GHG Emissions Performance Standards and Methodology for the Determination of the Total Annual Emissions Limit

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Ministry of the Environment, Conservation and Parks

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1 Introduction and Applicability

This Methodology is incorporated by reference into O. Reg. 241/19 Greenhouse Gas Emissions Performance Standards (the Regulation). The Methodology must be read in conjunction with the requirements set out in Part III of the Regulation (Compliance) and with the requirements under O. Reg. 390/18 Greenhouse Gas Emissions: Quantification, Reporting and Verification (the Reporting Regulation).

Section 12 of the Regulation requires the owner or operator of an EPS facility to determine the Total Annual Emissions Limit (TAEL) in respect of the facility for a compliance period. This applies to EPS facilities that are registered or required to be registered (covered facility). The determination must be done in accordance with this Methodology unless the determination is in respect of the 2022 compliance period, in which case the owner or operator may use the October 2021 version of this Methodology or this version. Section 3 of this Methodology sets out the calculations that must be used by the owner or operator in the determination of the TAEL of a covered facility.

Where the Methods in this document set out the GHG ID or GHGRP ID number of a facility, or a site that forms part of a facility, see Table A.1 in Appendix A for details on how to identify and locate the facility, or a site that forms part of the facility associated with the GHG ID or GHGRP ID.

2 Definitions

For the purposes of this Methodology:

"**Compliance period**" has the same meaning as in the Regulation.

"Covered facility" has the same meaning as in the Reporting Regulation.

"**Director**" has the same meaning as in the Regulation.

"EPS facility" has the same meaning as in the Regulation.

"Facility" means a covered facility.

"**Facility with no access to natural gas**" means a covered facility that is located in a geographic area, whether in a municipality or an unorganized territory, that is an area not covered by a certificate of public convenience and necessity under the *Municipal Franchises Act* for the supply of natural gas.

"Final product" means a product that is produced at one or more sites that form part of a facility and that is transferred out of the facility.

"**Fixed process emissions**" or "**FPE**" means any of the following:

(1) Stoichiometric CO_2 emissions from the use of reductants and, flux reagents in steel, base metal and other metal processing;

(2) Stoichiometric CO_2 emissions from the steam methane reforming process to produce hydrogen;

(3) Stoichiometric CO_2 emissions from the production of ammonia;

(4) Process CO_2 emissions, calculated in accordance with the Guideline, under any of the following Standard Quantification Methods:

(i) adipic acid production;

(ii) base metal production using an electric arc furnace;

(iii) carbonate use;

(iv) cement production from the calcination of limestone;

(v) glass production;

(vi) iron, steel and ferro-alloy production using an electric arc furnace;

(vii) lime production from the calcination of limestone;

(viii) nitric acid production;

(ix) soda ash production.

"**GHG ID**" means the number assigned to a covered facility, or a site that forms part of the facility, by the Ministry for the purposes of reporting greenhouse gas emissions.

"**GHGRP ID**" means the number assigned to a covered facility, or a site that forms part of the facility, by Environment and Climate Change Canada for the purposes of reporting greenhouse gas emissions to the federal government.

"**Guideline**" has the same meaning as in the Reporting Regulation.

"Input material" means a material that is:

(1) not produced at a facility and is used in the processing or production of an intermediate product or a final product at the facility, or

(2) an intermediate product that is used at a facility as an input in the processing or production of another intermediate product or a final product at the facility.

"Intermediate product" means a product produced at one or more sites that form part of a facility that is not transferred out of the facility.

"**Methodology**" has the same meaning as in the Regulation.

"**Ministry**" means the Ministry of Environment, Conservation and Parks.

"**Non-fixed process emissions**" or "**Non-FPE**" means all greenhouse gas emissions that are not fixed process emissions.

"**Regulation**" means Ontario Regulation 241/19 (Greenhouse Gas Emissions Performance Standards), made under the *Environmental Protection Act*.

"**Reporting Regulation**" means Ontario Regulation 390/18 (Greenhouse Gas Emissions: Quantification, Reporting and Verification) made under the *Environmental Protection Act.*

"**Verification amount**" has the same meaning as in the Reporting Regulation.

Where a term is not defined in this **Methodology**, the definition in the **Regulation**, **Reporting Regulation** or **Guideline** applies.

3 Total Annual Emissions Limit

The owner or operator shall determine the TAEL for a covered facility in respect of a compliance period using Formula 3-1. The value of any Annual Activity Emissions Limit (AAEL) is 0 if the owner or operator is not permitted to use the Method or the owner or operator did not use the Method.

If the number that results from the application of Formula 3-1 is not a whole number, the TAEL shall be the number that results from the application of Formula 3-1 rounded down to the nearest whole number.

$$TAEL = AAEL_A + AAEL_B + AAEL_C + AAEL_D + AAEL_E + AAEL_F - COA$$

Formula 3-1

Where:

$AAEL_A$ = Annual Activity Emissions Limits calculated using Method A in accordance with section 3.1.1

$AAEL_B$ = Annual Activity Emissions Limits calculated using Method B in accordance with section 3.1.2

$AAEL_C$ = Annual Activity Emissions Limits calculated using Method C in accordance with section 3.1.3

$AAEL_D$ = Annual Activity Emissions Limits calculated using Method D in accordance with section 3.1.4

$AAEL_E$ = Annual Activity Emissions Limits calculated using Method E in accordance with section 3.1.5

$AAEL_F$ = Annual Activity Emissions Limits calculated using Method F in accordance with section 3.1.6

COA =

1) the cumulative outstanding amount set out in a notice given in the year after the compliance period by the Director to the owner or operator of the facility under section 18 of the Regulation; or
2) 0, if no notice was given in the year after the compliance period to the owner or operator of the facility under section 18 of the Regulation.

3.1 Annual Activity Emissions Limits

The owner or operator of a covered facility shall calculate the AAELs for the covered facility in respect of a compliance period using all methods that are required to be used and such methods that the owner or operator elects to use, where a method is permitted to be used, as set out in subsections 3.1.1 to 3.1.6 below (Methods A through F).

If Section 5.1 applies to the owner or operator of a covered facility, the owner or operator of the covered facility shall calculate the AAELs for the covered facility in respect of the covered facility's first compliance period, in respect of a registration period, using the substitutions permitted in Section 5.2.

If Section 6.1 applies to the owner or operator of a covered facility, the owner or operator of the facility shall calculate the AAELs for the facility in respect of the compliance period in which the effective date of the change set out in the notice mentioned in Section 6.1 occurs, using the substitutions permitted in Section 6.2.

3.1.1 Method A: Sector Performance Standard

(a) The owner or operator of a covered facility engaged in an industrial activity set out in Column 1 of Table A and a sub-activity set out in Column 2 of Table A shall use Formula 3.1.1-1 to calculate the facility $AAEL_A$, in respect of each sub-activity, unless paragraph (1) or (2) below applies:

(1) The sub-activity is producing steel in an electric arc furnace and the facility, or a site that forms part of the facility, is identified with one of the following GHG IDs:

(i) 1055

(ii) 1084

(2) The sub-activity is producing gold through the mining and milling of gold ore and the facility, or a site that forms part of the facility, is not identified with one of the following GHG IDs:

(i) 1056

(ii) 1193

(iii) 1198

$$AAEL_{A,y} = \sum_{i=1}^{n} \left[\left(PS_{A,i,y,FPE} + PS_{A,i,y,nonFPE} \right) \times Production_{A,i,y} \right]$$

Formula 3.1.1-1

Where,

n = the number of production parameters set out in Column 3 of Table A that apply to the covered facility

i = a production parameter set out in Column 3 of Table A for the sub-activity in Column 2 of Table A in respect of the industrial activity in Column 1 of Table A

y = year of the compliance period

$PS_{A,i,y,FPE}$ = Fixed Process Emissions Sector Performance Standard for the production parameter “i” in year “y” expressed in tonnes of CO_2e per unit of production calculated in accordance with Formula 3.1.1-2

$PS_{A,i,y,nonFPE}$ = Non-Fixed Process Emissions Sector Performance Standard for the production parameter “i” in year “y” expressed in tonnes of CO_2e per unit of production calculated in accordance with Formula 3.1.1-3

$Production_{A,i,y}$ = Annual production of Production Parameter ‘i’ in year ‘y’ reported under the Reporting Regulation and Guideline

$$PS_{A,i,y,FPE} = BEI_{A,i,FPE} \times SF_{y,FPE}$$

Formula 3.1.1-2

Where,

i = a production parameter set out in Column 3 of Table A for the sub-activity in Column 2 of Table A in respect of the industrial activity in Column 1 of Table A

y = year of the compliance period

$BEI_{A,i,FPE}$ = Fixed Process Baseline Emissions Intensity for the sub-activity for production parameter 'i' expressed in tonnes of CO_2e per unit of production as set out in Column 4 of Table A

$SF_{y,FPE}$ = Fixed Process Emissions Stringency Factor for the industrial activity in year "y" as determined in accordance with Section 4.1

$$PS_{A,i,y,nonFPE} = BEI_{A,i,nonFPE} \times SF_{y,nonFPE}$$

Formula 3.1.1-3

Where,

i = a production parameter set out in Column 3 of Table A for the sub-activity in Column 2 of Table A in respect of the industrial activity in Column 1 of Table A

y = year of the compliance period

$BEI_{A,i,nonFPE}$ = Non-Fixed Process Baseline Emissions Intensity for the sub-activity for production parameter 'i' in tonnes of CO_2e per unit of production as set out in Column 5 of Table A

$SF_{y,nonFPE}$ = Non-Fixed Process Emissions Stringency Factor for the industrial activity in year "y" as determined in accordance with Section 4.2

Table A

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Industrial activity	**Sub-activity**	**Production Parameter**	**$BEI_{A,FPE}$**	**$BEI_{A,nonFPE}$**	**BEI Units**
Producing cement from clinker. (Item 8 of Schedule 2 of the Regulation)	Producing intermediate clinker	Tonnes of intermediate clinker produced	0.533	0.355	t CO_2e/t intermediate clinker
Producing cement from clinker. (Item 8 of Schedule 2 of the Regulation)	Producing grey cement from clinker produced at the covered facility For greater certainty, a tonne of clinker that is counted as production of intermediate clinker, shall not be counted again as part of the production of grey cement, even when the grey cement is produced in a different compliance period	Tonnes of grey cement produced from clinker produced at the covered facility	0.490	0.326	t CO_2e/t grey cement
Petroleum refining through either the distillation of crude oil or through cracking, rearranging or reforming unfinished petroleum derivatives. (Item 4 of Schedule 2 of the Regulation)	Refining crude oil, including bitumen, heavy crude oil, light crude oil and synthetic crude oil	CAN-CWB	0	0.0046	t CO_2e/ CAN-CWB
Producing iron or steel from smelted iron ore or producing metallurgical coke. (Item 17 of Schedule 2 of the Regulation)	Producing metallurgical coke in a coke oven battery	Tonnes of coke produced from coke oven	0	0.536	t CO_2e/t coke
Producing iron or steel from smelted iron ore or producing metallurgical coke. (Item 17 of Schedule 2 of the Regulation)	Producing iron from smelted iron ore	Tonnes of iron produced from blast furnace	1.034	0.366	t CO_2e/t liquid iron

