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December 9, 2023

DEPARTMENT OF THE ENVIRONMENT

CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999

Notice with respect to reporting of greenhouse gases (GHGs) for 2024 and 2025

Notice is hereby given, pursuant to subsection 46(1) of the *Canadian Environmental Protection Act, 1999* (the Act), that, with respect to emissions of greenhouse gases (GHGs) identified in Schedule 1 to this notice and for the purpose of conducting research, creating an inventory of data, formulating objectives and codes of practice, issuing guidelines or assessing or reporting on the state of the environment, any person who operates a facility described in Schedule 3 to this notice during the 2024 and 2025 calendar years, and who possesses or who may reasonably be expected to have access to information described in Schedules 4 through 18 to this notice, shall provide the Minister of the Environment with this information for each of those calendar years.

This notice applies to the calendar years 2024 and 2025. Information pertaining to the 2024 calendar year shall be provided no later than June 2, 2025. Information pertaining to the 2025 calendar year shall be provided no later than June 1, 2026.

Persons subject to this notice shall submit the information required by this notice using the Environment and Climate Change Canada (ECCC) Single Window system. Enquiries regarding this notice may be addressed to the following address:

Greenhouse Gas Reporting Program
Pollutant Inventories and Reporting Division
Environment and Climate Change Canada
Telephone: 819-938-3258 or 1-877-877-8375
Email: ges-ghg@ec.gc.ca

Pursuant to subsection 46(8) of the Act, any person subject to this notice shall keep copies of the information required by this notice, together with any calculations, measurements and other data on which the information is based, at the facility to which the information, calculations, measurements and other data relate, or at the facility's parent company, located in Canada, for a period of three years from the date the information is required to be submitted. Where the person chooses to keep the information required by the notice, together with any calculations, measurements and other data, at the facility's parent company in Canada, that person shall inform the Minister of the civic address of that parent company.

If a person who operates a facility with respect to which information was submitted for the 2023 calendar year in response to the *Notice with respect to reporting of greenhouse gases (GHGs) for 2022 and 2023* determines that the facility does not meet the criteria set out in Schedule 3 of this notice for the 2024 calendar year, the person shall

notify the Minister of the Environment that the facility does not meet those criteria no later than June 2, 2025. If a person who operates a facility with respect to which information is submitted for the 2024 calendar year in response to this notice determines that the facility does not meet any of the criteria set out in this notice for the 2025 calendar year, the person shall notify the Minister of the Environment that the facility does not meet these criteria no later than June 1, 2026.

The Minister of the Environment intends to publish information on greenhouse gas emission totals by gas and by source category per facility provided in response to this notice. Pursuant to section 51 of the Act, any person who provides information in response to this notice may submit, with their information and no later than the deadline for submission, a written request that the information be treated as confidential based on the reasons set out in section 52 of the Act. The person requesting confidential treatment of the information shall indicate which of the reasons stipulated in section 52 of the Act applies to their request. Nevertheless, the Minister may decide to disclose the information submitted in response to this notice, in accordance with subsection 53(3) of the Act.

Every person to whom this notice is directed shall comply with the notice. A person who fails to comply with the requirements of the notice will be liable under the applicable offence provisions of the Act.

Jacqueline Gonçalves
Director General
Science and Risk Assessment Directorate
On behalf of the Minister of the Environment

SCHEDULE 1

Greenhouse gases

Table 1: Greenhouse gases subject to mandatory reporting

	Greenhouse Gas	Formula	CAS Registry Number [a]	100-year Global Warming Potential (GWP) [b]
1.	Carbon dioxide	CO_2	124-38-9	1
2.	Methane	CH_4	74-82-8	28
3.	Nitrous oxide	N_2O	10024-97-2	265
4.	Sulphur hexafluoride	SF_6	2551-62-4	23 500
5.	HFC-23	CHF_3	75-46-7	12 400

a The Chemical Abstracts Service Registry Number (CAS RN) is the property of the American Chemical Society, and any use or redistribution, except as required in supporting regulatory requirements and/or for reports to the Government of Canada when the information and the reports are required by law or administrative policy, is not permitted without the prior, written permission of the American Chemical Society.

b IPCC, 2013: *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Stocker, T. F., D. Qin, G.-K. Plattner, M. Tignor, S. K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P. M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1535 pp.

