Quantification Methods for the *Output-Based Pricing System Regulations*

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Introduction

On November 22, 2023, the <u>Regulations Amending the Output-Based Pricing System Regulations and the</u> <u>Environmental Violations Administrative Monetary Penalties Regulations</u> (the Amendments) were published in the Canada Gazette, Part II. The Amendments result from the 2022 review of the <u>Output-Based</u> <u>Pricing System Regulations</u> (OBPS Regulations).

A key change to the OBPS Regulations is the incorporation by reference of the Quantification Methods for the *Output-Based Pricing System Regulations* (OBPS QM) document. The OBPS QM sets outs the methods for quantification to be used when quantifying GHGs, the ratio of heat and the quantity of electricity generated, as required under the OBPS.

This change will enable improved harmonization of quantification methods for GHG emissions between the OBPS Regulations and the federal Greenhouse Gas Reporting Program (GHGRP) over time as quantification methods are updated.

The OBPS QM applies to the 2024 and future compliance periods.

How to use the OBPS QM

- Section 2 provides general quantification rules, including which methods are to be used where there is no prescribed method for an activity.
- Section 3 provides specific quantification rules, including carbon capture and storage and continuous emissions monitoring system methods.
- Section 4 provides detailed quantification requirements per industrial sector.
- Production quantification methods remain in Schedule 3 to the OBPS Regulations.

Below is a list of some key changes that have been made to the prescribed quantification methodologies:

- Adding exceptions for sampling, analysis, and measurement methodology for wastewater emissions throughout section 4.
- Updating "anaerobic wastewater treatment" to "wastewater treatment" throughout section 4.
- Referencing GHGRP instead of WCI method for flaring emissions.
- Referencing GHGRP instead of WCI method for nitric acid industrial process emissions.

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Definitions

Alberta GHG Quantification Methods means Version 2.3 of the document titled Alberta's Greenhouse Gas Quantification Methodologies, published by the Alberta Government in September 2023.

CEMS Protocols means the document titled *Protocols and performance specifications for continuous monitoring of gaseous emissions from thermal power generation and other sources,* published by Environment and Climate Change Canada in 2023.

Directive 017 means the directive titled *Directive 017: Measurement Requirements for Oil and Gas Operations*, published by the Alberta Energy Regulator on March 17, 2022, as amended from time to time.

Directive PNG017 means the directive titled *Directive PNG017: Measurement Requirements for Oil and Gas Operations,* published by the Government of Saskatchewan in August 2022, as amended from time to time.

GHG means greenhouse gas set out in Schedule 3 to the Greenhouse Gas Pollution Pricing Act.

GHGRP 2022/2023 means the document titled *Canada's Greenhouse Gas Quantification Requirements: Greenhouse Gas Reporting Program*, version 6.0, published by Environment and Climate Change Canada in December 2022.

GHGRP 2024/2025 means the document titled *Canada's Greenhouse Gas Quantification Requirements: Greenhouse Gas Reporting Program*, version 7.0, published by Environment and Climate Change Canada in December 2023.

IPCC Guidelines means the guidelines titled *2006 IPCC Guidelines for National Greenhouse Gas Inventories*, published by the Institute for Global Environmental Strategies for the Intergovernmental panel on climate change, as amended from time to time.

Oil Sands QM means the document titled *Quantification of Area Fugitive Emissions at Oil Sands Mines*, version 2.2, published in June 2023 by the department of Environment and Parks of the Government of Alberta.

WCI Method means the document titled *Final Essential Requirements of Mandatory Reporting,* published on December 17, 2010, by the Western Climate Initiative, as amended from time to time.

1. Purpose

This document prescribes the methods to quantify GHGs, the ratio of heat and the quantity of electricity generated, as required under the *Output-Based Pricing System Regulations* (OBPS Regulations).

2. General Quantification Rules

2.1. Quantity of GHGs

For the purposes of paragraphs 17(2)(a) and 20(2)(a) of the OBPS Regulations, the GHG quantification methods are set out in column 3 of the table in section 4 of this document applicable to the industrial activities engaged in at the covered facility.

For the purposes of paragraphs 17(2)(b) and (c) and 20(2)(b) of the OBPS Regulations, where the specified emissions type or GHGs are not listed in column 1 or 2 of the tables in section 4 of this document applicable to the industrial activities engaged in at the covered facility or where there are no applicable tables in section 4, GHGs are to be quantified in accordance with:

- i. the GHGRP 2024/2025, if those methods are applicable to the activities engaged in at the covered facility,
- ii. the WCI method, if those methods are applicable to the activities engaged in at the covered facility and are not available in the GHGRP 2024/2025, or
- iii. the IPCC guidelines, if those guidelines are applicable to the activities engaged in at the covered facility and are not available in the GHGRP 2024/2025 or WCI Method.

When calculating GHGs from stationary fuel combustion using GHGRP 2024/2025, section 2.A, note #6 from the key notes list does not apply.

2.2. Sampling, analysis and measurement requirements

For the purposes of subsections 17(3) and 20(4) of the OBPS Regulations, the sampling, analysis and measurement requirements are set out in column 4 of the tables in section 4 of this document applicable to the industrial activities engaged in at the covered facility.

For the purposes of subsection 17(3) and 20(4) of the OBPS Regulations, where the sampling, analysis and measurement requirements are not listed in column 4 of the tables in section 4 of this document applicable to the industrial activities engaged in at the covered facility or where there are no applicable tables in section 4, the sampling, analysis and measurement requirements are specified in:

- i. the GHGRP 2024/2025, if those methods are applicable to the activities engaged in at the covered facility,
- ii. the WCI method, if those methods are applicable to the activities engaged in at the covered facility and are not available in the GHGRP 2024/2025, or
- iii. the IPCC guidelines, if those guidelines are applicable to the activities engaged in at the covered facility and are not available in the GHGRP 2024/2025 or WCI Method.

2.3. Missing data

For the purposes of subsection 17(4) and 20(5) of the OBPS Regulations, the missing data methods are set out in column 5 of the tables in section 4 of this document applicable to the industrial activities engaged in at the covered facility.

For the purposes of subsection 17(4) and 20(5) of the OBPS Regulations, where the missing data methods are not listed in column 5 of the tables in section 4 of this document applicable to the industrial activities engaged in at the covered facility or where there are no applicable tables in section 4, the missing data methods are specified in:

- i. the GHGRP 2024/2025, if those methods are applicable to the activities engaged in at the covered facility,
- ii. the WCI method, if those methods are applicable to the activities engaged in at the covered facility and are not available in the GHGRP 2024/2025, or
- iii. the IPCC guidelines, if those guidelines are applicable to the activities engaged in at the covered facility and are not available in the GHGRP 2024/2025 or WCI Method.

2.4. Conflicting requirements

For a requirement made under GHGRP 2024/2025 in respect of quantification of GHGs, in the event of a conflict between the OBPS Regulations and GHGRP, the OBPS Regulations prevail to the extent of the conflict.