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Industrial activity	**Sub-activity**	**Production Parameter**	**$BEI_{A,FPE}$**	**$BEI_{A,nonFPE}$**	**BEI Units**
Producing iron or steel from smelted iron ore or producing metallurgical coke. (Item 17 of Schedule 2 of the Regulation)	Producing steel in a basic oxygen furnace (BOF)	Tonnes of steel produced from BOF	0.148	0.013	t CO_2e/ t BOF steel
Producing steel from feedstock that comes primarily from iron or scrap steel. (Item 16 of Schedule 2 of the Regulation)	Producing of steel in an electric arc furnace (EAF)	Tonnes of steel produced from EAF	0.083	0.042	t CO_2e/t EAF steel
Petroleum refining through either the distillation of crude oil or through cracking, rearranging or reforming unfinished petroleum derivatives. (Item 4 of Schedule 2 of the Regulation)	Producing hydrogen using steam hydrogen carbon reforming or partial oxidation of hydrocarbon at a petroleum refinery.	Tonnes of hydrogen produced	5.5 x (1-$SF_{y,nonFPE}$)	0	t CO_2e/t hydrogen
Producing hydrogen gas using steam hydrocarbon reforming or partial oxidation of hydrocarbons. (Item 7 of Schedule 2 of the Regulation)	Producing hydrogen gas at a covered facility dedicated to the production of hydrogen gas, and not at a covered facility that carries out the activity described in paragraphs 4, 13, 13.1, 13.2, 13.3, 13.4, 13.5 and 24 of Schedule 2 of the Regulation	Tonnes of hydrogen produced	5.5	5.4	t CO_2e/t hydrogen
Producing metal or diamonds from the mining or milling of ore or kimberlite. (Item 20 of Schedule 2 of the Regulation)	Producing gold through the mining and milling of gold ore	kg of gold produced	0	7.21	t CO_2e/kg gold

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Industrial activity	**Sub-activity**	**Production Parameter**	**$BEI_{A,FPE}$**	**$BEI_{A,nonFPE}$**	**BEI Units**
Producing nitric acid by the catalytic oxidation of ammonia. (Item 23 of Schedule 2 of the Regulation)	Producing nitric acid	Tonnes of nitric acid produced	0.0239	0.289	t CO_2e/t nitric acid
Producing anhydrous ammonia or aqueous ammonia by the steam reforming of a hydrocarbon. (Item 24 of Schedule 2 of the Regulation)	Producing anhydrous ammonia or aqueous ammonia	Tonnes of ammonia produced	1.28	0.438	t CO_2e/t ammonia
Producing anhydrous ammonia or aqueous ammonia by the steam reforming of a hydrocarbon. (Item 24 of Schedule 2 of the Regulation)	Producing urea liquor at facilities that produce ammonia	Tonnes of urea produced	0	0.123	t CO_2e/t urea

3.1.2 Method B: Electricity Generation Sector Performance Standard

(a) An owner or operator of a covered facility engaged in the industrial activity of Generating Electricity Using Fossil Fuels, including using a cogeneration system, may use Formula 3.1.2-1 to calculate the $AAEL_B$, unless any of paragraphs (1), (2) or (3) below applies:

(1) The owner or operator engaged in the sub-activity of producing gold through the mining and milling of gold ore set out in Column 2 of Table A and the facility, or a site that forms part of the facility, is identified with one of the following GHG IDs:

(i) 1056

(ii) 1193

(iii) 1198

(2) The owner or operator engaged in one of the following sub-activities set out in Column 2 of Table A:

(i) producing grey cement from clinker;

(ii) producing intermediate clinker.

(3) The covered facility, or a site that forms part of the facility, is one whose GHG ID is set out in Column 1 of Table B.1 in Appendix B, and Column 2 opposite the GHG ID indicates “no”.

$$AAEL_{B,y} = PS_{B,y} \times \sum_{i=1}^{n} Production_{B,i,y} \times NBF_{i,y}$$

Formula 3.1.2-1

Where,

n = the number of applicable combustion devices that generate electricity at the covered facility

i = an applicable combustion device that generates electricity

y = year of the compliance period

$PS_{B,y}$ = Electricity generation sector Performance Standard expressed in tonnes of CO_2e per Gigawatt hour (tCO_2e/GWh) of electricity generated in year “y”, calculated in accordance with Formula 3.1.2-2

$Production_{B,i,y}$ = Annual electricity generated from the combustion device “i” for the production of electricity in year “y” expressed in Gigawatt hours (GWh), reported under the Reporting Regulation and Guideline.

$NBF_{i,y}$ = The non-biomass, non-coke oven gas and non-blast furnace gas, fraction of the total energy input (in GJ) into the combustion device "i" divided by the total energy input (in GJ) of all fuels into the combustion device that generates the electricity, reported under the Reporting Regulation and Guideline.

$$PS_{B,y} = BEI_B \times SF_{y,nonFPE}$$

Formula 3.1.2-2

Where,

y = year of the compliance period

BEI_B = 310 tonnes of CO_2e per Gigawatt hour (tCO_2e/GWh)

$SF_{y,nonFPE}$ = Non-Fixed Process Emissions Stringency Factor for the industrial activity in year "y" as determined in accordance with Section 4.2

3.1.3 Method C: Cogeneration Thermal Energy Sector Performance Standard

(a) Subject to what is set out in subsections (b) below, an owner or operator of a covered facility engaged in one of the following may use Formula 3.1.3-1 to calculate the facility $AAEL_C$:

(1) Generating electricity using fossil fuels with a cogeneration system, or

(2) Generating useful thermal energy from a boiler, that is not part of a cogeneration system, and transferring that useful thermal energy to another EPS facility.

(b) The owner or operator of a facility described in subsection (a) may not use Formula 3.1.3-1 to calculate the $AAEL_C$, if any of paragraphs (1)-(4) apply:

(1) The owner or operator engaged in one of the following sub-activities set out in Column 2 of Table A:

(i) refining crude oil, including bitumen, heavy crude oil, light crude oil and synthetic crude oil;

(ii) producing hydrogen using steam hydrogen carbon reforming or partial oxidation of hydrocarbon at a petroleum refinery.

(2) The owner or operator engaged in the sub-activity of producing gold from mining and milling of gold ore set out in Column 2 of Table A and the facility, or a site that forms part of the facility, is identified with one of the following GHG IDs:

(i) 1056

(ii) 1193

(iii) 1198

(3) The owner or operator is one whose GHG ID is set out in Column 1 of Table B.1 in Appendix B, and Column 3 opposite the GHG ID indicates “no”,

(4) The owner or operator has not included any useful thermal energy in the TET_y used in any applicable Formula under another Method.

(c) The owner or operator of the facility described in subsection (a) shall not include any amount of useful thermal energy generated at the facility and transferred to another EPS facility in the $Production_{C,I,y}$ used in Formula 3.1.3-1 that is a result of engaging in a sub-activity set out in Column 2 of Table A, other than the sub-activity of producing gold from mining and milling of gold ore.

$$AAEL_{C,y} = PS_{C,y} \times \sum_{i=1}^{n} Production_{C,i,y} \times NBF_{i,y}$$

Formula 3.1.3-1

Where,

n = the number of applicable combustion devices that generate useful thermal energy at the covered facility

i = an applicable combustion device that generates useful thermal energy

y = year of the compliance period

$PS_{C,y}$ = Thermal energy sector Performance Standard expressed in tonnes of CO_2e per Gigajoule (tCO_2e/GJ) of useful thermal energy transferred in year "y", calculated in accordance with Formula 3.1.3-2

$Production_{C,i,y}$ = Annual useful thermal energy that is generated from the cogeneration system, or generated from a combustion device "i" and is transferred to another EPS facility in year "y", expressed in Gigajoules (GJ), reported under the Reporting Regulation and Guideline.

$NBF_{i,y}$ = The non-biomass, non-coke oven gas and non-blast furnace gas, fraction of the total energy input (in GJ) into the combustion device "i" divided by the total energy input (in GJ) of all fuels into the combustion device that generates the electricity, reported under the Reporting Regulation and Guideline.

$$PS_{C,y} = BEI_C \times SF_{y,nonFPE}$$

Formula 3.1.3-2

Where,

y = year of the compliance period

BEI_C = 0.063 tonnes of CO_2e per Gigajoule (tCO_2e/GJ)

$SF_{y,nonFPE}$ = Non-Fixed Process Emissions Stringency Factor for the industrial activity in year "y" as determined in accordance with Section 4.2.

3.1.4 Method D: Facility Specific Performance Standard (Facilities Not Subject to Method E)

(a) An owner or operator of a covered facility that was given written notice under paragraph (1) of subsection 7.2(b) or paragraph (1) of subsection 7.2(d) setting out a baseline emissions intensity (BEI) in respect of a production parameter produced at the facility shall use Formula 3.1.4-1 to calculate the facility $AAEL_D$.

(b) If a written notice was not given under paragraph (1) of subsection 7.2(b) or paragraph (1) of subsection 7.2(d) setting out a BEI in respect of a production parameter produced at the facility, an owner or operator of the facility shall use Formula 3.1.4-2 to calculate the facility $AAEL_D$ on a transitional basis if all of the following criteria are met:

(1) The facility is one at which an eligible modification that would be an eligible modification for the purposes of registration under the Regulation and that is a change described in paragraph 2 or 3 of subsection 1(4) of the Regulation has been substantially completed;

(2) The primary activity engaged in at the facility is not Generating electricity using fossil fuels. (Item 38 of Schedule 2 of the Regulation);

(3) The transitional production parameter produced at the facility related to the eligible modification,

(i) constitutes a proposed production parameter in accordance with paragraphs (4) and (5) of subsection 7.1(a); and

(ii) resulted in the highest proportion of greenhouse gas emissions from the facility in the year.

(4) The calculation is in respect of the year in which the eligible modification is substantially completed or one of the two subsequent years.

(c) The owner or operator of a covered facility may use Formula 3.1.4-6 to calculate the facility $AAEL_D$ if all of the following criteria are met:

(1) The facility is one described in subparagraph (1)(vi) of subsection 7.1(a);

(2) The site, the addition of which was the subject of the notice given under subsection 8 (3) of the Regulation, did not constitute part of another covered facility prior to the effective date of the change set out in the notice;

(3) The owner or operator of the facility did not engage in any industrial activity at the site mentioned in paragraph (2), before the effective date of the change set out in the notice, and the industrial activity that is to be engaged in at the site is not one that a previous owner or operator engaged in at the site;

(4) The owner or operator of the covered facility is not required or eligible to use Methods A, E or F of this Methodology, or Formulas 3.1.4-1 or 3.1.4-2 under this

Method in respect of the production parameter produced at the site mentioned in paragraph (2) for the compliance period;

(5) The emissions at the site mentioned in paragraph (2) that are a result of engaging in the industrial activity Generating electricity using fossil fuels (Item 38 of Schedule 2 of the Regulation), do not exceed 50 per cent of the portion of the covered facility's verification amount that is attributable to the site, unless the electricity is generated using a cogeneration system;

(6) The production parameter produced at the site mentioned in (2),

(i) is a proposed production parameter described in paragraphs (4) and (5) of subsection 7.1(a); and

(ii) resulted in the highest proportion of greenhouse gas emissions from the site in the year.