6.	HFC-32	CH_2F_2	75-10-5	677
7.	HFC-41	CH_3F	593-53-3	116
8.	HFC-43-10mee	$C_5H_2F_{10}$	138495-42-8	1 650
9.	HFC-125	C_2HF_5	354-33-6	3 170
10.	HFC-134	$C_2H_2F_4$ (Structure: CHF_2CHF_2)	359-35-3	1 120
11.	HFC-134a	$C_2H_2F_4$ (Structure: CH_2FCF_3)	811-97-2	1 300
12.	HFC-143	$C_2H_3F_3$ (Structure: CHF_2CH_2F)	430-66-0	328
13.	HFC-143a	$C_2H_3F_3$ (Structure: CF_3CH_3)	420-46-2	4 800
14.	HFC-152a	$C_2H_4F_2$ (Structure: CH_3CHF_2)	75-37-6	138
15.	HFC-227ea	C_3HF_7	431-89-0	3 350
16.	HFC-236fa	$C_3H_2F_6$	690-39-1	8 060
17.	HFC-245ca	$C_3H_3F_5$	679-86-7	716
18.	Perfluoromethane	CF_4	75-73-0	6 630
19.	Perfluoroethane	C_2F_6	76-16-4	11 100
20.	Perfluoropropane	C_3F_8	76-19-7	8 900
21.	Perfluorobutane	C_4F_{10}	355-25-9	9 200
22.	Perfluorocyclobutane	c-C_4F_8	115-25-3	9 540
23.	Perfluoropentane	C_5F_{12}	678-26-2	8 550
24.	Perfluorohexane	C_6F_{14}	355-42-0	7 910

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SCHEDULE 2

Definitions

The following definitions apply to this notice and its schedules:

"2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines"
means the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, prepared by the Intergovernmental Panel on Climate Change National Greenhouse Gas Inventories Program. [*Lignes directrices 2006 du Groupe d'expert intergouvernemental sur l'évolution du climat (GIEC) pour les inventaires nationaux de gaz à effet de serre*]

"aluminium production"
means primary processes that are used to manufacture aluminium from alumina, including electrolysis in prebake and Søderberg cells, anode and cathode baking for prebake cells, and green coke calcination. (*production d'aluminium*)

"ammonia production"
means processes in which ammonia is manufactured from fossil-based feedstock produced by steam reforming of a hydrocarbon. This also includes processes where ammonia is manufactured through the gasification of solid and liquid raw material. (*production d'ammoniac*)

"base metal production"
means the primary and secondary production processes that are used to recover copper, nickel, zinc, lead, and cobalt. Primary production includes the smelting or refining of base metals from feedstock that comes primarily from ore. Secondary production processes include the recovery of base metals from various feedstock materials, such as recycled metals. Process activities may include the removal of impurities using carbonate flux reagents, the use of reducing agents to extract metals or slag cleaning, and the consumption of carbon electrodes. (*production de métaux communs*)

"biomass"
means plants or plant materials, animal waste or any product made of either of these, including wood and wood products, charcoal, agricultural residues, biologically derived organic matter in municipal and industrial wastes, landfill gas, bio-alcohols, black liquor, sludge digestion gas and animal- or plant-derived oils. (*biomasse*)

"bone-dry tonnes"
means biomass solids that contain zero percent (0%) moisture. (*tonnes anhydres*)

"Canada's 2024 Greenhouse Gas Quantification Requirements"
means the document titled *Canada's Greenhouse Gas Quantification Requirements*, published by Environment and Climate Change Canada, 2023. (*Exigences relatives à la quantification des gaz à effet de serre du Canada pour 2024*)