3. Specific Quantification Rules

3.1. Ratio of heat

For the purposes of paragraph 34(1)(b) of the OBPS Regulations, when determining the ratio of heat the following variables are quantified as follows:

$\mathbf{HHV}_{\mathbf{i}}$

is the higher heating value of the fossil fuel of type "i" combusted in the facility for the generation of thermal energy during the compliance period determined in accordance with sections 2.D.1 and 2.D.3 of the GHGRP 2024/2025.

QBB_k

is the quantity of biomass fuel type "k" combusted in the facility for the generation of thermal energy during the compliance period, determined in accordance with subsection 4(2) of Part 38 of Schedule 3 to the OBPS Regulations and the WCI Method WCI.214.

HHV_k

is the higher heating value for biomass fuel type "k" combusted in the facility during the compliance period for the generation of thermal energy in accordance with sections 2.D.1 and 2.D.3 of the GHGRP 2024/2025 and the WCI Method WCI.214.

For the purposes of paragraph 34(1)(c) of the OBPS Regulations, when determining the ratio of heat the following variables are quantified as follows:

HHVi

is the higher heating value of the fossil fuel of type "i" combusted in the facility for the generation of thermal energy during the compliance period, determined in accordance with sections 2.D.1 and 2.D.3 of the GHGRP 2024/2025.

HHV_k

is the higher heating value for biomass fuel type "k" combusted in the facility during the compliance period for the generation of thermal energy in accordance with sections 2.D.1 and 2.D.3 of the GHGRP 2024/2025 and WCI Method WCI.214.

For the purposes of subsection 4(2) of Division 3 of Part 38 of Schedule 3 to the OBPS Regulations, as referenced in paragraph 34(1)(b), the quantity of fuel for QF_i and QBB_k is determined on the following basis:

(a) for a solid fuel, the mass of the fuel combusted, on a wet or dry basis, expressed in tonnes and measured in accordance with section 2.D.2 of the GHGRP 2024/2025;

(b) for a liquid fuel, the volume of the fuel combusted, expressed in kL and measured in accordance with section 2.D.2 of the GHGRP 2024/2025; and

(c) for a gaseous fuel, the volume of the fuel combusted, expressed in standard cubic metres and measured in accordance with section 2.D.2 of the GHGRP 2024/2025.

3.2. Quantity of CO₂ captured and stored

For the purposes of subsection 35(1) of the OBPS Regulations, the variable B is determined as follows:

B is the quantity of carbon dioxide (CO₂) captured at the covered facility that is stored during the compliance period in a storage project, determined using the quantification method described in section 1 of the GHGRP 2024/2025, expressed in carbon dioxide equivalent (CO₂e) tonnes.

3.3. Quantity of electricity generated

For the purposes of subsection 1(2) of Division 2 to Part 38 Schedule 3 to the OBPS Regulations, variables HHV_i and HHV_j are quantified in accordance with section 2.D.1 and 2.D.3 of the GHGRP 2024/2025.

For the purposes of subsection 4(1) of Division 3 of Part 38 of Schedule 3 to the OBPS Regulations, the following variables are quantified as follows:

\mathbf{QFF}_{j}

is the quantity of gaseous, liquid or solid fuel, as the case may be, type "j" combusted in the facility for electricity generation during the compliance period, determined in accordance with section 4(2) of Division 3 of Part 38 of Schedule 3 to the OBPS Regulations and section 2.D.2 of the GHGRP 2024/2025,

HHV_j

is the higher heating value of the gaseous, liquid or solid fuel, as the case may be, type "j" combusted in the facility for electricity generation determined in accordance with sections 2.D.1 and 2.D.3 of the GHGRP 2024/2025,

QB_i

is the quantity of biomass fuel type "i" combusted in the facility for electricity generation during the compliance period, determined in accordance with subsection 4(2) of Division 3 of Part 38 of Schedule 3 to the OBPS Regulations and with section 2.D.2 of the GHGRP 2024/2025 and the WCI Method WCI.214, and

\mathbf{HHV}_{i}

is the higher heating value for each biomass fuel type "i" combusted in the facility for electricity generation in accordance with sections 2.D.1 and 2.D.3 of the GHGRP 2024/2025 and the WCI Method WCI.214.

For the purposes of subsection 4(2) of Division 3 of Part 38 of Schedule 3 to the OBPS Regulations, the quantity of fuel for QFF_j and QB_i is determined on the following basis:

(a) for a solid fuel, the mass of the fuel combusted, on a wet or dry basis, expressed in tonnes and measured in accordance with section 2.D.2 of the GHGRP 2024/2025;

(b) for a liquid fuel, the volume of the fuel combusted, expressed in kL and measured in accordance with section 2.D.2 of the GHGRP 2024/2025; and

(c) for a gaseous fuel, the volume of the fuel combusted, expressed in standard cubic metres and measured in accordance with section 2.D.2 of the GHGRP 2024/2025.

3.4. Continuous Emissions Monitoring Systems

For the purposes of section 25 of the OBPS Regulations, if a continuous emissions monitoring system (CEMS) is used to quantify GHGs, the person responsible for the covered facility must ensure that the system complies with the requirements of the CEMS Protocols.

For the purposes of subsection 45(2) of the OBPS Regulations, for each compliance period during which a person responsible for the covered facility uses a continuous emissions monitoring system, they must comply with the record-keeping requirements set out in the CEMS Protocols.

For the purposes of the OBPS Regulations, when the requirements of the CEMS Protocols require any data or records to be kept for at least 3 years, those records must be kept for at least 7 years. This aligns with the record-keeping requirements for a person responsible for a covered facility set out in paragraph 187(5) of the *Greenhouse Gas Pollution Pricing Act*.

For greater certainty, when a CEMS is used to quantify GHGs at a covered facility, any quantity of GHGs that have not been quantified using the CEMS must be included in the total quantity of GHGs from the covered facility calculated in accordance with subsections 17(2) to (4) or 20(2) to (5) of the OBPS Regulations.

4. Quantification of GHGs for Industrial Activities

PART 1: Bitumen and Other Crude Oil Production

ltem	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHG	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025, sections 2.A and 2.B	Directive 017, Directive PNG017	GHGRP 2024/2025 2.E
2	Flaring emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.C	Directive 017, Directive PNG017	GHGRP 2024/2025 2.E
3	Wastewater emissions from				
	(a) anaerobic and aerobic wastewater treatment	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 11.G	GHGRP 2024/2025 11.N.7*	GHGRP 2024/2025 11.O
	(b) oil-water separators	CH4	GHGRP 2024/2025 11.H	GHGRP 2024/2025 11.N.8	GHGRP 2024/2025 11.0
4	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

Quantification of GHGs from Certain Specified Emission Types

Exceptions:

- (1) You must collect samples representing wastewater influent to the wastewater treatment process, following all preliminary and primary treatment steps (e.g., after grit removal, primary clarification, oil-water separation, dissolved air flotation, or similar solids and oil separation processes). You must collect and analyze samples for COD or BOD5 concentration once each calendar week.
- (2) You must measure the flow rate of wastewater entering wastewater treatment process once each calendar week. The flow measurement location must correspond to the location used to collect samples analyzed for COD or BOD5 concentration.