(7) The calculation is in respect the site mentioned in paragraph (2) and the year of the effective date of the change set out in the notice under section 8 (3) of the Regulation, or one of the two subsequent years.

$$AAEL_{D1,y} = \sum_{i=1}^{n} \left(PS_{D1,i,y,nonFPE} \times Production_{D1,i,y}\right) - \left(TET_y \times 0.063 \times SF_{y,nonFPE}\right)$$

Formula 3.1.4-1

Where,

n = the number of production parameters set out in the notice by the Director under paragraph (1) of subsection 7.2(b) or paragraph (1) of subsection 7.2(d)

i = a production parameter set out in the notice by the Director under paragraph (1) of subsection 7.2(b) or paragraph (1) of subsection 7.2(d)

y = year of the compliance period

$PS_{D1,i,y,nonFPE}$ = Non-Fixed Process Emissions Facility Performance Standard for the production parameter "i" in year "y" expressed in tonnes of CO_2e per unit of production calculated in accordance with Formula 3.1.4-3

$Production_{D1,i,y}$ = Annual production of production parameter "i" in year "y" expressed in the units set out in the notice by the Director under paragraph (1) of subsection 7.2(b) or paragraph (1) of subsection 7.2(d), reported under the Reporting Regulation and Guideline

TET_y = The amount of thermal energy transferred in year "y" from any other EPS facility to the covered facility; or from a cogeneration system to the production

processes for all production parameters “i” within the same facility, reported under the Reporting Regulation and Guideline. The amount is zero for thermal energy transfer from a cogeneration system if Method C is not used.

$SF_{y,nonFPE}$ = Non-Fixed Process Emissions Stringency Factor for the industrial activity in year “y” as determined in accordance with Section 4.2

$$AAEL_{D2,y} = PS_{D2,\mathrm{i},y,nonFPE} \times Production_{D2,\mathrm{i},y}$$

Formula 3.1.4-2

Where,

i = the transitional production parameter described in paragraph (3) of subsection (b)

y = a year described in paragraph (4) of subsection (b)

$PS_{D2,i,y,nonFPE}$ = Non-Fixed Process Emissions Facility Performance Standard for the transitional production parameter “i” in year “y” expressed in tonnes of CO_2e per unit of production calculated in accordance with Formula 3.1.4-4

$Production_{D2,i,y}$ = Annual production of transitional production parameter “i” in year ”y” reported under the Reporting Regulation and Guideline

$$PS_{D1,i,y,nonFPE} = BEI_{D1,i,nonFPE} \times SF_{y,nonFPE}$$

Formula 3.1.4-3

Where,

i = a production parameter set out in a notice published by the Ministry under paragraph (1) of subsection 7.2(b) or paragraph (1) of subsection 7.2(d)

y = year of the compliance period

$BEI_{D1,i,nonFPE}$ = Non-Fixed Process Baseline Emissions Intensity for the facility, or a site that forms part of the facility, for the production parameter “i” as set out in a notice by the Director given to the owner or operator of the facility under paragraph (1) of subsection 7.2(b) or paragraph (1) of subsection 7.2(d)

$SF_{y,nonFPE}$ = Non-Fixed Process Emissions Stringency Factor for the industrial activity in year “y” as determined in accordance with Section 4.2

$$PS_{D2,i,y,nonFPE} = BEI_{D2,i,nonFPE} \times SF_{y,nonFPE}$$

Formula 3.1.4-4

Where,

i = the transitional production parameter described in paragraph (3) of subsection (b)

y = a year described in paragraph (4) of subsection (b)

$BEI_{D2,i,nonFPE}$ = Non-Fixed Process Baseline Emissions Intensity for the facility for the transitional production parameter "i" calculated in accordance with Formula 3.1.4-5, reported under the Reporting Regulation and Guideline

$SF_{y,nonFPE}$ = Non-Fixed Process Emissions Stringency Factor for the industrial activity in year "y" as determined in accordance with Section 4.2

$$BEI_{D2,i,nonFPE} = \sum_{y}^{y+2} Emissions_{i,y} \div \sum_{y}^{y+2} Production_{\ i,y}$$

Formula 3.1.4-5

Where,

i = the transitional production parameter described in paragraph (3) of subsection (b)

y = the year in which the facility's eligible modification is substantially completed

$Emissions_{i,y}$ = Annual emissions that are attributable to producing transitional production parameter "i" in year "y" and meet the criteria set out in subparagraph (2)(iv) and (2)(v) of subsection 7.3(a), reported under the Reporting Regulation and Guideline

$Production_{i,y}$ = Annual production of transitional production parameter "i" in year "y", reported under the Reporting Regulation and Guideline

$$AAEL_{D3,y} = PS_{D3,\mathrm{i},y,nonFPE} \times Production_{D3,\mathrm{i},y}$$

Formula 3.1.4-6

Where,

i = the production parameter described in paragraph (6) of subsection (c) that is produced at the site mentioned in paragraph (2) of subsection (c)

y = a year described in paragraph (7) of subsection (c)

$PS_{D3,i,y,nonFPE}$ = Non-Fixed Process Emissions Facility Performance Standard for the production parameter “i” in year “y” expressed in tonnes of CO_2e per unit of production calculated in accordance with Formula 3.1.4-7

$Production_{D3,i,y}$ = Annual production of production parameter “i” in year ”y”, reported under the Reporting Regulation and Guideline

$$PS_{D3,i,y,nonFPE} = BEI_{D3,i,nonFPE}$$

Formula 3.1.4-7

Where,

i = a production parameter described in paragraph (6) of subsection (c) that is produced at the site mentioned in paragraph (2) of subsection (c)

y = a year described in paragraph (7) of subsection (c)

$BEI_{D3,i,nonFPE}$ = Non-Fixed Process Baseline Emissions Intensity for the site mentioned in paragraph (2) of subsection (c), for the production parameter “i” calculated in accordance with Formula 3.1.4-8

$$BEI_{D3,i,nonFPE} = Emissions_y \div Production_{i,y}$$

Formula 3.1.4-8

Where,

i = the production parameter described in paragraph (6) of subsection (c) that is produced at the site mentioned in paragraph (2) of subsection (c)

y = a year described in paragraph (7) of subsection (c)

Emissions$_y$ = Portion of the of the covered facility's verification amount that is attributable to the site mentioned in paragraph (2) of subsection (c) in year "y", reported under the Reporting Regulation and Guideline

Production$_{i,y}$ = Annual production at the site mentioned in paragraph (2) of subsection (c) of production parameter "i" in year "y", reported under the Reporting Regulation and Guideline

3.1.5 Method E: Facility Specific Performance Standard

(a) If a covered facility, or a site that forms part of the facility is set out in Table E, the owner or operator of the facility shall use Formula 3.1.5-1 to calculate the $AAEL_E$.

$$AAEL_{E,y} = \sum_{i=1}^{n}\left[\left(PS_{E,i,y,FPE} + PS_{E,i,y,nonFPE}\right) \times Production_{E,i,y}\right] - \left(TET_y \times 0.063 \times SF_{y,nonFPE}\right) - \left(BPF_y \times SF_{y,nonFPE}\right)$$

Formula 3.1.5-1

Where,

n = the number of production parameters set out in Column 2 of Table E that apply to the covered facility, or a site that forms part of the facility

i = a production parameter set out in Column 2 of Table E

y = year of the compliance period

$PS_{E,i,y,FPE}$ = Fixed Process Emissions Facility Performance Standard for the production parameter "i" in year "y" expressed in tonnes of CO_2e per unit of production calculated in accordance with Formula 3.1.5-2

$PS_{E,i,y,nonFPE}$ = Non-Fixed Process Emissions Facility Performance Standard for the production parameter "i" in year "y" expressed in tonnes of CO_2e per unit of production calculated in accordance with Formula 3.1.5-3

$SF_{y,nonFPE}$ = Non-Fixed Process Emissions Stringency Factor for the industrial activity in year "y" as determined in accordance with Section 4.2

$Production_{E,i,y}$ = Annual production of production parameter "i" in year "y" expressed in the units set out in Column 3 of Table E reported under the Reporting Regulation and Guideline

TET_y = Any thermal energy transferred in year "y" from any EPS facility to the covered facility; or from a cogeneration system to the production processes for all production parameters "i" within the same facility, reported under the Reporting Regulation and Guideline. The amount is zero for thermal energy transfer from a cogeneration system if Method C is not used

BPF_y = The annual emissions in year "y" from the use of by-product fuels used in the production of hot rolled steel at a facility that engaged in the industrial activity "Producing iron or steel from smelted iron ore or producing metallurgical coke" (Item 17 of Schedule 2 of the Regulation), expressed in tonnes of CO_2e, reported under the Reporting Regulation and Guideline

$$PS_{E,i,y,FPE} = BEI_{E,i,FPE} \times SF_{y,FPE}$$

Formula 3.1.5-2

Where,

i = a production parameter set out in Column 2 of Table E

y = year of the compliance period

$BEI_{E,i,FPE}$ = Fixed Process Baseline Emissions Intensity for the facility, or a site that forms part of the facility, for the production parameter "i" as set out in a notice by the Director given to the owner or operator of the facility:

1) On or before March 31, 2022, for a covered facility, or a site that forms part of the facility, is one whose GHG ID is set out in Column 1 of Table E, and column 5 opposite the GHG ID indicates "2022". The BEI is calculated based on emissions information, energy use information, and production parameter information for the years set out in Column 4 of Table E, which information has been provided to the Ministry by the owner or operator of the facility on or before May 31, 2019 or obtained by the Ministry from publicly available information on or before that date, or
2) Between January 1 and March 31, 2023, for a covered facility, or a site that forms part of the facility, is one whose GHG ID is set out in Column 1 of Table E, and column 5 opposite the GHG ID indicates "2023". The BEI is calculated based on emissions information, energy use information, and production parameter information for the years set out in Column 4 of Table E, which information has been provided to the Ministry by the owner or operator of the facility on or before November 14, 2022 or obtained by the Ministry from publicly available information on or before that date

$SF_{y,FPE}$ = Fixed Process Emissions Stringency Factor for the industrial activity in year "y" as determined in accordance with Section 4.1

$$PS_{E,i,y,nonFPE} = BEI_{E,i,nonFPE} \times SF_{y,nonFPE}$$

Formula 3.1.5-3

Where,

i = a production parameter set out in Column 2 of Table E

y = year of the compliance period

$BEI_{E,i,nonFPE}$ = Non-Fixed Process Baseline Emissions Intensity for the facility, or a site that forms part of the facility, for the production parameter "i" as set out in a notice by the Director given to the owner or operator of the facility:

