, iso-	123-92-2	1.87E-02	AERMOD	33	24hr	53,200	Health & Odour	Guideline	0%
Adipic acid	124-04-9	2.29E-08	AERMOD	2.00E-05	24hr	1,167	Health	Guideline	0%
Diethylene glycol monobutyl ether acetate	124-17-4	2.48E-03	AERMOD	3.43	24hr	85	Health	Guideline	4%
Dibromochloromethane	124-48-1	4.00E-07	AERMOD	7.75E-06	24hr	0.2		JSL	Below JSL
trans-1,2-Dichloroethylene	156-60-5	1.00E-06	AERMOD	1.94E-05	24hr	105	Health	Guideline	0%
Indeno(1,2,3-cd)pyrene	193-39-5	2.02E-09	AERMOD	3.91E-08	24hr	0.1		Table B-2A	Below de minimus level
Benzo(b)fluoroanthene	205-99-2	2.17E-09	AERMOD	4.21E-08	24hr	0.1		Table B-2A	Below de minimus level
Benzo(k)fluoroanthene	207-08-9	8.90E-10	AERMOD	1.72E-08	24hr	0.1		Table B-2A	Below de minimus level
Chrysene	218-01-9	6.50E-10	AERMOD	1.26E-08	24hr	0.1		Table B-2A	Below de minimus level
Amyl acetate, n-	628-63-7	1.75E-02	AERMOD	30.6	24hr	53,200	Health & Odour	Guideline	0%
Carbon monoxide	630-08-0	1.81E-01	AERMOD	14.76	0.5hr	6,000	Health	Schedule 3	0%
1-Methyl-2-pyrrolidinone	872-50-4	2.96E-03	AERMOD	8.1	1hr	40,000	Health	Guideline	0%
Cresol	1319-77-3	1.48E-03	AERMOD	4	24hr	75	Health	Schedule 3	5%
1-Propoxy-2-propanol	1569-01-3	7.01E-03	AERMOD	9.14	24hr	520		JSL	Below JSL
Propylene Glycol n-Butyl Ether	5131-66-8	3.59E-03	AERMOD	3.58	24hr	3,300	Health	Guideline	0%
Dipropylene Glycol Methyl Ether	34590-94-8	3.04E-03	AERMOD	3.48	24hr	1,400		JSL	Below JSL
Coconut oil acid/Diethanolamine condensate (2:1)	68603-42-9	8.01E-13	AERMOD	0	24hr	0.1		Table B-2A	Below de minimus level
Fuel oil No. 2	68476-30-2	2.44E-03	AERMOD	2.39	24hr	400		JSL	Below JSL
Dipropylene glycol	25265-71-8	6.05E-03	AERMOD	19.7	24hr	148		JSL	Below JSL
Benzoic acid	65-85-0	1.01E-06	AERMOD	4.89E-03	24hr	700		Guideline	0%
Trichlorofluoromethane	75-69-4	2.60E-05	AERMOD	5.04E-04	24hr	6,000	Health	Guideline	0%
Trichloromethane	67-66-3	8.50E-06	AERMOD	1.65E-04	24hr	1	Health	Schedule 3	0%

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Contaminant Name	Contaminant CAS Number	Total Facility Emission Rate (g/s)	Air Dispersion Model Used	Max. POI Concentration ($\mu\text{g}/\text{m}^3$)	Averaging Period (hours)	MOE POI Limit ($\mu\text{g}/\text{m}^3$)	Limiting Effect	Regulation Schedule #	Percentage of MOE POI Limit
Trichlorotrifluoroethane	76-13-1	3.90E-06	AERMOD	7.56E-05	24hr	800,000	Health	Schedule 3	0%

Notes on Column labelled Regulation Schedule #:

- "Schedule 3" refers to Standards in Schedule 3 of O. Reg. 419/05.
- "Schedule 6" refers to Standards in Schedule 6 of O. Reg. 419/05.
- "Guideline" refers to criteria identified as POI Guideline in the document "Summary of Standards and Guidelines to support Ontario Regulation 419: Air Pollution – Local Air Quality" dated April 2012.
- "JSL" refers to Jurisdictional Screening Limit the "Jurisdictional Screening Level (JSL) List A Screening Tool for Ontario Regulation 419: Air Pollution – Local Air Quality" dated February 2008.
- "Table B-2A" refers to Table B-2A: Contaminants Not Listed in the MOE document, "Summary of Standards and Guidelines to Support Ontario Regulation 419: Air Pollution – Local Air Quality" that Can Be Considered Insignificant in a Specific Situation, in the MOE document, Procedure for Preparing an Emission Summary and Dispersion Modelling Report, Version 3.0, dated March 2009.
- "Table B-2B" List of Contaminants Excluded from de minimus level (See Table B-2A), in the MOE document, Procedure for Preparing an Emission Summary and Dispersion Modelling Report, Version 3.0, dated March 2009.

Contaminants having 10-minute odour-based standards are evaluated according to Technical Bulletin "Methodology for Modelling Assessments of Contaminants with 10-Minute Average Standards and Guidelines under O. Reg. 419/05" dated April 2008.

Benzene (CAS# 71-43-2) is under phase-in period (until July 1, 2016), as a minimum, facility should not exceed the concentration set out in Schedule 6.