"carbon dioxide equivalent (CO_2 eq.)"
means a unit of measure for comparison between greenhouse gases that have different global warming potentials (GWPs). [1] [*équivalent en dioxyde de carbone (éq. CO_2)*]

"CAS Registry Number"
means the Chemical Abstracts Service Registry Number. (*numéro d'enregistrement CAS*)

"cement production"
means all processes used to manufacture portland, ordinary portland, masonry, pozzolanic or other hydraulic cements. (*production de ciment*)

"CEMS"
means Continuous Emission Monitoring Systems. (*SMECE*)

"CO_2 capture"
means the capture of CO_2, at an integrated facility that would otherwise be directly released to the atmosphere or the capture of CO_2 through Direct Air Capture (DAC). (*capture de CO_2*)

"CO_2 emissions from biomass decomposition"

means releases of CO_2 resulting from aerobic decomposition of biomass and from the fermentation of biomass. (*émissions de CO_2 provenant de la décomposition de la biomasse*)

"CO_2 injection"
means an activity that places captured CO_2 into a long-term geological storage site or an enhanced fossil fuel recovery operation. (*injection de CO_2*)

"CO_2 recovered"
means the recovery or capture of CO_2 at a hydrogen production facility that would typically be delivered for downstream use in other manufacturing industries, used in on-site production or sent to permanent storage. (*CO_2 récupéré*)

"CO_2 storage"
means storage of CO_2 in a long-term geological formation. (*stockage de CO_2*)

"CO_2 transport system"
means a system transporting captured CO_2 by any mode. (*système de transport de CO_2*)

"CO_2 utilization"
means the usage of captured CO_2 in products or processes with a goal of long-term removal from the atmosphere, including CO_2 injection at an enhanced fossil fuel recovery operation. (*utilisation de CO_2*)

"cogeneration unit"
means a fuel combustion device which simultaneously generates electricity and either heat or steam. (*unité de cogénération*)

"Continuous Emission Monitoring Systems"
means the complete equipment for sampling, conditioning, and analyzing emissions or process parameters and for recording data. (*Systèmes de mesure et d'enregistrement en continu des émissions*)

"CSM"
means cyclohexane-soluble matter. (*MSC*)

"electricity generating unit"
means any device that combusts solid, liquid, or gaseous fuel for the purpose of producing electricity either for sale or for use on site. This includes cogeneration units, but excludes portable or emergency generators that have less than 50 kW in nameplate generating capacity or that generate less than 2 MWh during the reporting year. (*unité de production d'électricité*)

"emissions"
means direct releases to the atmosphere from sources that are located at the facility. (*émissions*)

"enhanced fossil fuel recovery operation"
means enhanced oil recovery, enhanced natural gas recovery and enhanced coal bed methane recovery. (*opération améliorée de récupération des combustibles fossiles*)

"ethanol production"
means processes that produce grain ethanol for the use in industrial applications or as a fuel. (*production d'éthanol*)

"facility"
means an integrated facility, a pipeline transportation system, or an offshore installation. (*installation*)

"flaring emissions"
means controlled releases of gases from industrial activities, from the combustion of a gas or liquid stream produced at the facility, the purpose of which is not to produce useful heat or work. This includes releases from

waste petroleum incineration; hazardous emission prevention systems (in pilot or active mode); well testing; natural gas gathering systems; natural gas processing plant operations; crude oil production; pipeline operations; petroleum refining; chemical fertilizer production; steel production. (*émissions de torchage*)

"fossil fuel production and processing"
means the exploration, extraction, processing including refining and upgrading, transmission, storage and use of solid, liquid or gaseous petroleum, coal or natural gas fuels, or any other fuels derived from these sources. (*production et transformation de combustibles fossiles*)

"fugitive emissions"
means releases from venting, flaring or leakage of gases from fossil fuel production and processing; iron and steel coke oven batteries; CO_2 capture, transport, injection, utilization and storage infrastructure. (*émissions fugitives*)