PART 2: Bitumen and Heavy Oil Upgrading

Quantification of GHGs from Certain Specified Emission Types

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHG	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025, sections 2.A and 2.B	Directive 017, Directive PNG017	GHGRP 2024/2025 2.E
2	Industrial process emissions from				
	(a) hydrogen production	CO ₂	GHGRP 2024/2025 10.A	GHGRP 2024/2025 10.B	GHGRP 2024/2025 10.C
	(b) sulphur recovery	CO ₂	GHGRP 2024/2025 11.D	GHGRP 2024/2025 11.N.4	GHGRP 2024/2025 11.0
	(c) catalyst regeneration	CO ₂ , CH ₄ and N ₂ O	GHGRP 2024/2025 11.A	GHGRP 2024/2025 11.N.1	GHGRP 2024/2025 11.0
3	Flaring emissions	CO ₂ , CH ₄ and N ₂ O	GHGRP 2024/2025 2.C	GHGRP 2024/2025 2.D.7	GHGRP 2024/2025 2.E
4	Venting emissions from				
	(a) process vents	CO_2 and N_2O	GHGRP 2024/2025 11.B	GHGRP 2024/2025 11.N.2	GHGRP 2024/2025 11.0
	(b) uncontrolled blowdown	CO_2 and N_2O	GHGRP 2024/2025 11.K	GHGRP 2024/2025 11.N.2	GHGRP 2024/2025 11.0
5	Wastewater emissions from				
	(a) anaerobic and aerobic wastewater treatment	CO ₂ , CH ₄ and N ₂ O	GHGRP 2024/2025 11.G	GHGRP 2024/2025 11.N.7*	GHGRP 2024/2025 11.0
	(b) oil-water separators	CH ₄	GHGRP 2024/2025 11.H	GHGRP 2024/2025 11.N.8	GHGRP 2024/2025 11.O
6	On-site transportation emissions	CO_2 , CH_4 a nd N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

Exceptions:

*Sampling, analysis and measurement requirements (1) and (2) of section 11.N.7 of GHGRP 2024/2025 are replaced by

(1) You must collect samples representing wastewater influent to the wastewater treatment process, following all preliminary and primary treatment steps (e.g., after grit removal, primary clarification, oil-

water separation, dissolved air flotation, or similar solids and oil separation processes). You must collect and analyze samples for COD or BOD5 concentration once each calendar week.

(2) You must measure the flow rate of wastewater entering wastewater treatment process once each calendar week. The flow measurement location must correspond to the location used to collect samples analyzed for COD or BOD5 concentration.

PART 3: Petroleum Refining

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Venting emissions from				
-	(a) process vent	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 11.B	GHGRP 2024/2025 11.N.2	GHGRP 2024/2025 11.0
	(b) asphalt production	CO_2 and CH_4	GHGRP 2024/2025 11.C	GHGRP 2024/2025 11.N.2	GHGRP 2024/2025 11.0
	(c) delayed coking unit	CH ₄	GHGRP 2024/2025 11.M	GHGRP 2024/2025 11.M	GHGRP 2024/2025 11.0
3	Industrial process emissions from				
	(a) hydrogen production	CO ₂	GHGRP 2024/2025 10.A	GHGRP 2024/2025 10.B	GHGRP 2024/2025 10.C
	(b) catalyst regeneration	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 11.A	GHGRP 2024/2025 11.N.1	GHGRP 2024/2025 11.0
	(c) sulphur recovery	CO ₂	GHGRP 2024/2025 11.D	GHGRP 2024/2025 11.N.4	GHGRP 2024/2025 11.0
	(d) coke calcining	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 11.J	GHGRP 2024/2025 11.N.9	GHGRP 2024/2025 11.0
4	Flaring emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.C	GHGRP 2024/2025 2.D.7	GHGRP 2024/2025 2.E
5	Leakage emissions	CH ₄	GHGRP 2024/2025 11.I	GHGRP 2024/2025 11.I	GHGRP 2024/2025 11.0
6	Wastewater emissions from				
	(a) anaerobic and aerobic wastewater treatment	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 11.G	GHGRP 2024/2025 11.N.7*	GHGRP 2024/2025 11.0
	(b) oil-water separators	CH_4	GHGRP 2024/2025 11.H	GHGRP 2024/2025 11.N.8	GHGRP 2024/2025 11.0
7	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

Exceptions:

- (1) You must collect samples representing wastewater influent to the wastewater treatment process, following all preliminary and primary treatment steps (e.g., after grit removal, primary clarification, oil-water separation, dissolved air flotation, or similar solids and oil separation processes). You must collect and analyze samples for COD or BOD5 concentration once each calendar week.
- (2) You must measure the flow rate of wastewater entering wastewater treatment process once each calendar week. The flow measurement location must correspond to the location used to collect samples analyzed for COD or BOD5 concentration.

PART 3.1: Surface mining of oil sands and extraction of bitumen

Item	Column	1	Column 2	Column 3	Column 4	Column 5
	Specified	d Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationa emission	ry fuel combustion ns	CO_2 , CH_4 and N_2O	GHGRP 2024/2025, sections 2.A and 2.B	Directive 017 or Directive PNG017	GHGRP 2024/2025 2.E
2	Flaring e	missions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.C	GHGRP 2024/2025 2.D.7	GHGRP 2024/2025 2.E
3	Leakage	emissions	CO_2 and CH_4	Oil Sands QM, section 6	Oil Sands QM, sections 6 and 7	Oil Sands QM, sections 6 and 7
4	Wastewa from	ater emissions				
	(a)	anaerobic and aerobic wastewater treatment	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 11.G	GHGRP 2024/2025 11.N.7*	GHGRP 2024/2025 11.0
	(b)	oil-water separators	CH ₄	GHGRP 2024/2025 11.H	GHGRP 2024/2025 11.N.8	GHGRP 2024/2025 11.0
5	On-site t emission	transportation ns	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

Quantification of GHGs from Certain Specified Emission Types

Exceptions:

- (1) You must collect samples representing wastewater influent to the wastewater treatment process, following all preliminary and primary treatment steps (e.g., after grit removal, primary clarification, oil-water separation, dissolved air flotation, or similar solids and oil separation processes). You must collect and analyze samples for COD or BOD5 concentration once each calendar week.
- (2) You must measure the flow rate of wastewater entering wastewater treatment process once each calendar week. The flow measurement location must correspond to the location used to collect samples analyzed for COD or BOD5 concentration.