1) On or before March 31, 2022, for a covered facility, or a site that forms part of the facility is one whose GHG ID is set out in Column 1 of Table E, and column 5 opposite the GHG ID indicates "2022". The BEI is calculated based on emissions information, energy use information, and production parameter information for the years set out in Column 4 of Table E, which information has been provided to the Ministry by the owner or operator of the facility on or before May 31, 2019 or obtained by the Ministry from publicly available information on or before that date, or
2) Between January 1 and March 31, 2023, for covered facility, or a site that forms part of the facility is one whose GHG ID is set out in Column 1 of Table E, and column 5 opposite the GHG ID indicates "2023". The BEI is calculated based on emissions information, energy use information, and production parameter information for the years set out in Column 4 of Table E, which information has been provided to the Ministry by the owner or operator of the facility on or before November 14, 2022 or obtained by the Ministry from publicly available information on or before that date

$SF_{y,nonFPE}$ = Non-Fixed Process Emissions Stringency Factor for the industrial activity in year "y" as determined in accordance with Section 4.2

Table E

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
GHG ID /GHGRP ID	**Production Parameter**	**Production Parameter Units**	**FPE and Non-FPE Intensity years**	**Year in which Notice was Given by the Director**	**$BEI_{E,i,nonFPE}$ adjusted for biomass combustion CO_2 emissions[1]**
1001	Finished Oilseed Product(s) produced	Tonnes	2015 to 2017	2023	
1005	Hot rolled steel produced	Tonnes	2015 to 2017	2023	
1005	Finished steel - annealed	Tonnes	2015 to 2017	2023	
1005	Finished steel product produced	Tonnes	2015 to 2017	2023	
1005	Galvanized steel produced	Tonnes	2015 to 2017	2023	
1006	Finished product(s) produced	Tonnes	2016 to 2018	2023	
1011	Brick or other products made from clay or shale using a kiln	Tonnes	2015 to 2017	2023	
1016	Beans and seeds crushed	Tonnes	2015 to 2017	2023	
1017	Carbon black produced	Tonnes	2015 to 2017	2022	
1018	Gypsum panels produced	Thousand square feet	2015 to 2017	2022	
1020	High calcium lime produced	Tonnes	2015 to 2017	2022	
1020	Cal-85 produced	Tonnes	2015 to 2017	2022	
1020	Lime kiln dust + waste lime produced	Tonnes	2015 to 2017	2023	
1021	Dolomitic lime produced	Tonnes	2015 to 2017	2023	
1021	Double burnt lime produced	Tonnes	2015 to 2017	2023	
1021	Iron coated dolime produced	Tonnes	2015 to 2017	2023	
1021	Lime kiln dust + waste Lime produced	Tonnes	2015 to 2017	2023	
1022	High calcium lime produced	Tonnes	2015 to 2017	2023	
1022	Lime kiln dust + waste lime produced	Tonnes	2015 to 2017	2023	
1023	Finished product(s) produced	Tonnes	2016 to 2018	2023	
1024	Gypsum panels produced	Thousand square feet	2015 to 2017	2022	
1025	Vehicles produced with an internal combustion engine	Number of vehicles	2017 to 2020	2023	
1026	Vehicles produced with an internal combustion engine	Number of vehicles	2017 to 2020	2023	

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
GHG ID /GHGRP ID	**Production Parameter**	**Production Parameter Units**	**FPE and Non-FPE Intensity years**	**Year in which Notice was Given by the Director**	**$BEI_{E,i,nonFPE}$ adjusted for biomass combustion CO_2 emissions[1]**
1030	Carbon black produced	Tonnes	2015 to 2017	2022	
1032	Finished product(s) produced	Tonnes	2016 to 2018	2023	Yes
1033	Finished product(s) produced	Tonnes	2016 to 2018	2022	Yes
1042	Dolomitic lime produced	Tonnes	2015 to 2017	2022	
1042	High calcium lime produced	Tonnes	2015 to 2017	2022	
1042	Hot rolled steel produced	Tonnes	2015 to 2017	2023	
1042	Finished steel - annealed	Tonnes	2015 to 2017	2023	
1042	Finished steel - heat treated	Tonnes	2015 to 2017	2023	
1042	Direct strip steel produced	Tonnes	2015 to 2017	2023	
1045	White Cement produced from clinker produced at the covered facility	Tonnes	2015 to 2017	2022	
1046	Medium density fibreboard produced	Cubic meters	2017 to 2019	2023	
1047	Vehicles produced with an internal combustion engine	Number of vehicles	2017 to 2020	2023	
1054	Hot rolled steel produced	Tonnes	2014, 2015, 2017	2022	
1055	Steel produced from electric arc furnace	Tonnes	2014 to 2017	2022	
1055	Hot rolled steel produced	Tonnes	2014 to 2017	2022	
1060	Fuel ethanol produced	Kilolitres of absolute ethanol	2016 to 2017	2022	
1060	Industrial ethanol produced	Kilolitres of absolute ethanol	2016 to 2017	2022	
1061	Fuel ethanol produced	Kilolitres of absolute ethanol	2014 to 2016	2022	
1065	Brick or other products made from clay or shale using a kiln	Tonnes	2015 to 2017	2022	
1066	Brick or other products made from clay or shale using a kiln	Tonnes	2015 to 2017	2022	

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
GHG ID /GHGRP ID	**Production Parameter**	**Production Parameter Units**	**FPE and Non-FPE Intensity years**	**Year in which Notice was Given by the Director**	**$BEI_{E,i,nonFPE}$ adjusted for biomass combustion CO_2 emissions[1]**
1068	Beverage ethanol produced	Kilolitres of absolute ethanol	2015 to 2017	2022	
1070	Vehicles produced with an internal combustion engine	Number of vehicles	2017 to 2020	2023	
1073	Products from steam cracker	Tonnes	2015 to 2017	2022	
1073	Products not from steam racker	Tonnes	2015 to 2017	2022	
1075	Corn milled and corn germ processed	Tonnes (air dried)	2018	2022	
1076	Corn milled	Tonnes (air dried)	2015 to 2017	2022	
1079	Fuel ethanol produced	Kilolitres of absolute ethanol	2015 to 2017	2022	
1080	Finished product(s) produced	Tonnes	2015 to 2017	2022	
1081	Nylon resins produced	Tonnes	2015 to 2017	2022	
1081	Nylon fibres produced	Tonnes	2015 to 2017	2022	
1082	MPMD produced	Tonnes	2016 to 2017	2022	
1082	Diaminocyclohexane (DCH) produced	Tonnes	2019 to 2021	2023	
1083	Finished product(s) produced	Tonnes	2016 to 2018	2022	
1084	Steel produced from an electric arc furnace	Tonnes	2016 to 2018	2023	
1084	Hot rolled steel produced	Tonnes	2016 to 2018	2023	
1084	Finished steel product produced	Tonnes	2016 to 2018	2023	
1085	Corn milled	Tonnes	2016 to 2018	2022	
1085	Citric acid produced	Tonnes	2016 to 2018	2022	
1086	Beer and other beverages produced	Hectolitres	2017 to 2019	2023	
1092	Poultry processed	Tonnes	2017 to 2019	2023	
1094	Finished product(s) produced	Tonnes	2015 to 2017	2023	
1100	Ethylene produced	Tonnes	2014 to 2016	2023	
1101	Polyethylene produced	Tonnes	2014 to 2016	2023	
1102	Polyethylene produced	Tonnes	2014 to 2016	2023	

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
GHG ID /GHGRP ID	**Production Parameter**	**Production Parameter Units**	**FPE and Non-FPE Intensity years**	**Year in which Notice was Given by the Director**	**$BEI_{E,i,nonFPE}$ adjusted for biomass combustion CO_2 emissions[1]**
1103	Glass produced	Tonnes	2015 to 2017	2022	
1109	Polyvinyl chloride resin produced	Tonnes	2018 to 2020	2023	
1111	Refinery feed	Kilolitres	2015 to 2017	2022	
1113	Propane and butane produced	Cubic metres	2015 to 2017	2022	
1118	Raw sugar processed	Tonnes	2015 to 2017	2022	
1120	Finished product(s) produced	Tonnes	2015 to 2017	2023	Yes
1121	Mineral wool insulation produced	Tonnes	2015 to 2017	2022	
1122	Used oil feed produced	Kilolitres	2015 to 2017	2022	
1123	Vaccine produced	Litres	2018 to 2020	2023	
1126	Finished product(s) produced	Tonnes	2015 to 2017	2022	
1131	Finished product(s) produced	Tonnes	2015 to 2017	2022	
1132	Styrene produced	Tonnes	2015 to 2017	2022	
1134	Fuel ethanol produced	Kilolitres of absolute ethanol	2015 to 2017	2022	
1135	Finished product(s) produced	Tonnes	2016 to 2018	2023	Yes
1136	Hot rolled steel produced	Tonnes	2015 to 2017	2023	
1136	Finished steel product produced	Tonnes	2015 to 2017	2023	
1138	Finished product(s) produced	Tonnes	2016 to 2018	2022	Yes
1139	Wax produced	Tonnes	2017 to 2020	2023	
1140	Vehicles produced with an internal combustion engine	Number of vehicles	2017 to 2020	2023	
1141	Vehicles produced with an internal combustion engine	Number of vehicles	2017 to 2020	2023	
1147	Megawatt hours of work produced	Megawatt hours	2014 to 2016	2022	
1148	Finished steel product produced	Tonnes	2015 to 2017	2023	
1149	Hot rolled steel produced	Tonnes	2015 to 2017	2023	
1149	Finished steel product produced	Tonnes	2015 to 2017	2023	
1158	Nickel matte produced	Tonnes	2016 to 2018	2023	

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
GHG ID /GHGRP ID	**Production Parameter**	**Production Parameter Units**	**FPE and Non-FPE Intensity years**	**Year in which Notice was Given by the Director**	**$BEI_{E,i,nonFPE}$ adjusted for biomass combustion CO_2 emissions[1]**
1163	Fuel ethanol produced	Kilolitres of absolute ethanol	2015 to 2017	2022	
1163	Industrial ethanol produced	Kilolitres of absolute ethanol	2015 to 2017	2022	
1166	Coal tar distillation products produced	Tonnes	2017 to 2020	2023	
1167	Fuel ethanol produced	Kilolitres of absolute ethanol	2015 to 2017	2022	
1171	Aluminium alloys produced	Tonnes	2015 to 2017	2023	
1172	Aluminium poured	Tonnes	2017 to 2020	2023	
1175	Malic acid produced	Tonnes	2015 to 2017	2022	
1175	Fumaric acid produced	Tonnes	2015 to 2017	2022	
1186	Coils produced	Tonnes	2017-2019	2023	
1191	Rubber produced	Tonnes	2015 to 2017	2023	
1192	Nickel matte produced	Tonnes	2016 to 2018	2023	
1200	Total synthetic oil, antioxidants, rubber additives and specialty chemical produced	Tonnes	2019 to 2021	2023	
1207	Beverage ethanol produced	Kilolitres of absolute ethanol	2015 to 2017	2022	
1219	Stocked tires produced	Thousand pounds	2016 to 2018	2023	
1224	Zinc oxide (ZnO) produced	Tonnes	2018 to 2020	2023	
1225	Hot rolled steel produced	Tonnes	2015 to 2017	2023	
1225	Finished steel - annealed	Tonnes	2015 to 2017	2023	
1225	Finished steel product produced	Tonnes	2015 to 2017	2023	
1225	Galvanized steel produced	Tonnes	2015 to 2017	2023	
1234	Finished product(s) produced	Tonnes	2016 to 2018	2022	
1237	Carbon and alloy steel cast billets produced	Tonnes	2015 to 2017	2023	