"GHGs"
means greenhouse gases referred to in column 1 of Table 1 of Schedule 1. (*GES*)

"GWP"
means global warming potential. (*PRP*)

"HFCs"
means hydrofluorocarbons listed in items 5 to 17 of column 1 of Table 1 of Schedule 1. (*HFC*)

"hydrogen production"
means processes that produce hydrogen gas by steam hydrocarbon reforming, partial oxidation of hydrocarbons, or other transformation of hydrocarbon feedstock. This activity may occur at bitumen upgraders; petroleum refineries; chemical plants; fertilizer plants; stand-alone industrial gas producers and, where needed, for purification or synthesis of substances. (*production d'hydrogène*)

"industrial process emissions"
means releases from an industrial process that involves a chemical or physical reaction, the primary purpose of which is to produce a product, as opposed to useful heat or work. This does not include venting from hydrogen production associated with fossil fuel production and processing. (*émissions liées aux procédés industriels*)

"industrial product use emissions"
means releases from the use of a product, in an industrial process, that is not involved in a chemical or physical reaction and does not react in the process. This includes releases from the use of SF_6, HFCs and PFCs as cover gases, and the use of HFCs and PFCs in foam blowing. This does not include releases of PFCs and HFCs used in refrigeration, air conditioning, semiconductor production, fire extinguishing, solvents, aerosols and releases of SF_6 used in explosion protection, leak detection, electronic applications and fire extinguishing. (*émissions associées à l'utilisation de produits industriels*)

"integrated facility"
means all buildings, equipment, structures, on site transportation machinery, and stationary items that are located on a single site, on multiple sites or between multiple sites that are owned or operated by the same person or persons and that function as a single integrated site. "Integrated facility" excludes public roads. (*installation intégrée*)

"iron and steel production"
means primary iron and steel production processes, secondary steelmaking processes, iron production processes, coke oven battery production processes, iron ore pellet firing processes, or iron and steel powder processes. (*production de fer et d'acier*)

"leakage emissions"
means accidental releases and leaks of gases from fossil fuel production and processing, transmission and distribution; iron and steel coke oven batteries; CO_2 capture, transport, injection, utilization and storage

infrastructure. (*émissions dues aux fuites*)

"*lime production*"
means all processes that are used to manufacture a lime product by calcination of limestone or other calcareous materials. (*production de chaux*)

"mining"
means the mining, beneficiating or otherwise preparing metallic and non-metallic minerals, including coal. (*exploitation minière*)

"NAICS"
means the North American Industry Classification System. (*SCIAN*)

"nitric acid production"
means the use of one or more trains to produce weak nitric acid that is 30 to 70 percent in strength. A nitric acid train produces weak nitric acid through the catalytic oxidation of ammonia followed by the absorption of nitrogen oxides by water. The absorber tail gas contains unabsorbed nitrogen oxides, including nitrous oxide emissions that may be reduced by abatement technologies. (*production d'acide nitrique*)

"offshore installation"
means an offshore drilling unit, production platform or ship, or sub-sea installation that is attached or anchored to the continental shelf of Canada in connection with the exploitation of oil or natural gas. (*installation extracôtière*)

"*on-site transportation emissions*"
means releases from machinery used for the transport or movement of substances, materials, equipment or products that are used in the production process at an integrated facility. This includes releases from vehicles without public road licences. (*émissions liées au transport sur le site*)

"*petroleum refining*"
means processes used to produce gasoline, aromatics, kerosene, distillate fuel oils, residual fuel oils, lubricants, asphalt, or other products through the refining of crude oil or through redistillation, cracking, rearrangement or reforming of unfinished petroleum derivatives. This includes catalytic cracking units; fluid coking units; delayed coking units; catalytic reforming units; coke calcining units; asphalt blowing operations; blowdown systems; storage tanks; process equipment components (i.e. compressors, pumps, valves, pressure relief devices, flanges, and connectors) in gas service; marine vessel, barge, tanker truck, and similar loading operations; flares; sulphur recovery plants; and non-merchant hydrogen plants that are owned or under the direct control of the refinery owner and operator. This does not include facilities that distill only pipeline transmix or produce lubricants, asphalt paving, roofing, and other saturated materials using already refined petroleum products. (*raffinage de pétrole*)