PART 4: Natural Gas Processing

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO ₂ , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	Directive 017 or Directive PNG017	GHGRP 2024/2025 2.E
2	Industrial process emissions from acid gas removal	CO ₂	WCI Method WCI.363(c)	WCI Method WCI.364	WCI Method WCI.365
3	Flaring emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.C	Directive 017, Directive PNG017	GHGRP 2024/2025 2.E
4	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 5: Natural Gas Transmission

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission	GHGs	Method for	Sampling, Analysis and	Method for Estimating
	Types		Calculating GHGs	Measurement	Missing Analytical Data
				Requirements	
1	Stationary fuel	CO ₂ ,	GHGRP 2024/2025,	GHGRP 2024/2025 2.D.1 to	GHGRP 2024/2025 2.E
	combustion emissions	CH₄ and N₂O	sections 2.A and 2.B	2.D.4	
2	Flaring emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.C	Directive 017 or Directive PNG017	GHGRP 2024/2025 2.E

PART 6: Hydrogen Gas Production

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission	GHGs	Method for	Sampling, Analysis and	Method for Estimating
	Types		Calculating GHGs	Measurement Requirements	Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industrial process emissions	CO ₂	GHGRP 2024/2025 10.A	GHGRP 2024/2025 10.B	GHGRP 2024/2025 10.C
3	Flaring emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.C	GHGRP 2024/2025 2.D.7	GHGRP 2024/2025 2.E
4	Leakage emissions	CH ₄	GHGRP 2024/2025 11.I	GHGRP 2024/2025 11.I	GHGRP 2024/2025 11.0
5	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 7: Cement and Clinker Production

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industrial process emissions	CO ₂	GHGRP 2024/2025 4.A	GHGRP 2024/2025 4.B	GHGRP 2024/2025 4.C
3	On-site transportation emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 8: Lime Manufacturing

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission	GHGs	Method for	Sampling, Analysis and	Method for
	Types		Calculating GHGs	Measurement Requirements	Estimating Missing Analytical Data
1	Stationary fuel	CO ₂ ,	GHGRP 2024/2025,	GHGRP 2024/2025 2.D.1	GHGRP 2024/2025
	combustion emissions	CH_4 and N_2O	sections 2.A and 2.B	to 2.D.4	2.E
2	Industrial process emissions	CO ₂	GHGRP 2024/2025 3.A	GHGRP 2024/2025 3.B	GHGRP 2024/2025 3.C
3	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 9: Glass Manufacturing

Quantification	of GHGs from	Certain Specified	Emission	Types

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industrial process emissions	CO ₂	WCI Method WCI.143	WCI Method WCI.144	WCI Method WCI.145
3	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 10: Gypsum Product Manufacturing

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission	GHGs	Method for	Sampling, Analysis and	Method for
	Types		Calculating GHGs	Measurement Requirements	Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 11: Mineral Wool Insulation Manufacturing

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission	GHGs	Method for	Sampling, Analysis and	Method for
	Types		Calculating GHGs	Measurement Requirements	Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industrial process emissions	CO ₂	WCI Method WCI.183	WCI Method WCI.184	WCI Method WCI.185
3	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 12: Brick Production

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO ₂ , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industrial process emissions	CO ₂	WCI Method WCI.183	WCI Method WCI.184	WCI Method WCI.185
3	On-site transportation emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 13: Ethanol Production

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission	GHGs	Method for	Sampling, Analysis and	Method for
	Types		Calculating GHGs	Measurement	Estimating Missing
				Requirements	Analytical Data
1	Stationary fuel	CO ₂ ,	GHGRP 2024/2025,	GHGRP 2024/2025 2.D.1	GHGRP 2024/2025
	combustion	CH_4 and	sections 2.A and 2.B	to 2.D.4	2.E
	emissions	N ₂ O			
2	On-site	CO ₂ ,	GHGRP 2024/2025	GHGRP 2024/2025 2.D.1	GHGRP 2024/2025
	transportation	CH ₄ and	2.A.1.a, 2.A.2.e and	to 2.D.4, and 2.D.6	2.E
	emissions	N ₂ O	2.B		

PART 14: Furnace Black Production

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industrial process emissions	CO ₂	WCI Method WCI.303(b)	WCI Method WCI.304(b)	WCI Method WCI.305
3	Venting emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 11.B	GHGRP 2024/2025 11.N.2	GHGRP 2024/2025 11.0
4	Leakage emissions	CH ₄	GHGRP 2024/2025 11.I(1)	GHGRP 2024/2025 11.I(1)	GHGRP 2024/2025 11.0
5	Industrial product use emissions	SF ₆ and PFC	WCI Method WCI.233	WCI Method WCI.234	WCI Method WCI.235
6	On-site transportation emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 15: 2-methylpentamethylenediamine (MPMD) Production

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industrial process emissions	CO ₂	WCI Method WCI.133	WCI Method WCI.134	WCI Method WCI.135
3	Industrial product use emissions	SF ₆ and PFC	WCI Method WCI.233	WCI Method WCI.234	WCI Method WCI.235
4	Flaring emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.C	GHGRP 2024/2025 2.D.7	GHGRP 2024/2025 2.E
5	Leakage emissions	CH ₄	GHGRP 2024/2025 11.I	GHGRP 2024/2025 11.I	GHGRP 2024/2025 11.0
6	On-site transportation emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 16: Nylon Production

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission	GHGs	Method for	Sampling, Analysis and	Method for
	Types		Calculating GHGs	Measurement	Estimating Missing
				Requirements	Analytical Data
1	Stationary fuel	CO ₂ ,	GHGRP 2024/2025,	GHGRP 2024/2025 2.D.1	GHGRP 2024/2025
	combustion	CH₄ and	sections 2.A and 2.B	to 2.D.4	2.E
	emissions	N ₂ O			
2	On-site	CO ₂ ,	GHGRP 2024/2025	GHGRP 2024/2025 2.D.1	GHGRP 2024/2025
	transportation	CH_4 and	2.A.1.a, 2.A.2.e and	to 2.D.4, and 2.D.6	2.E
	emissions	N ₂ O	2.B		

PART 17: Petrochemicals Production

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industrial process emissions	CO ₂	WCI Method WCI.303(b)	WCI Method WCI.304(b)	WCI Method WCI.305
3	Venting emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 11.B	GHGRP 2024/2025 11.N.2	GHGRP 2024/2025 11.0
4	Flaring emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.C	Directive 017, Directive PNG017	GHGRP 2024/2025 2.E
5	Leakage emissions	CH ₄	GHGRP 2024/2025 11.I(1)	GHGRP 2024/2025 11.I(1)	GHGRP 2024/2025 11.0
6	Wastewater emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 11.G	GHGRP 2024/2025 11.N.7*	GHGRP 2024/2025 11.0
7	Industrial product use emissions	SF ₆ and PFC	WCI Method WCI.233	WCI Method WCI.234	WCI Method WCI.235
8	On-site transportation emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

Quantification of GHGs from Certain Specified Emission Types

Exceptions:

- (1) You must collect samples representing wastewater influent to the wastewater treatment process, following all preliminary and primary treatment steps (e.g., after grit removal, primary clarification, oil-water separation, dissolved air flotation, or similar solids and oil separation processes). You must collect and analyze samples for COD or BOD5 concentration once each calendar week.
- (2) You must measure the flow rate of wastewater entering wastewater treatment process once each calendar week. The flow measurement location must correspond to the location used to collect samples analyzed for COD or BOD5 concentration.