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
GHG ID /GHGRP ID	**Production Parameter**	**Production Parameter Units**	**FPE and Non-FPE Intensity years**	**Year in which Notice was Given by the Director**	**$BEI_{E,i,nonFPE}$ adjusted for biomass combustion CO_2 emissions[1]**
1237	Carbon and alloy steel ingots produced	Tonnes	2015 to 2017	2023	
1237	Stainless steel cast billets produced	Tonnes	2015 to 2017	2023	
1237	Stainless steel ingots produced	Tonnes	2015 to 2017	2023	
1240	Biodiesel produced	Metric tonne	2016 to 2018	2023	
1245	Particleboard panels produced	Cubic meters	2016 to 2018	2023	
1251	Expanded polystyrene produced	Tonnes	2016 to 2018	2023	
1251	Wax paper produced	Tonnes	2019 to 2021	2023	
1252	Finished product(s) produced	Tonnes	2016 to 2018	2022	
1257	Evaporated salt produced	Tonnes	2016 to 2019	2023	
1261	Glass produced	Tonnes	2015 to 2017	2022	
1263	Glass produced	Tonnes	2015 to 2017	2022	
1266	Heat-treated steel tubing produced	Tonnes	2017 to 2020	2023	
1269	Confectionery products produced	Tonnes	2018 to 2020	2023	
1340	Transmission and power train parts	Number of parts sold	2017 to 2019	2023	
1341	Canned food items produced	Tonnes	2018 to 2020	2023	
1342	Total billets and extruded product produced	Tonnes	2018 to 2020	2023	
1344	Masking tapes produced	Kilograms	2018 to 2020	2023	
1344	Medical tapes produced	Kilograms	2018 to 2020	2023	
1346	Potato chips and corn snacks produced	Tonnes	2017 to 2019	2023	
1356	Gold mined and milled	Kilograms	2018 to 2020	2023	
1368	Total uranium hexafluoride (UF_6) and uranium dioxide (UO_2) converted	Tonnes of uranium	2018 to 2020	2023	
1381	Finished pork products produced	Tonnes	2017 to 2019	2023	
1384	Evaporated salt produced	Tonnes	2018 to 2020	2023	
1406	Glass produced	Tonnes	2015 to 2017	2022	

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
GHG ID /GHGRP ID	**Production Parameter**	**Production Parameter Units**	**FPE and Non-FPE Intensity years**	**Year in which Notice was Given by the Director**	**$BEI_{E,i,nonFPE}$ adjusted for biomass combustion CO_2 emissions[1]**
1407	Gold mined and milled	Kilograms	2018 to 2020	2023	
1408	Abrasives produced	Kilograms	2018 to 2020	2023	
1408	Capsules produced	Kilograms	2018 to 2020	2023	
1409	Uranium trioxide (UO_3) refined	Tonnes of uranium	2018 to 2020	2023	
1410	Palladium and platinum produced	Kilograms	2018 to 2020	2023	
1412	Steel products	Tonnes	2019 to 2020	2023	
1414	Gold mined and milled	Kilograms	2018 to 2020	2023	
1416	Gold mined and milled	Kilograms	2018 to 2020	2023	
1417	Nepheline syenite produced	Tonnes	2015 to 2017	2022	
1418	Mined material	Megatonnes	2015 to 2017	2022	
1432	Megawatt hours of work produced	Megawatt hours	2015 to 2017	2022	
1456	Gold mined and milled	Kilograms	2018 to 2020	2023	
1457	Gold bearing ore produced	Thousand tonnes milled	2018 to 2020	2023	
1489	Transmission and power train parts	Number of parts sold	2017 to 2019	2023	
1505	Baked goods produced	Tonnes	2018 to 2020	2023	
1507	Tape produced	Kilograms	2018 to 2020	2023	
1507	Scotch-Brite produced	Kilograms	2018 to 2020	2023	

[1] Two per cent of biomass combustion CO2 emissions has been included in the $BEI_{E,i,nonFPE}$ of the facility, or a site that forms part of the facility, is one whose GHG ID is set out in Column 1 of this table, and column 6 opposite the GHG ID indicates “Yes”

3.1.6 Method F: Historical Facility Emissions Limit Standard

(a) The owner or operator of a covered facility, or a site that forms part of the facility, set out in Table F shall use Formula 3.1.6-1 to calculate the AAELF.

$$AAEL_{F,y} = (BL_{F,FPE} \times SF_{y,FPE}) + (BL_{F,nonFPE} \times SF_{y,nonFPE})$$

Formula 3.1.6-1

Where,

y = year of the compliance period

$BL_{F,FPE}$ = Baseline Fixed Process Emissions for the facility, or a site that forms part of the facility, as set out in Column 3 of Table F

$SF_{y,FPE}$ = Fixed Process Emissions Stringency Factor for the industrial activity in year "y" as determined in accordance with Section 4.1

$BL_{F,nonFPE}$ = Baseline Non-Fixed Process Emissions for the facility, or a site that forms part of the facility, as set out in Column 4 of Table F

$SF_{y,nonFPE}$ = Non-Fixed Process Emissions Stringency Factor for the industrial activity in year "y" as determined in accordance with Section 4.2

Table F

Column 1	Column 2	Column 3	Column 4	Column 5
GHG ID	**Industrial activity**	**$BL_{F,FPE}$**	**$BL_{F,nonFPE}$**	**Units**
1168	Smelting or refining, from feedstock that comes primarily from ore, of at least one of the following metals: nickel, copper, zinc, lead, or cobalt. (Item 1 of Schedule 2)	102,804	352,132	Tonnes CO_2e
1189	Smelting or refining, from feedstock that comes primarily from ore, of at least one of the following metals: nickel, copper, zinc, lead, or cobalt. (Item 1 of Schedule 2)	5,081	12,256	Tonnes CO_2e

4 Stringency Factors (SF)

4.1 Fixed Process Emissions Stringency Factor

(a) An owner or operator of a covered facility shall use the Fixed Process Emissions Stringency Factor for the year "y" (**$SF_{y,FPE}$**) that is set out in Table 4.1 for all industrial activities engaged in at the facility, where **"y"** is the year of the compliance period.

Table 4.1

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Industrial activity	**$SF_{2022,FPE}$**	**$SF_{2023,FPE}$**	**$SF_{2024,FPE}$**	**$SF_{2025,FPE}$**	**$SF_{2026,FPE}$**	**$SF_{2027,FPE}$**	**$SF_{2028,FPE}$**	**$SF_{2029,FPE}$**	**$SF_{2030,FPE}$**
All industrial activities	1.0	0.976	0.961	0.946	0.931	0.916	0.901	0.886	0.871

4.2 Non-Fixed Process Emissions Stringency Factor

(a) If biomass was not used at the covered facility in the 2022 compliance period, the owner or operator of the covered facility engaged in an industrial activity set out in Column 1 of Table 4.2 shall use, for the purposes of using the method set out in Column 2 opposite that industrial activity, the Non-Fixed Process Emissions Stringency Factor for year "y" (**$SF_{y,nonFPE}$**) that is set out in Table 4.2 opposite the method, where "**y**" is the year of the compliance period.

(b) If biomass was used at the covered facility in the 2022 compliance period, the owner or operator of the covered facility engaged in an industrial activity set out in Column 1 of Table 4.2 shall use, for the purposes of using the method set out in Column 2 opposite that industrial activity, the following to calculate the non-fixed process emissions stringency factor,

(1) Formula 4.2-1 to calculate the Non-Fixed Process Emissions Stringency Factor for the compliance period 2023 (**$SF_{2023,nonFPE}$**), and

(2) Formula 4.2-2 to calculate the Non-Fixed Process Emissions Stringency Factor for the compliance period 2024 and each subsequent compliance period (**$SF_{y,nonFPE}$**), where "**y**" is the compliance period in respect of which the calculation is being made.

$$SF_{2023,nonFPE} = SF_{2022,bio} - 0.024$$

Formula 4.2-1

Where,

$SF_{2022,bio}$ = Non-fixed Process Emissions Stringency Factor for the year 2022 adjusted based on biomass fuel use, calculated in accordance with Formula 4.2-3

$$SF_{y,nonFPE} = \left(SF_{2023,nonFPE}\right) - [(y - 2023) \times 0.015]$$

Formula 4.2-2

Where,

y = year of the compliance period

$SF_{2023,nonFPE}$ = Non-fixed Process Emissions Stringency Factor for the year 2023, calculated in accordance with Formula 4.2-1

$$SF_{2022,bio} = 1 - \left[\left(1 - SF_{2022,nonFPE}\right) \times NBF_{2022}\right]$$

Formula 4.2-3

Where,

$SF_{2022,nonFPE}$ = Non-Fixed Process Emissions Stringency Factor without adjustment based on biomass fuel use as set out in Table 4.2 for year 2022 that is set out opposite the industrial activity engaged in at the facility set out in Column 1 and the applicable method set out in Column 2

NBF_{2022} = Non-biomass fraction for the year 2022, calculated in accordance with Formula 4.2-4

$$NBF_{2022} = 1 - \left(\frac{EI_{biomass,2022}}{EI_{AllFuels,2022}}\right)$$

Formula 4.2-4

Where,

EI$_{biomass,2022}$ = energy input from biomass fuel at the covered facility in the year 2022, expressed in Gigajoules (GJ)

EI$_{AllFuels,2022}$ = total energy input from all fuel, including biomass fuel, at the covered facility in the year 2022, expressed in Gigajoules (GJ)

Table 4.2

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10	Column 11
Industrial activity	**Applicable Method**	**SF$_{2022, nonFPE}$**	**SF$_{2023, nonFPE}$**	**SF$_{2024, nonFPE}$**	**SF$_{2025, nonFPE}$**	**SF$_{2026, nonFPE}$**	**SF$_{2027, nonFPE}$**	**SF$_{2028, nonFPE}$**	**SF$_{2029, nonFPE}$**	**SF$_{2030, nonFPE}$**
Transmitting natural gas[1]	All Methods	0.80	0.776	0.761	0.746	0.731	0.716	0.701	0.686	0.671
Dairy[2]	All Methods	0.80	0.776	0.761	0.746	0.731	0.716	0.701	0.686	0.671
Generating electricity using fossil fuels[3]	Method B	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Method C	0.92	0.896	0.881	0.866	0.851	0.836	0.821	0.806	0.791
All other industrial activities	All Methods	0.92	0.896	0.881	0.866	0.851	0.836	0.821	0.806	0.791

[1] Item 6 of Schedule 2 of the Regulation
[2] Subparagraph vi of Item 39 of Schedule 2 of the Regulation
[3] Item 38 of Schedule 2 of the Regulation

5 Partial Year Adjustment in Respect of the First Compliance Period

5.1 Application of Partial Year Adjustment Criteria in Respect of the First Compliance Period

(a) This section applies to the owner or operator of a covered facility that received a notice of registration as a registered emitter issued under subsection 64 (2) of the Greenhouse Gas Pollution Pricing Act (Canada) by the Minister of National Revenue and the effective date of the notice is after January 1 in the first compliance period, in respect of a registration period, that applies to the facility.