"*PFCs*"
means perfluorocarbons listed in items 18 to 24 of column 1 of Table 1 of Schedule 1. (*PFC*)

"*pipeline transportation system*"
means all pipelines that are owned or operated by the same person within a province or territory that transport/distribute CO_2 or processed natural gas and their associated installations, including meter sets and storage installations but excluding straddle plants or other processing installations. (*gazoducs*)

"*pulp and paper production*"
means separating cellulose fibres from other materials in fibre sources to produce pulp, paper and paper products. This includes converting paper into paperboard products, or operating coating and laminating processes. (*production de pâtes et papiers*)

"*reporting company*"
means a person who operates one or more facilities that meet the reporting criteria as set out in Schedule 3 of this notice. (*société déclarante*)

"*stationary fuel combustion emissions*"
means releases from stationary fuel combustion sources, in which fuel is burned for the purpose of producing useful heat or work. This includes releases from the combustion of waste fuels to produce useful heat or work. (*émissions de combustion stationnaire de combustible*)

"*stationary fuel combustion sources*"
means devices that combust solid, liquid, gaseous, or waste fuel for the purpose of producing useful heat or work. This includes boilers, electricity generating units, cogeneration units, combustion turbines, engines, incinerators, process heaters, and other stationary combustion devices, but does not include emergency flares. (*sources de combustion stationnaires*)

"*surface leakage*"
means CO_2 emitted from geological formations used for long-term storage of CO_2. (*fuites en surface*)

"*venting emissions*"
means controlled releases of a process or waste gas, including releases of CO_2 associated with CO_2 capture, transport, injection, utilization and storage; from hydrogen production associated with fossil fuel production and processing; of casing gas; of gases associated with a liquid or a solution gas; of treater, stabilizer or dehydrator off-gas; of blanket gases; from pneumatic devices which use natural gas as a driver; from compressor start-ups, pipelines and other blowdowns; from metering and regulation station control loops. (*émissions d'évacuation*)

"*waste emissions*"
means releases that result from waste disposal activities at a facility including, but not limited to, landfilling of solid waste, flaring of landfill gas, and waste or sewage sludge incineration. This does not include releases from the combustion of waste fuels to produce useful heat or work, or releases of CO_2 from biomass combustion. (*émissions des déchets*)

"wastewater emissions"
means releases resulting from wastewater and wastewater treatment at a facility. This includes, but is not limited to, releases from flaring of captured gas from wastewater treatment. It does not include releases of CO_2 from biomass combustion or incineration of sewage sludge (see definition for Waste emissions). (*émissions des eaux usées*)

SCHEDULE 3

Reporting criteria

1. This notice applies to any person who operates

(a) a facility that emits 10 000 tonnes of carbon dioxide equivalent or more (the "reporting threshold") of GHGs in the 2024 calendar year, the 2025 calendar year or in both calendar years;

(b) a facility that emits 10 000 tonnes of carbon dioxide equivalent or more (the "reporting threshold") of GHGs in the 2024 calendar year, the 2025 calendar year or in both calendar years and meets both of the criteria listed in subparagraphs (i) and (ii) below:

(i) The facility is classified under any of the following North American Industry Classification System (NAICS) codes:

212
221112
221119
221330
322

324110
324121
325120
325190
325313
327310
327410
331110
331313
331410
331490

(ii) The facility is engaged in any of the following activities:

a. mining,

b. ethanol production,

c. lime production,

d. cement production,

e. aluminium production,

f. iron and steel production,

g. electricity and heat generation,

h. ammonia production,

i. nitric acid production,

j. hydrogen production,

k. petroleum refining,

l. pulp and paper production,

m. base metal production; or

(c) a facility engaged in CO_2 capture, CO_2 transport, CO_2 injection, CO_2 utilization or CO_2 storage in the 2024 calendar year, the 2025 calendar year or in both calendar years.