PART 18: Vaccine Production

ltem	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission	GHGs	Method for	Sampling, Analysis and	Method for
	Types		Calculating GHGs	Measurement Requirements	Estimating Missing Analytical Data
1	Stationary fuel	CO ₂ ,	GHGRP 2024/2025,	GHGRP 2024/2025	GHGRP 2024/2025
	combustion	CH_4 and	sections 2.A and	2.D.1 to 2.D.4	2.E
	emissions	N ₂ O	2.B		
2	Industrial product use emissions	SF ₆	WCI Method WCI.233	WCI Method WCI.234	WCI Method WCI.235
3	On-site	CO ₂ ,	GHGRP 2024/2025	GHGRP 2024/2025	GHGRP 2024/2025
	transportation	CH₄ and	2.A.1.a, 2.A.2.e and	2.D.1 to 2.D.4, and	2.E
	emissions	N ₂ O	2.B	2.D.6	

PART 19: Scrap-based Steel Production

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industrial process emissions from				
	(a) electric arc furnace	CO ₂	GHGRP 2024/2025 6.A.5	GHGRP 2024/2025 6.C	GHGRP 2024/2025 6.D
	(b) argon-oxygen decarburization vessel	CO ₂	GHGRP 2024/2025 6.A.6	GHGRP 2024/2025 6.C	GHGRP 2024/2025 6.D
	(c) ladle furnace	CO ₂	GHGRP 2024/2025 6.A.9	GHGRP 2024/2025 6.C	GHGRP 2024/2025 6.D
3	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 20: Integrated Steel Production

Quantification of GHGs from Certain Specified Emission Types

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO₂, CH₄ and N₂O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industrial process emissions from				
	(a) basic oxygen furnace	CO ₂	GHGRP 2024/2025 6.A.2*	GHGRP 2024/2025 6.C	GHGRP 2024/2025 6.D
	(b) coke oven battery	CO ₂	GHGRP 2024/2025 6.A.3*	GHGRP 2024/2025 6.C	GHGRP 2024/2025 6.D
	(c) direct reduction furnace	CO ₂	GHGRP 2024/2025 6.A.7	GHGRP 2024/2025 6.C	GHGRP 2024/2025 6.D
	(d) electric arc furnace	CO ₂	GHGRP 2024/2025 6.A.5	GHGRP 2024/2025 6.C	GHGRP 2024/2025 6.D
	(e) blast furnace	CO ₂	GHGRP 2024/2025 6.A.8*	GHGRP 2024/2025 6.C	GHGRP 2024/2025 6.D
	(f) ladle furnace	CO ₂	GHGRP 2024/2025 6.A.9	GHGRP 2024/2025 6.C	GHGRP 2024/2025 6.D
	(g) argon-oxygen decarburization vessel	CO ₂	GHGRP 2024/2025 6.A.6	GHGRP 2024/2025 6.C	GHGRP 2024/2025 6.D
3	Wastewater emissions	CO _{2,} CH ₄ and N ₂ O	GHGRP 2024/2025 11.G	GHGRP 2024/2025 11.N.7**	GHGRP 2024/2025 11.0
4	Industrial product use emissions	SF ₆ and PFC	WCI Method WCI.233	WCI Method WCI.234	WCI Method WCI.235
5	On-site transportation emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E
6	Leakage emissions from coal storage	CH ₄	WCI Method WCI.103	WCI Method WCI.104	WCI Method WCI.105

Exceptions:

*For the purposes of calculating CO₂ industrial process emissions in section 6.A of the GHGRP 2024/2025:

- a. BOG x C_{BOG} is equal to zero in equation 6-3
- b. COG x C_{COG} is equal to zero in equation 6-4
- c. BG x C_{BG} is equal to zero in equation 6-9

- (1) You must collect samples representing wastewater influent to the wastewater treatment process, following all preliminary and primary treatment steps (e.g., after grit removal, primary clarification, oil-water separation, dissolved air flotation, or similar solids and oil separation processes). You must collect and analyze samples for COD or BOD5 concentration once each calendar week.
- (2) You must measure the flow rate of wastewater entering wastewater treatment process once each calendar week. The flow measurement location must correspond to the location used to collect samples analyzed for COD or BOD5 concentration.

PART 21: Iron Ore Pelletizing

ltem	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industrial process emissions (induration furnace)	CO ₂	GHGRP 2024/2025 6.A.1	GHGRP 2024/2025 6.C	GHGRP 2024/2025 6.D
3	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 22: Metal Tube Manufacturing

ltem	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	On-site transportation emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 23: Base Metal Production

Quantification of GHGs from Certain Specified Emission Types

ltem	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission	GHGs	Method for	Sampling, Analysis and	Method for
	Types		Calculating GHGs	Measurement Requirements	Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH_4 , and N_2O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industrial process emissions from				
	(a) lead production	CO ₂	GHGRP 2024/2025 13.A*	GHGRP 2024/2025 13.B	GHGRP 2024/2025 13.C
	(b) zinc production	CO ₂	GHGRP 2024/2025 13.A*	GHGRP 2024/2025 13.B	GHGRP 2024/2025 13.C
	(c) copper and nickel production	CO ₂	GHGRP 2024/2025 13.A*	GHGRP 2024/2025 13.B	GHGRP 2024/2025 13.C
3	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

Exception:

*For the purposes of calculating industrial process emissions using section 13.A of GHGRP 2024/2025, de minimis emissions must meet the requirements of section 23 of the OBPS Regulations.

PART 24: Potash Production

Quantification	of GHGs from	Certain Specified	Emission	Types

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission	GHGs	Method for	Sampling, Analysis and	Method for
	Types		Calculating GHGs	Measurement	Estimating Missing
				Requirements	Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 24.1: Production of Evaporated Salt

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission	GHGs	Method for	Sampling, Analysis and	Method for
	Types		Calculating GHGs	Measurement	Estimating Missing
				Requirements	Analytical Data
1	Stationary fuel	CO ₂ ,	GHGRP 2024/2025,	GHGRP 2024/2025 2.D.1	GHGRP 2024/2025
	combustion	CH_4 and	sections 2.A and 2.B	to 2.D.4	2.E
	emissions	N ₂ O			
2	On-site	CO ₂ ,	GHGRP 2024/2025	GHGRP 2024/2025 2.D.1	GHGRP 2024/2025
	transportation	CH₄ and	2.A.1.a, 2.A.2.e and	to 2.D.4, and 2.D.6	2.E
	emissions	N ₂ O	2.B		

PART 25: Coal Mining

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Leakage emissions from				
	(a) coal storage	CH ₄	WCI Method WCI.103	WCI Method WCI.104	WCI Method WCI.105
	(b) underground coal mining	CH ₄	WCI Method WCI.253	WCI Method WCI.254	WCI Method WCI.255
3	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

Table 1: Quantification of GHGs from Certain Specified Emission Types

For the purpose of item 2 of Table 1 to this Part, the CH₄ leakage emissions from surface coal mining are quantified by multiplying the quantity of coal extracted by the applicable emission factor set out in column 3 of Table 2 to this Part according to the province of extraction set out in column 1 and the coal type set out in column 2 of Table 2.