5.2 Partial Year Adjustment Method in Respect of the First Compliance Period

(a) An owner or operator that meets the criteria in section 5.1 shall apply the following substitutions in calculating the AAELs for the covered facility's first compliance period in respect of a registration period when using methods that are required to be used and such methods that the owner or operator is permitted to use and elects to use as set out in subsections 3.1.1 to 3.1.6 (Methods A through F):

(1) All production* amounts used in the Formulas under Methods A to F shall be the amounts from the period starting from the effective date of the notice referred to in 5.1 through to December 31 of that year.

(2) Calculate the AAEL for applicable Methods A to F using the calculation methods and Formulas in Sections 3.1.1 to 3.1.6 substituting production* amounts in those calculations and Formulas with the amounts referred to in paragraph 1 above.

* Including production parameters (**Production**$_{x,y}$), energy inputs (**NBF**$_y$ and **TET**$_y$) and by-product fuels (**BPF**$_y$).

6 Partial Year Adjustment in Respect of Sites Added to or Removed from a Facility

6.1 Application of Partial Year Adjustment Criteria in Respect of Sites Added to or Removed from a Facility

(a) This section applies to the owner or operator of a covered facility that received a notice under subsection 8 (3) of the Regulation setting out an effective date of a change in respect of the composition of sites that constitute the covered facility that is on or after January 1 in a compliance period.

6.2 Partial Year Adjustment Method in Respect of Sites Added to or Removed from a Facility

(a) An owner or operator that meets the criteria in section 6.1 shall apply the following substitutions in calculating the AAELs for the covered facility in respect of the compliance period in which the effective date of the change set out in the notice under 8(3) of the Regulation occurs, using all methods that are required to be used and such methods that the owner or operator is permitted to use and elects to use, as set out in subsections 3.1.1 to 3.1.6 (Methods A through F):

(1) If a site that, before the effective date of the change set out in the notice, did not constitute part of another covered facility is added to the covered facility:

(i) No amount of production* in respect of the site shall be included in the production* amounts used in the Formulas under Methods A to F for the portion of the year that occurs before the effective date.

(ii) Calculate the AAEL for applicable Methods A to F using the calculation methods and Formulas in Sections 3.1.1 to 3.1.6 substituting production* amounts in those calculations and Formulas with the amounts referred to in subparagraph (1) (i) above.

(2) If a site is removed from the covered facility and is not added to another covered facility:

(i) No amount of production* in respect of the site shall be included in the production* amounts used in the Formulas under Methods A to F for the portion the year that occurs after the effective date.

(ii) Calculate the AAEL for applicable Methods A to F using the calculation methods and Formulas in Sections 3.1.1 to 3.1.6 substituting production* amounts in those calculations and Formulas with the amounts referred to in paragraph (2) (i) above.

* Including production parameters (**Production**$_{x,y}$), energy inputs (**NBF**$_y$ and **TET**$_y$) and by-product fuels (**BPF**$_y$).

7 Process for Setting a Baseline Emissions Intensity (BEI)

7.1 Application for a Baseline Emissions Intensity

(a) The owner or operator of a covered facility may apply to the Director for a BEI in respect of a proposed production parameter if all of the following criteria in paragraphs (1), (2) (3) and (4) are met:

(1) The covered facility is one:

(i) In respect of which the $AAEL_E$ in the determination of the TAEL for the 2022 compliance period was greater than zero and the facility, or a site that forms part of the facility, is not one set out in Table E,

(ii) Registered under paragraph 3 of subsection 4(1) of the Regulation,

(iii) Registered under paragraph 2 of subsection 4(1) of the Regulation and the eligible modification in respect of which they were registered is one described in paragraph 1 of subsection 1(4) of the Regulation,

(iv) At which an eligible modification that would be an eligible modification for the purposes of registration under the Regulation and that is a change described in paragraph 2 or 3 of subsection 1(4) of the Regulation has been substantially completed,

(v) Registered under section 2 or 4 of the Regulation in 2023 or in a subsequent year and is not one described in subparagraphs (i) – (iv) above,

(vi) In respect of which the owner or operator has received a notice under subsection 8 (3) of the Regulation setting out an effective date of the addition of a site to the covered facility that is on or after January 1 in the year.

(2) The primary activity engaged in at the facility is not Generating electricity using fossil fuels. (Item 38 of Schedule 2 of the Regulation).

(3) The owner or operator of the covered facility is not required or permitted to include production values in the Formulas under Methods A, E or F of this Methodology in respect of the proposed production parameter.

(4) The proposed production parameter is one of the following:

(i) A final product or sum of final products produced at the facility, as a result of engaging in an industrial activity,

(ii) An intermediate product or sum of intermediate products produced at the facility, as a result of engaging in an industrial activity,

(iii) An input material, or sum of input materials, used at the facility, as a result of engaging in an industrial activity.

(5) For the purposes of paragraph (4) and despite the definition of production parameter in the Regulation, none of the following constitutes a proposed production parameter:

(i) A production parameter identified in Column 3 of Table A, unless the production parameter is kg of gold produced,

(ii) A production parameter set out in Column 2 of Table E that is set out opposite the facility or a site that forms part of the facility identified in Column 1,

(iii) Electricity generated from a combustion device at the facility,

(iv) Useful thermal energy generated from a combustion device at the facility,

(v) Fuel input (e.g., natural gas), electricity use, or thermal energy transferred into the facility.

(6) For greater certainty, administrative data such as payroll, sales, revenues, profit, factory area or space, employment, degree heat days are not proposed production parameters.

(b) An application under subsection (a) for a BEI in respect of a proposed production parameter shall include all of the following:

(1) A statement about which criterion under paragraph (1) of subsection (a) applies to the facility,

(2) the proposed BEI, calculated in accordance with Section 7.3

(3) the proposed production parameter,

(4) all emissions and production data used in the calculations performed under Section 7.3 in respect of the proposed BEI, and

(5) such other information as the Director may specify in writing

7.2 Procedure to Apply for a Baseline Emissions Intensity

(a) For the purposes of applying under Section 7.1 for a BEI, the owner or operator of the covered facility shall complete the application form approved by the Director and give it to the Director.

(b) If the Director is satisfied that all the criteria in subsection 7.1 (a) have been met, and the application has been made in accordance with subsection 7.1 (b) the Director shall,

(1) give the applicant written notice setting out the BEI in respect of the production parameter, and

(2) publish the GHG ID and name of the facility, the production parameter for the BEI and the years from which data was used in calculating the BEI.

(c) If the Director proposes to refuse an application for a BEI in respect of a proposed production parameter, the Director shall give written notice to the applicant, setting out the following:

(1) The reasons for the proposed refusal.

(2) A statement that the applicant may submit comments in writing to the Director in respect of the proposed refusal by the date specified in the notice.

(d) After considering any comments received from the applicant within the time period specified in the notice under subsection (c), the Director shall,

(1) give the applicant written notice setting out the BEI in respect of the production parameter, and publish the GHG ID and name of the facility, the production parameter for the BEI and the years from which data was used in calculating the BEI, or

(2) give the applicant written notice of the Director's refusal to establish a BEI for the production parameter.

7.3 Calculation of a Proposed Baseline Emissions Intensity

(a) For the purposes of applying under Section 7.1 for a BEI, the owner or operator of the covered facility shall calculate the BEI proposed in the application in accordance with all of the following:

(1) Use the applicable Formula set out below:

(i) Formula 7.3-1 if the facility is one that is described in subparagraph (1)(i) of subsection 7.1(a).

(ii) Formula 7.3-2 if the facility is one that is described in subparagraph (1)(ii) through (1)(v) of subsection 7.1(a).

(2) Use emissions and production data in the applicable formula that meet all the following criteria:

(i) 90 or more per cent of the emissions attributed to the proposed production parameter, that constitutes a proposed production parameter in accordance with paragraphs (4) and (5) of subsection 7.1(a), are associated directly with the production of the proposed production parameter as demonstrated through engineering estimates,

(ii) emissions from steam import and use are accounted for in the manner and form approved by the Director,

(iii) emissions from electricity generation, including from a cogeneration system, are excluded.

(iv) the sum of all emissions associated with producing all production parameters and all proposed production parameters for each year in respect of which the

data are used in an applicable formula is less than or equal to the verification amount in that year.

(v) the emissions and production data used in the applicable formula have been calculated in accordance with the Guideline and the applicable sampling, analysis and measurement has been done in accordance with the Guideline.

$$BEI_{D,i,nonFPE} = \sum_{y}^{y+3} Emissions_{i,y} \div \sum_{y}^{y+3} Production_{i,y}$$

Formula 7.3-1

Where,

i = the proposed production parameter that constitutes a proposed production parameter in accordance with paragraphs (4) and (5) of subsection 7.1(a)

y = 2017 or a year specified in writing by the Director where there is no data or abnormal operations in 2017

Emissions$_{j,y}$ = annual emissions that are attributable to producing the proposed production parameter "i" in year “y” and meet the criteria set out in paragraph (2) of subsection (a), reported under the Reporting Regulation and Guideline

Production$_{j,y}$ = annual production of proposed production parameter “i” in year “y”

$$BEI_{D,i,nonFPE} = \sum_{y}^{y+2} Emission_{i,y} \div \sum_{y}^{y+2} Production_{i,y}$$

Formula 7.3-2

Where,

i = the proposed production parameter that constitutes a proposed production parameter in accordance with paragraphs (4) and (5) of subsection 7.1(a)

y is the year,

1) that is 3 years prior to the year of the first compliance period if the facility is one described in subparagraph (1)(ii), (iii) or (v) of subsection 7.1(a), or
2) in which the eligible modification was substantially completed if the facility is one described in subparagraph (1)(iv) of subsection 7.1(a).

$Emissions_{j,y}$ = annual emissions that are attributable to producing the proposed production parameter "i" in year “y” and meet the criteria set out in paragraph (2) of subsection (a), reported under the Reporting Regulation and Guideline

$Production_{j,y}$ = annual production of the proposed production parameter “i” in year “y”, reported under the Reporting Regulation and Guideline

Appendix A

Where the GHGID/GHGRP ID number set out in Column 1 of Table A.1 does not accord with the Company Name and Facility/Site Name set out in Columns 2 and 3, the GHG ID or GHGRP ID and address prevails. This approach recognizes that the information set out in Columns 2 and 3, that is intended to help identify a covered facility, or a site that forms part of the covered facility, may change while the GHGID/GHGRP ID and address information will generally not change.