2. Any person who operates a facility described in this notice shall determine whether the facility meets or exceeds the reporting threshold referred to in paragraph 1(a) or (b) using the following equation and the steps described in paragraphs 2(a) to 2(c):

Total Emissions (in CO_2 eq.) = $\sum_1^i (E_{CO2} \times GWP_{CO2})_i + \sum_1^i (E_{CH4} \times GWP_{CH4})_i + \sum_1^i (E_{N2O} \times GWP_{N2O})_i + \sum_1^i (E_{HFC} \times GWP_{HFC})_i + \sum_1^i (E_{PFC} \times GWP_{PFC})_i + \sum_1^i (E_{SF6} \times GWP_{SF6})_i$

Where:

E =

total emissions, from all activities occurring at the facility, of a particular GHG in calendar year 2024 or 2025, expressed in tonnes

GWP =

global warming potential of the particular GHG

i =

each emission source

(a) determine the quantity of CO_2 eq. by multiplying the GWP of a particular GHG by the quantity of the particular GHG (as shown in the equation above);

(b) exclude CO_2 emissions from the combustion of biomass in the determination of total emissions; and

(c) exclude CO_2 emissions from biomass decomposition in the determination of total emissions.

3. Any person who operates a facility that is engaged in more than one activity described in paragraph 1(b) shall report emissions for each activity separately, but shall determine whether the facility meets or exceeds the reporting threshold by adding emissions from all activities undertaken at the facility.

4. If the person who operates a facility described in section 1 changes during the calendar years for which this notice applies, the facility operator on December 31, of either of those calendar years, shall comply with the present notice. If facility operations terminate during a calendar year for which this notice applies, the last facility operator shall comply with the present notice for the portion of the year during which the operations occurred.

SCHEDULE 4

Reportable administrative information

1. Any person who operates a facility described in Schedule 3 of this notice shall, for each facility, submit the following information:

(a) the reporting company's legal and trade name, its federal business number assigned by the Canada Revenue Agency and its Dun and Bradstreet (D-U-N-S) number, if any;

(b) the facility name and the address of its physical location;

(c) the latitude and longitude coordinates of the facility, for facilities other than a pipeline transportation system and CO_2 transport system;

(d) the six-digit North American Industry Classification System (NAICS) Canada code;

(e) the National Pollutant Release Inventory (NPRI) identification number, if any;

(f) the name, position, mailing and civic address, email address and telephone number of the person submitting the information that is required under this notice;

(g) the name, position, mailing address, email address and telephone number of a public contact, if any;

(h) the name, position, mailing and civic address, email address and telephone number of the authorized signing officer signing the Statement of Certification; and

(i) the legal names of the Canadian parent companies of the operator, if any, their civic address, their percentage of ownership of the operator, where available, their federal business number and their Dun and Bradstreet (D-U-N-S) number, if any.

2. The information required by this notice must be accompanied by a Statement of Certification, signed by an authorized officer, indicating that the information submitted is true, accurate and complete.

SCHEDULE 5

Basic reporting requirements

1. This schedule applies to any person who operates a facility described in paragraph 1(a) or 1(b) of Schedule 3 of this notice.

2. Any person subject to this schedule shall, for each GHG, submit the following information:

(a) the total quantity of CO_2, CH_4 and N_2O emissions expressed in tonnes in each of the following source categories: stationary fuel combustion emissions, industrial process emissions, industrial product use emissions, venting emissions, flaring emissions, leakage emissions, on-site transportation emissions, waste emissions, and wastewater emissions (shown in Table 2);

(b) the total quantity of CH_4 and N_2O emissions expressed in tonnes from biomass combustion under the stationary fuel combustion emissions source category if the biomass is being burned to produce energy, or under the waste emissions source category in the case of waste incineration and landfill gas flaring processes;

(c) the total quantity of CO_2 emissions expressed in tonnes from biomass combustion; and

(d) the total quantity of SF6 emissions and of each HFC and PFC emissions expressed in tonnes under the industrial process emissions and industrial product use emissions source categories.