Table 2: Emission Factor by Province and Coal Type

Item	Column 1	Column 2	Column 3
	Province	Coal Type	Emission Factor (tonnes of CH ₄ / tonnes of coal)
1	Nova Scotia	Bituminous	7 x 10 ⁻⁵
2	New Brunswick	Bituminous	7 x 10 ⁻⁵
3	Saskatchewan	Lignite	7 x 10 ⁻⁵
4	Alberta	Bituminous	5.5 x 10 ⁻⁴
5	Alberta	Sub- bituminous	2 x 10 ⁻⁴
6	British Columbia	Bituminous	8.6 x 10 ⁻⁴

PART 26: Production of Metals or Diamonds

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission	GHGs	Method for	Sampling, Analysis and	Method for
	Types		Calculating GHGs	Measurement	Estimating Missing
				Requirements	Analytical Data
1	Stationary fuel	CO ₂ ,	GHGRP 2024/2025,	GHGRP 2024/2025	GHGRP 2024/2025
	combustion	CH_4 and	sections 2.A and	2.D.1 to 2.D.4	2.E
	emissions	N ₂ O	2.B		
2	On-site	CO ₂ ,	GHGRP 2024/2025	GHGRP 2024/2025	GHGRP 2024/2025
	transportation	CH_4 and	2.A.1.a, 2.A.2.e and	2.D.1 to 2.D.4, and	2.E
	emissions	N ₂ O	2.B	2.D.6	

PART 27: Char Production

Quantification	of GHGs f	from Certain	Specified	Emission	Types
•					

mn 1	Column 2	Column 3	Column 4	Column 5
ified Emission	GHGs	Method for	Sampling, Analysis and	Method for
2S		Calculating GHGs	Measurement	Estimating Missing
			Requirements	Analytical Data
onary fuel	CO ₂ ,	GHGRP 2024/2025,	GHGRP 2024/2025 2.D.1	GHGRP 2024/2025
bustion sions	CH₄ and N₂O	sections 2.A and 2.B	to 2.D.4	2.E
ite	CO ₂ ,	GHGRP 2024/2025	GHGRP 2024/2025 2.D.1	GHGRP 2024/2025
sportation	CH₄ and	2.A.1.a, 2.A.2.e and	to 2.D.4, and 2.D.6	2.E
	ified Emission sonary fuel bustion sions ite sportation sions	ified Emission GHGs onary fuel CO ₂ , bustion CH ₄ and sions N ₂ O ite CO ₂ , sportation CH ₄ and sions N ₂ O	Init 1Column 2Column 3ified Emission isGHGsMethod for Calculating GHGsonary fuelCO2,GHGRP 2024/2025, sections 2.A and 2.BsionsN2OiteCO2,GHGRP 2024/2025 sections 2.A and 2.BsportationCH4 and2.A.1.a, 2.A.2.e and sionssionsN2O2.B	Init 1Column 2Column 3Column 4ified Emission asGHGsMethod for Calculating GHGsSampling, Analysis and Measurement Requirementsonary fuel bustionCO2, CH4 and sionsGHGRP 2024/2025, sections 2.A and 2.BGHGRP 2024/2025 2.D.1 to 2.D.4ite coportationCO2, CH4 and SectionsGHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.BGHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6

PART 28: Activated Carbon Production

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission	GHGs	Method for	Sampling, Analysis and	Method for
	Types		Calculating GHGs	Measurement	Estimating Missing
				Requirements	Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 29: Nitrogen-based Fertilizer Production

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emissic Types	n GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO ₂ , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industrial proces emissions from	S			
	(a) nitric aci	d CO ₂ , CH ₄ and N ₂ O	GHGRP 2024/2025 9.A and 9.B*	GHGRP 2024/2025 9.C**	GHGRP 2024/2025 9.D
	(b) ammoni steam reformir	a CO ₂	GHGRP 2024/2025 8.A***	GHGRP 2024/2025 8.B	GHGRP 2024/2025 8.C
3	On-site transportation emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

Quantification of GHGs from Certain Specified Emission Types

Exceptions:

*For the purposes of calculating GHGs from industrial process emissions from nitric acid in section 9.A and 9.B of GHGRP 2024/2025, section 9.A of GHGRP 2022/2023 may be used instead for the 2024 compliance period.

**For the purposes of sampling, analysis and measurement of industrial process emissions from nitric acid in section 9.C of GHGRP 2024/2025, section 9.B of GHGRP 2022/2023 may be used instead for the 2024 compliance period.

*** For the purposes of calculating industrial process emissions from ammonia production, do not subtract the quantity of CO2 consumed in the production of urea from the total reported industrial process emissions. Equation 8-5 in section 8.A of GHGRP 2024/2025 is therefore not applicable.

PART 30: Industrial Potato Processing

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission	GHGs	Method for	Sampling, Analysis and	Method for
	Types		Calculating GHGs	Measurement Requirements	Estimating Missing Analytical Data
1	Stationary fuel	CO ₂ ,	GHGRP 2024/2025,	GHGRP 2024/2025 2.D.1	GHGRP 2024/2025
	combustion emissions	CH₄ and N₂O	sections 2.A and 2.B	to 2.D.4	2.E
2	Wastewater emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 11.G	GHGRP 2024/2025 11.N.7*	GHGRP 2024/2025 11.0
3	On-site transportation emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

Quantification of GHGs from Certain Specified Emission Types

Exceptions:

- (1) You must collect samples representing wastewater influent to the wastewater treatment process, following all preliminary and primary treatment steps (e.g., after grit removal, primary clarification, oil-water separation, dissolved air flotation, or similar solids and oil separation processes). You must collect and analyze samples for COD or BOD5 concentration once each calendar week.
- (2) You must measure the flow rate of wastewater entering wastewater treatment process once each calendar week. The flow measurement location must correspond to the location used to collect samples analyzed for COD or BOD5 concentration.