Table A.1

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
GHG ID /GHGRP ID	**Company Name**	**Facility/Site Name**	**Facility/Site Address**	**Facility/Site City or Town**	**Facility/Site Postal Code**
1001	ADM Agri-Industries Company	ADM AGRI-INDUSTRIES - ADM Windsor	5550 Maplewood Drive	Windsor	N9C 0B9
1001	ADM Agri-Industries Company	ADM AGRI-INDUSTRIES - ADM Windsor	5551 Maplewood Drive	Windsor	N9C 0B9
1005	ArcelorMittal Dofasco G.P.	ArcelorMittal Dofasco G.P.	1330 Burlington Street East	Hamilton	L8N 3J5
1006	Atlantic Packaging Products Ltd.	111 Progress	111 Progress Avenue	Scarborough	M1P 2Y9
1011	Brampton Brick Limited	Brampton Brick Limited	225 Wanless Drive	Brampton	L7A 1E9
1016	Bunge Canada	Bunge Canada - Hamilton	515 Victoria Avenue North	Hamilton	L8N 3K7
1017	Cabot Canada Limited	Cabot Canada Limited	800 Tashmoo Avenue	Sarnia	N7T 7N4
1018	CGC Inc.	CGC Hagersville Plant	55 Third Line Road	Hagersville	N0A 1H0
1020	Carmeuse Lime Canada	Beachville Operation	374681 Oxford County 6 Road	Ingersoll	N5C 3K5
1021	Carmeuse Lime Canada	Dundas Operations	600 Highway # 5 Highway	Dundas	L9H 3S9
1022	Carmeuse Lime Canada	Northern Lime Limited	17 Highway 17 East	Blind River	P0R 1B0
1023	Cascades Canada ULC	Cascades Containerboard Packaging, A Division of Cascades Canada ULC.	300 Marmora Street	Trenton	K8V 5R8

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
GHG ID /GHGRP ID	**Company Name**	**Facility/Site Name**	**Facility/Site Address**	**Facility/Site City or Town**	**Facility/Site Postal Code**
1024	CertainTeed Gypsum Canada, Inc.	Toronto Board Plant	2424 Lakeshore Road West	Mississauga	L5J 1K4
1025	FCA Canada Inc.	Stellantis Brampton	2000 Williams Parkway East	Brampton	L6S 6B3
1026	FCA Canada Inc.	Stellantis Windsor	2199 Chrysler Centre Road	Windsor	N9A 4H6
1030	Birla Carbon Canada Ltd.	Birla Carbon Canada Ltd.	755 Parkdale Avenue North	Hamilton	L8H 7N5
1032	Domtar Inc.	Dryden Mill	1 Duke Street	Dryden	P8N 2Z7
1033	Domtar Inc.	Espanola Mill	1 Station Road	Espanola	P5E 1R6
1042	Algoma Steel Inc.	Algoma Steel Inc.	105 West Street	Sault Ste. Marie	P6A 7B4
1045	Federal White Cement Ltd.	Woodstock Plant	355151 35th Line	Woodstock	N0J 1J0
1046	Arauco Canada Limited	Arauco	657 Baseline Road	Sault Ste Marie	P6A 5K6
1047	Ford Motor Company of Canada, Limited	Ford	1 The Canadian Road	Oakville	L6J 5C9
1054	Gerdau Ameristeel Corporation	Gerdau Ameristeel Corporation, Cambridge Mill	160 Orion Place	Cambridge	N1T 1R9
1055	Gerdau Ameristeel Corporation	Gerdau Ameristeel Corporation, Whitby Mill	1 Gerdau Court	Whitby	L1N 5T1
1056	GOLDCORP CANADA LTD	Musselwhite Mine	N/A	Kenora District	P7B 4A3
1060	Greenfield Global Inc.	Chatham	275 Bloomfield Road	Chatham	N7M 5J5
1061	Greenfield Global Inc.	Johnstown	141 Commerce Drive	Johnstown	K0E 1T0
1065	Meridian Brick	Meridian Brick - Aldershot	1570 Yorkton Court	Aldershot	L7P 5B7
1066	Meridian Brick	Meridian Brick - Burlington	5155 Dundas Street	Burlington	L7R 3Y2
1068	Hiram Walker & Sons Ltd.	Walkerville	2072 Riverside Drive East	Windsor	N8Y 4S5
1070	Honda Canada Inc.	Honda	4700 Industrial Parkway	Alliston	L9R 1A2

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
GHG ID /GHGRP ID	**Company Name**	**Facility/Site Name**	**Facility/Site Address**	**Facility/Site City or Town**	**Facility/Site Postal Code**
1073	Imperial Oil	Sarnia Chemical Plant	602 Christina Street South	Sarnia	N7T 7M5
1075	Ingredion Canada Corporation	Ingredion Canada Corporation	4040 James Street	Cardinal	K0E 1E0
1076	Ingredion Canada Corporation	Ingredion Canada Incorporated - London Plant	1100 Green Valley Road	London	N6N 1E3
1079	IGPC Ethanol Inc.	IGPC Ethanol Inc.	89 Progress Drive	Aylmer	N5H 2R9
1080	Interlake Acquisition Corporation Limited	Dunn Paper	45 Merritt Street	St. Catharines	L2T 1J4
1081	INVISTA (Canada) Company	INVISTA (Canada) Company	455 Front Road	Kingston	K7L 4Z6
1082	INVISTA (Canada) Company	INVISTA (Canada) Company-Maitland Site	1400 County #2 Road	Maitland	K0E 1P0
1083	Irving Consumer Products Limited	Irving Consumer Products Limited	1551 Weston Road	Toronto	M6M 4Y4
1084	Ivaco Rolling Mills 2004 L. P.	Ivaco Rolling Mills	1040 County Rd 17 Road	L'Orignal	K0B 1K0
1085	Jungbunzlauer Canada Incorporated	Jungbunzlauer Canada Inc.	1555 Elm Street	Port Colborne	L3K 5V5
1086	Labatt Brewing Company Ltd	Labatt	150 Simcoe Street	London	N6A 4M3
1092	Maple Lodge Farms Ltd	Maple Lodge Farms	8301 Winston Churchill Boulevard	Brampton	L6Y 0A2
1094	New Forest Paper Mills LP	New Forest Paper Mills LP	333 Progress Avenue	Scarborough	M1P 2Z7
1100	NOVA Chemicals Corporation	Corunna Site	785 Petrolia Line	Corunna	N0N 1G0
1101	NOVA Chemicals Corporation	Moore Site	510 Moore Line	Mooretown	N0N 1M0
1102	NOVA Chemicals Corporation	St. Clair River Site	285 Albert Street	Corunna	N0N 1G0
1103	O-I Canada Corp.	Plant #31 Brampton	100 West Drive	Brampton	L6T 2J5
1109	Oxy Vinyls Canada Co.	Oxy Vinyl’s	8800 Thorold Townline	Thorold	L2E 6S5
1111	Petro-Canada Lubricants Inc.	Mississauga Lubricants Centre	385 Southdown Road	Mississauga	L5J 2Y3

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
GHG ID /GHGRP ID	**Company Name**	**Facility/Site Name**	**Facility/Site Address**	**Facility/Site City or Town**	**Facility/Site Postal Code**
1113	Plains Midstream Canada	Sarnia Fractionation Plant	1182 Plank Road	Sarnia	N7T 7H9
1118	Redpath Sugar Ltd	Toronto Refinery	95 Queen's Quay East	Toronto	M5E 1A3
1120	Resolute FP Canada Inc.	Resolute Forest Products - Thunder Bay Operations	2001 Neebing Avenue	Thunder Bay	P7E 6S3
1121	ROXUL Inc.	ROXUL Inc.	805 Steeles Avenue East	Milton	L9T 5H3
1122	Safety-Kleen Canada Inc.	Oil Recovery Division	300 Woolwich Street South	Breslau	N0B 1M0
1123	Sanofi Pasteur Limited	Sanofi Pasteur	1755 Steeles Ave West	Toronto	M2R 3T4
1126	Sonoco Canada Corporation	Sonoco Brantford	33 Park Avenue	Brantford	N3T 5T5
1127	Sonoco Canada Corporation	Sonoco - Trent Valley Mill	5 Bernard Long Road	Trenton	K8V 5P6
1131	Strathcona Paper GP Inc.	Strathcona Paper LP	77 County Road 16, RR 7	Napanee	K7R 3L2
1132	INEOS Styrolution Canada Ltd.	INEOS Styrolution	872 Tashmoo Avenue	Sarnia	N7T 7H5
1134	Suncor Energy Inc.	St. Clair Ethanol Plant	535 Rokeby Line	Mooretown	N0N 1M0
1135	Rayonier A.M. Canada G.P.	Kapuskasing Operations	1 Government Road	Kapuskasing	P5N 2Y2
1136	Algoma Tubes Inc.	Tenaris Algoma Tubes	547 Wallace Terrace	Sault Ste. Marie	P6C 1L5
1137	Terra International (Canada) Inc.	CF Industries Courtright Nitrogen Complex	161 Bickford Line	Courtright	N0N 1H0
1138	AV Terrace Bay Inc.	AV Terrace Bay	21 Mill Road	Terrace Bay	P0T 2W0
1139	The International Group Inc.	The International Group	50 Salome Drive	Toronto	M1S 2A8
1140	Toyota Motor Manufacturing Canada Inc.	Toyota Cambridge	1055 Fountain Street North	Cambridge	N3H 5K2
1141	Toyota Motor Manufacturing Canada Inc.	Toyota Woodstock	1717 Dundas Street	Woodstock	N4S 0A4

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
GHG ID /GHGRP ID	**Company Name**	**Facility/Site Name**	**Facility/Site Address**	**Facility/Site City or Town**	**Facility/Site Postal Code**
1147	TransCanada PipeLines Ltd.	TransCanada Pipeline, Ontario	1644 Veterans Drive	Kenora	P9N 0C1
1148	Stelco Inc.	U. S. Steel Canada Inc.	386 Wilcox Street	Hamilton	L8L 8K5
1149	Stelco Inc.	U. S. Steel Canada Inc.	2330 Regional Road #3	Haldimand County	N0A 1L0
1158	Glencore Canada Corporation	Sudbury Integrated Nickel Operations Smelter	2 Longyear Drive	Falconbridge	P0M 1S0
1163	Greenfield Global Inc.	Tiverton	99 Farrell Drive	Tiverton	N0G 2T0
1164	Magna Exteriors Inc.	Magna Exteriors	65 Independence Place	Guelph	N1K 1H8
1166	Rain Carbon Canada Inc.	Ruetgers/Rain Carbon	725 Strathearne Avenue North	Hamilton	L8H 5L3
1167	Kawartha Ethanol Inc.	Kawartha Ethanol Inc.	6830 7 Highway	Havelock	K0L 1Z0
1168	Vale Canada Limited	Copper Cliff Mining, Smelting and Refining Complex	18 Rink Street	Copper Cliff	P0M 1N0
1171	Real Alloy Canada Ltd.	Real Alloy Canada Ltd.	7496 Torbram Road	Mississauga	L4T 1G9
1172	FCA Canada Inc.	Stellantis Etobicoke Casting	15 Brown's Line	Toronto	M8W 3S3
1175	Bartek Ingredients Inc.	Plant #1	421 Seaman Street	Stoney Creek	L8E 3J4
1184	Roseburg Forest Products Canada Ltd.	Roseburg Forrest	777 Fibreboard Drive	Pembroke	K8A 6W4
1185	Great Lakes Copper Ltd.	Great Lakes Copper Ltd	1010 Clarke Road	London	N5Y 5S6
1186	ArcelorMittal Produits Longs Canada s.e.n.c	ArcelorMittal Long Products Canada G. P.	690 Strathearne Avenue North	Hamilton	L8H 7N8
1189	Vale Canada Limited	Port Colborne Refinery	187 Davis Street	Port Colborne	L3K 5W2
1191	ARLANXEO Canada Inc.	Arlanxeo	1265 Vidal Street South	Sarnia	N7T 7M2
1192	Glencore Canada Corporation	Glencore	85 Regional Road 8	Onaping	P0M 2R0