PART 31: Industrial Oilseed Processing

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission	GHGs	Method for	Sampling, Analysis and	Method for
	Types		Calculating GHGs	Measurement Requirements	Estimating Missing Analytical Data
1	Stationary fuel	CO ₂ ,	GHGRP	GHGRP 2024/2025 2.D.1	GHGRP 2024/2025
	combustion emissions	CH_4 and N_2O	2024/2025, sections 2.A and 2.B	to 2.D.4	2.E
2	Wastewater emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 11.G	GHGRP 2024/2025 11.N.7*	GHGRP 2024/2025 11.0
3	On-site transportation emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

Quantification of GHGs from Certain Specified Emission Types

Exceptions:

- (1) You must collect samples representing wastewater influent to the wastewater treatment process, following all preliminary and primary treatment steps (e.g., after grit removal, primary clarification, oil-water separation, dissolved air flotation, or similar solids and oil separation processes). You must collect and analyze samples for COD or BOD5 concentration once each calendar week.
- (2) You must measure the flow rate of wastewater entering wastewater treatment process once each calendar week. The flow measurement location must correspond to the location used to collect samples analyzed for COD or BOD5 concentration.

PART 32: Alcohol Production

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified	GHGs	Method for	Sampling, Analysis and	Method for
	Emission Types		Calculating GHGs	Measurement Requirements	Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Wastewater emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 11.G	GHGRP 2024/2025 11.N.7*	GHGRP 2024/2025 11.0
3	On-site transportation emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

Quantification of GHGs from Certain Specified Emission Types

Exceptions:

- (1) You must collect samples representing wastewater influent to the wastewater treatment process, following all preliminary and primary treatment steps (e.g., after grit removal, primary clarification, oil-water separation, dissolved air flotation, or similar solids and oil separation processes). You must collect and analyze samples for COD or BOD5 concentration once each calendar week.
- (2) You must measure the flow rate of wastewater entering wastewater treatment process once each calendar week. The flow measurement location must correspond to the location used to collect samples analyzed for COD or BOD5 concentration.

PART 33: Wet Corn Milling

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission	GHGs	Method for	Sampling, Analysis and	Method for
	Types		Calculating GHGs	Measurement Requirements	Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO ₂ , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Wastewater emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 11.G	GHGRP 2024/2025 11.N.7*	GHGRP 2024/2025 11.0
3	On-site transportation emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

Quantification of GHGs from Certain Specified Emission Types

Exceptions:

- (1) You must collect samples representing wastewater influent to the wastewater treatment process, following all preliminary and primary treatment steps (e.g., after grit removal, primary clarification, oil-water separation, dissolved air flotation, or similar solids and oil separation processes). You must collect and analyze samples for COD or BOD5 concentration once each calendar week.
- (2) You must measure the flow rate of wastewater entering wastewater treatment process once each calendar week. The flow measurement location must correspond to the location used to collect samples analyzed for COD or BOD5 concentration.

PART 34: Citric Acid Production

Quantification	of GHGs from	Certain	Specified	Emission	Types
Quantineation	01 01103 11011		Specificu	LIIII33IOII	Types

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for	Sampling, Analysis and	Method for
			Calculating GHGs	Measurement	Estimating Missing
				Requirements	Analytical Data
1	Stationary fuel combustion	CO ₂ ,	GHGRP 2024/2025,	GHGRP 2024/2025 2.D.1	GHGRP 2024/2025
	emissions	CH_4 and N_2O	sections 2.A and 2.B	to 2.D.4	2.E
2	On-site transportation	CO ₂ ,	GHGRP 2024/2025	GHGRP 2024/2025 2.D.1	GHGRP 2024/2025
	emissions	CH_4 and N_2O	2.A.1.a, 2.A.2.e and 2.B	to 2.D.4, and 2.D.6	2.E

PART 35: Sugar Refining

Ouantification	of GHGs from	n Certain	Specified	Emission	Types
Quantineation	01 01103 11011	i cei tuili	opeemea	Ennission	i ypc5

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for	Sampling, Analysis and	Method for
			Calculating GHGs	Measurement	Estimating Missing
				Requirements	Analytical Data
1	Stationary fuel combustion	CO ₂ ,	GHGRP 2024/2025,	GHGRP 2024/2025 2.D.1	GHGRP 2024/2025
	emissions	CH ₄ and N ₂ O	sections 2.A and 2.B	to 2.D.4	2.E
2	On-site transportation	CO ₂ ,	GHGRP 2024/2025	GHGRP 2024/2025 2.D.1	GHGRP 2024/2025
	emissions	CH₄ and N₂O	2.A.1.a, 2.A.2.e and 2.B	to 2.D.4, and 2.D.6	2.E

PART 35.1: Production of Malt

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing
1	Stationary fuel combustion emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Wastewater emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 11.G	GHGRP 2024/2025 11.N.7*	GHGRP 2024/2025 11.0
3	On-site transportation emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

Quantification of GHGs from Certain Specified Emission Types

Exceptions:

- (1) You must collect samples representing wastewater influent to the wastewater treatment process, following all preliminary and primary treatment steps (e.g., after grit removal, primary clarification, oil-water separation, dissolved air flotation, or similar solids and oil separation processes). You must collect and analyze samples for COD or BOD5 concentration once each calendar week.
- (2) You must measure the flow rate of wastewater entering wastewater treatment process once each calendar week. The flow measurement location must correspond to the location used to collect samples analyzed for COD or BOD5 concentration.

PART 36: Pulp and Paper Production

For the purposes of the table, GHGs from stationary fuel combustion emissions from biomass fuels may be quantified using equations 2-1, 2-2, 2-6, 2-7, 2-11, 2-12 or 2-13 of the GHGRP 2024/2025, if applicable.

Quantification of GHGs from Certain Specified Emission Types

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions from				
	 (a) boiler, thermal oxidizer, direct- fired turbine, engine, gasifier or any other combustion device that generates heat, steam or energy 	CO_2 , CH_4 and N_2O	GHGRP 2024/2025, sections 2.A and 2.B, except for biomass fuels, other than those set out in table 2-4 and 2-12 of the GHGRP, use the emission factors provided in table 20-2 of WCI Method WCI.20 ^a	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
	(b) recovery boiler	CO_2 , CH_4 and N_2O	For fossil fuels, GHGRP 2024/2025, sections 2.A and 2.B and for pulping liquor, WCI Method WCI.213(c) ^a	For fossil fuels, GHGRP 2024/2025 2.D.1 to 2.D.4 and for pulping liquor, WCI Method WCI.214	GHGRP 2024/2025 2.E and for pulping liquor, WCI Method WCI.215
	(c) lime kiln	CO ₂	GHGRP 2024/2025 2.A	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
	(d) lime kiln	CH_4 and N_2O	GHGRP 2024/2025 2.B, except use the default emission factors for lime kilns set out in Table 210-1 of WCI Method WCI.213 ^a	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industrial process emissions: addition of carbonate compound into a lime kiln	CO ₂	GHGRP 2024/2025 12.A.2	GHGRP 2024/2025 12.B	GHGRP 2024/2025 12.C
3	Wastewater emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 11.G	GHGRP 2024/2025 11.N.7*	GHGRP 2024/2025 11.0
4	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

^a For the combustion of biomass fuels where CH₄ and N₂O emission factors are not prescribed, the IPCC Guidelines must be used to estimate those emissions.

Exceptions:

- (1) You must collect samples representing wastewater influent to the wastewater treatment process, following all preliminary and primary treatment steps (e.g., after grit removal, primary clarification, oil-water separation, dissolved air flotation, or similar solids and oil separation processes). You must collect and analyze samples for COD or BOD5 concentration once each calendar week.
- (2) You must measure the flow rate of wastewater entering wastewater treatment process once each calendar week. The flow measurement location must correspond to the location used to collect samples analyzed for COD or BOD5 concentration.

PART 37: Main Assembly of Vehicles

ltem	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission	GHGs	Method for	Sampling, Analysis and	Method for
	Types		Calculating GHGs	Measurement Requirements	Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industrial product use emissions	HFC	WCI Method WCI.43(d)	WCI Method WCI.44	WCI Method WCI.45
3	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 38: Electricity Generation

Quantification of GHGs from Other Specified Emission Types

ltem	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4*	GHGRP 2024/2025 2.E
2	Leakage emissions from coal storage	CH ₄	WCI Method WCI.103	WCI Method WCI.104	WCI Method WCI.105
3	Industrial process emissions from acid gas scrubbers and acid gas reagent	CO ₂	GHGRP 2024/2025 7.C	GHGRP 2024/2025 7.D	GHGRP 2024/2025 7.E
4	Industrial product use emissions from				
	(a) electrical equipment	SF ₆ and PFC	WCI Method WCI.233	WCI Method WCI.234	WCI Method WCI.235
	(b) cooling units	HFC	WCI Method WCI.43(d)	WCI Method WCI.44	WCI Method WCI.45
5	On-site transportation emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

Exceptions:

*Where the *Regulations Limiting Carbon Dioxide Emissions from Natural Gas-fired Generation of Electricity* apply to a unit at a covered facility, the person responsible for the facility may use the specific standards prescribed in sections 14, 18, and 19 of those regulations for sampling the higher heating value, carbon content and natural gas in place of the standards set out in sections 2.D.1 to 2.D.4 of GHGRP 2024/2025, while otherwise following the guidance set out in sections 2.D.1 to 2.D.4 of GHGRP 2024/2025.

PART 39: Production of wood products

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 40: Aluminium production from alumina

Item	Column	1	Column 2	Column 3	Column 4	Column 5
	Specifie	d Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationa emissio	ary fuel combustion ns	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industri from	al process emissions				
	(a)	pre-baked anode consumption	CO ₂	GHGRP 2024/2025 5.A.1	GHGRP 2024/2025 5.B	GHGRP 2024/2025 5.C
	(b)	Søderberg electrolysis cells	CO ₂	GHGRP 2024/2025 5.A.2	GHGRP 2024/2025 5.B	GHGRP 2024/2025 5.C
	(c)	anode effects	PFC	GHGRP 2024/2025 5.A.7	GHGRP 2024/2025 5.B	GHGRP 2024/2025 5.C
	(d)	carbonate use	CO ₂	WCI Method WCI.183	WCI Method WCI.184	WCI Method WCI.185
3	Industri emissio	al product use ns	SF ₆ and HFC	GHGRP 2024/2025 5.A.8 and WCI Method WCI.43(d)	GHGRP 2024/2025 5.B and WCI Method WCI.44	GHGRP 2024/2025 5.C and WCI Method WCI.45
4	On-site emissio	transportation ns	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 41: Production of baked anodes - Aluminium

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industrial process emissions from anode and cathode baking	CO ₂	GHGRP 2024/2025 5.A.3, 5.A.4 and 5.A.5	GHGRP 2024/2025 5.B	GHGRP 2024/2025 5.C
3	On-site transportation emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 42: Production of calcined petroleum coke - Aluminium

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for	Sampling, Analysis	Method for
			Calculating GHGs	and Measurement Requirements	Estimating Missing Analytical Data
1	Stationary fuel combustion	CO ₂ ,	GHGRP 2024/2025,	GHGRP 2024/2025	GHGRP 2024/2025
	emissions	CH₄ and N₂O	sections 2.A and 2.B	2.D.1 to 2.D.4	2.E
2	Industrial process emissions	CO ₂	GHGRP 2024/2025	GHGRP 2024/2025	GHGRP 2024/2025
	from green coke calcination		5.A.6	5.B	5.C
3	Industrial product use emissions	HFC	WCI Method WCI.43(d)	WCI Method WCI.44	WCI Method WCI.45
4	On-site transportation	CO ₂ ,	GHGRP 2024/2025	GHGRP 2024/2025	GHGRP 2024/2025
	emissions	CH₄ and	2.A.1.a, 2.A.2.e and	2.D.1 to 2.D.4, and	2.E
		N ₂ O	2.B	2.D.6	

PART 43: Production of alumina from bauxite

ltem	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement	Method for Estimating Missing Analytical Data
				Requirements	
1	Stationary fuel	CO ₂ ,	GHGRP 2024/2025,	GHGRP 2024/2025	GHGRP 2024/2025 2.E
	combustion emissions	CH₄ and N₂O	sections 2.A and 2.B	2.D.1 to 2.D.4	
2	Industrial product use emissions	HFC	WCI Method WCI.43(d)	WCI Method WCI.44	WCI Method WCI.45
3	On-site transportation emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

PART 44: Production of pneumatic tires

ltem	Column 1	Column 2	Column 3	Column 4	Column 5
	Specified Emission Types	GHGs	Method for Calculating GHGs	Sampling, Analysis and Measurement Requirements	Method for Estimating Missing Analytical Data
1	Stationary fuel combustion emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025, sections 2.A and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4	GHGRP 2024/2025 2.E
2	Industrial product use emissions	HFC	WCI Method WCI.43(d)	WCI Method WCI.44	WCI Method WCI.45
3	Wastewater emissions	CO_2 , CH_4 and N_2O	GHGRP 2024/2025 11.G	GHGRP 2024/2025 11.N.7*	GHGRP 2024/2025 11.0
4	On-site transportation emissions	CO_2 , CH ₄ and N ₂ O	GHGRP 2024/2025 2.A.1.a, 2.A.2.e and 2.B	GHGRP 2024/2025 2.D.1 to 2.D.4, and 2.D.6	GHGRP 2024/2025 2.E

Quantification of GHGs from Certain Specified Emission Types

Exceptions:

- (1) You must collect samples representing wastewater influent to the wastewater treatment process, following all preliminary and primary treatment steps (e.g., after grit removal, primary clarification, oil-water separation, dissolved air flotation, or similar solids and oil separation processes). You must collect and analyze samples for COD or BOD5 concentration once each calendar week.
- (2) You must measure the flow rate of wastewater entering wastewater treatment process once each calendar week. The flow measurement location must correspond to the location used to collect samples analyzed for COD or BOD5 concentration.