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
GHG ID /GHGRP ID	**Company Name**	**Facility/Site Name**	**Facility/Site Address**	**Facility/Site City or Town**	**Facility/Site Postal Code**
1193	Red Lake Gold Mines Partnership	Red Lake Gold Mines	10 Mine Road	Balmertown	P0V 1C0
1198	GOLDCORP CANADA LTD	Porcupine Gold Mines	4315 Gold Mine Road	South Porcupine	P0N 1H0
1200	LANXESS Canada Co./Cie	Lanxess	25 Erb Street	Elmira	N3B 2J3
1207	Sazerac Distillers of Canada Inc.	Collingwood Distillery	202 MacDonald Road	Collingwood	L9Y 4J2
1219	Goodyear Canada Inc.	Goodyear Canada Inc	388 Goodyear Road	Napanee	K7R 3L2
1224	Zochem ULC	Zochem	1 Tilbury Court	Brampton	L6T 3T4
1229	IKO Industries Ltd.	IKO Industries Ltd.	105084 Highway 7	Madoc	K0K 2K0
1230	IKO Industries Ltd.	IKO Industries Ltd.	1451 Spence Avenue	Hawkesbury	K6A 3T4
1234	Kimberly-Clark Inc.	Kimberly Clark, Huntsville Mill	570 Ravenscliffe Road	Huntsville	P1H 2A1
1237	Valbruna ASW Inc.	ASW Steel Inc.	42 Centre Street	Welland	L3B 0E5
1240	BIOX Canada Limited	Biox Canada	41 Oliver Street	Hamilton	L8L 4K9
1245	Panolam Industries Ltd.	Panolam	61 Domtar Road	Huntsville	P1H 2J7
1247	Matalco Inc.	Matalco Inc.	850 Intermodal Drive	Brampton	L6T 0B5
1251	Genpak, Division of Great Pacific Enterprises LP	GenPak	3185 Pepper Mill Court	Mississauga	L5L 4X5
1252	Hartmann Canada Inc.	Hartmann North America	58 Frank Street	Brantford	N3T 5T6
1257	Compass Minerals Canada Corp	Compass Minerals Canada Corp	245 Regent Street	Goderich	N7A 3Y5
1261	Owens Corning Insulating Systems Canada LP	Toronto Plant	3450 McNicoll Avenue	Toronto	M1V 1Z5
1263	Owens Corning Composite Materials Canada LP	Guelph Glass Plant	247 York Road	Guelph	N1H 6P6
1266	Welded Tube of Canada Corp.	Welded tube of Canada Corp	191 Ridge Road	Welland	L3B 5N7

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
GHG ID /GHGRP ID	**Company Name**	**Facility/Site Name**	**Facility/Site Address**	**Facility/Site City or Town**	**Facility/Site Postal Code**
1269	Ferrero Canada Limited	Ferrero	1 Ferrero Boulevard	Brantford	N3V 1G3
1340	Linamar Transportation Inc.	Linamar	32 Independence Place	Guelph	N1K 1H8
1341	Sun-Brite Foods Inc.	Sun-Brite	1532 Country Road 34	Ruthven	N0P 2G0
1342	Signature Aluminum Canada Inc.	Signature Aluminum Canada Inc.	1850 Clements Road	Pickering	L1W 3R8
1344	3M Canada Company	3M (Brockville)	60 California Avenue	Brockville	K6V 5W1
1346	Super-Pufft Snacks Corporation	Super-Pufft	880 Gana Court	Mississauga	L5S 1N8
1356	Alamos Gold Inc.	Alamos Gold Inc.	566 Highway 566 3 km west of Matachewan	Matachewan	P0K 1M0
1368	Cameco Corporation	Cameco Corporation	1 Eldorado Place	Port Hope	L1A 3A1
1381	Sofina Foods Inc./Aliments Sofina Inc.	Sofina	821 Appleby Line	Burlington	L7L 4W9
1384	Windsor Salt Ltd.	Windsor Salt Ltd.	30 Prospect Avenue	Windsor	N9C 3G3
1406	Ottawa Fibre LP	CertainTeed Insulation Ottawa	3985 Belgreen Drive	Ottawa	K1G 3N2
1407	New Gold Inc.	New Gold Inc.	5967 Highway 11/71	Emo	P0W 1E0
1408	3M Canada Company	3M (London)	1840 Oxford Street East	London	N5V 3R6
1409	Cameco Corporation	Cameco Corporation	328 Eldorado Road Northwest	Blind River	P0R 1B0
1410	Impala Canada Ltd.	Impala Canada Ltd.	Highway 527	Thunder Bay	P7B 6T9
1412	Max Nee (North America) Limited	Max Aicher (North America) Limited	855 Industrial Drive	Hamilton	L8L 0B2
1414	Lake Shore Gold Corp.	Lake Shore Gold Corp.	3160 Florence Street	Porcupine	P0N 1C0
1416	McEwen Ontario	McEwen Ontario	2839 Highway 101 East	Matheson	P0K 1N0
1417/G10920	Covia Canada Limited	Nepheline Syenite Operations	260 Unimin Road	Havelock	K0L 1Z0

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
GHG ID /GHGRP ID	**Company Name**	**Facility/Site Name**	**Facility/Site Address**	**Facility/Site City or Town**	**Facility/Site Postal Code**
1418/G10765	Kirkland Lake Gold Inc	Detour Lake Project	End of Highway 652	Cochrane	P0L 1C0
1432	Enbridge Gas Inc.	Enbridge Gas Inc.	500 Consumers Road	North York	M2J 1P8
1456	Alamos Gold Inc.	Kirkland Lake Gold Inc. (Macasa)	15 Goudreau	Dubreuiville	P0S 1B0
1457	Kirkland Lake Gold Inc.	Alamos Gold Inc.	66 Highway	Kirkland Lake	P2N 3J1
1489	Linamar Corporation	Vehcom	74 Cambell Road	Guelph	N1H 1C1
1505	Canada Bread Company, Ltd.	Canada Bread Company (Bimbo)	745 Nebo Road	Hannon	L0R 1P0
1507	3M Canada Company	3M (Perth)	2 Craig Street	Perth	K7H 3E2

Appendix B

This table sets out the eligibility, of the owner or operator of a covered facility, or a site that forms part of the facility, whose GHG ID is set out in Column 1 of this Table, to use Method B, Method C or TET_y in a Formula in Method E.

Table B1

Column 1	Column 2	Column 3	Column 4
GHG ID	**Eligible to use Method B**	**Eligible to use Method C**	**Eligible to use TET_y in Method E**
1001	No	No	No
1005	Yes	Yes	Yes
1006	No	No	No
1011	No	No	No
1016	Yes	Yes	Yes
1017	No	No	No
1018	Yes	Yes	Yes
1020	Yes	Yes	Yes
1021	Yes	Yes	Yes
1022	Yes	Yes	Yes
1023	Yes	Yes	Yes
1024	Yes	Yes	Yes
1025	Yes	Yes	Yes
1026	Yes	Yes	Yes
1030	No	No	No
1032	No	No	No
1033	No	No	No
1042	Yes	Yes	Yes
1045	No	No	No
1046	Yes	Yes	Yes
1047	Yes	Yes	Yes
1054	Yes	Yes	Yes
1055	Yes	Yes	Yes
1060	Yes	Yes	Yes
1061	Yes	Yes	Yes
1065	No	No	No
1066	No	No	No

Column 1	Column 2	Column 3	Column 4
GHG ID	**Eligible to use Method B**	**Eligible to use Method C**	**Eligible to use TET_y in Method E**
1068	No	No	No
1070	Yes	Yes	Yes
1073	No	No	Yes
1075	Yes	Yes	Yes
1076	Yes	Yes	Yes
1079	Yes	Yes	Yes
1080	No	No	No
1081	Yes	Yes	Yes
1082	Yes	Yes	Yes
1083	Yes	Yes	Yes
1084	Yes	Yes	Yes
1085	Yes	Yes	Yes
1086	Yes	Yes	Yes
1092	Yes	Yes	Yes
1094	No	No	No
1100	No	No	Yes
1101	No	No	No
1102	No	No	No
1103	Yes	Yes	Yes
1109	Yes	Yes	Yes
1111	No	No	No
1113	Yes	Yes	Yes
1118	No	No	No
1120	No	No	No
1121	No	No	No
1122	Yes	Yes	Yes
1123	Yes	Yes	Yes
1126	No	No	No
1127	No	No	No
1131	No	No	No
1132	Yes	Yes	Yes
1134	Yes	Yes	Yes
1135	No	No	No

Column 1	Column 2	Column 3	Column 4
GHG ID	**Eligible to use Method B**	**Eligible to use Method C**	**Eligible to use TET_y in Method E**
1136	Yes	Yes	Yes
1138	No	No	No
1139	Yes	Yes	Yes
1140	Yes	Yes	Yes
1141	Yes	Yes	Yes
1147	No	No	No
1148	Yes	Yes	Yes
1149	Yes	Yes	Yes
1158	Yes	Yes	Yes
1163	Yes	Yes	Yes
1166	Yes	Yes	Yes
1167	Yes	No	No
1168	No	No	No
1171	Yes	Yes	Yes
1172	Yes	Yes	Yes
1175	Yes	Yes	Yes
1186	Yes	Yes	Yes
1189	No	No	No
1191	Yes	Yes	Yes
1192	Yes	Yes	Yes
1200	Yes	Yes	Yes
1207	No	No	No
1219	Yes	Yes	Yes
1224	Yes	Yes	Yes
1225	Yes	Yes	Yes
1234	No	No	No
1237	Yes	Yes	Yes
1240	Yes	Yes	Yes
1245	Yes	Yes	Yes
1251	Yes	Yes	Yes
1252	No	No	No
1257	Yes	Yes	Yes
1261	Yes	Yes	Yes

Column 1	Column 2	Column 3	Column 4
GHG ID	**Eligible to use Method B**	**Eligible to use Method C**	**Eligible to use TET_y in Method E**
1263	Yes	Yes	Yes
1266	Yes	Yes	Yes
1269	Yes	Yes	Yes
1340	Yes	Yes	Yes
1341	Yes	Yes	Yes
1342	Yes	Yes	Yes
1344	Yes	Yes	Yes
1346	Yes	Yes	Yes
1356	Yes	Yes	Yes
1368	Yes	Yes	Yes
1381	Yes	Yes	Yes
1384	Yes	Yes	Yes
1406	No	No	No
1407	Yes	Yes	Yes
1408	Yes	Yes	Yes
1409	Yes	Yes	Yes
1410	Yes	Yes	Yes
1412	Yes	Yes	Yes
1414	Yes	Yes	Yes
1416	Yes	Yes	Yes
1417	No	No	No
1418	No	No	No
1432	No	No	No
1456	Yes	Yes	Yes
1457	Yes	Yes	Yes
1489	Yes	Yes	Yes
1505	Yes	Yes	Yes
1507	Yes	Yes	Yes