3. Any person subject to this schedule shall

(a) not account for CO_2 emissions from biomass combustion in the total emissions of the facility;

(b) not account for CO_2 emissions from biomass decomposition;

(c) account for the total quantity of GHG emissions from coke oven batteries in iron and steel manufacturing under the stationary fuel combustion (fuel use for the production of coke), flaring and leakage emissions source categories; [2] and

(d) account for the total quantity of GHG emissions from hydrogen production as part of fossil fuel production and processing under the venting emissions source category. [2]

4. Any person subject to this schedule, and to whom any of Schedules 6 to 18 of this notice apply, shall use the methods described in the applicable schedules to produce the information that the person must submit under this schedule, with the following exceptions:

(a) If the person is also subject to the *Output-Based Pricing System Regulations*, the operator may use the methods described in those Regulations, where applicable, to produce the information;

(b) If the person is also subject to Alberta's *Specified Gas Reporting Regulation*, the operator may use the methods described in those Regulations that are referred to in the appropriate sections of Canada's 2024 Greenhouse Gas Quantification Requirements; and

(c) Where the applicable schedules do not describe a method for a specific emission source, one of the methods described in section 5 shall be used.

5. Any person subject to this schedule, and to whom none of Schedules 6 through 18 of this notice apply, shall

(a) use methods that are consistent with the 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories to produce the information that the person submits under this schedule; and

(b) identify the methods used to determine the quantities reported under paragraphs 2(a), 2(b), 2(c) and 2(d) of this schedule, chosen from monitoring or direct measurement, mass balance, emission factors, engineering estimates, or Canada's 2024 Greenhouse Gas Quantification Requirements.

Table 2: Table for reporting selected GHGs by source category

	Emission Source Categories							
Greenhouse Gas	**Stationary Fuel Combustion Emissions**	**Industrial Process Emissions**	**Industrial Product Use Emissions**	**Fugitive**			**On-site Transportation Emissions**	**Waste Emissions**
				Venting Emissions	**Flaring Emissions**	**Leakage Emissions**		
Carbon dioxide (excluding CO_2 emissions from biomass combustion, which is to be reported separately)	Report	Report	N/A	Report	Report	Report	Report	Report
Methane	Report	Report	N/A	Report	Report	Report	Report	Report
Nitrous oxide	Report	Report	N/A	Report	Report	Report	Report	Report
Sulphur hexafluoride	N/A	Report	Report	N/A	N/A	N/A	N/A	N/A
Hydrofluorocarbons	N/A	Report by gas	Report by gas	N/A	N/A	N/A	N/A	N/A
Perfluorocarbons	N/A	Report by gas	Report by gas	N/A	N/A	N/A	N/A	N/A
Total (CO_2 equivalent)	Report	Report	Report	Report	Report	Report	Report	Report

SCHEDULE 6

CO_2 capture, CO_2 transport, CO_2 injection, CO_2 storage and CO_2 utilization reporting requirements

1. This schedule applies to any person who operates a facility described in paragraph 1(c) of Schedule 3 of this notice.

2. Any person subject to this schedule shall use section 1 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity of CO_2

(a) exiting each CO_2 capture site, expressed in tonnes (t);

(b) captured domestically within Canada, entering each CO_2 transport system, expressed in tonnes (t);

(c) imported from outside Canada, entering each CO_2 transport system, expressed in tonnes (t);

(d) exiting each CO_2 transport system, expressed in tonnes (t);

(e) entering each long-term geologic storage site, expressed in tonnes (t);

(f) injected at each long-term geologic storage site, expressed in tonnes (t);

(g) entering each enhanced fossil fuel recovery operation, expressed in tonnes (t);

(h) injected at each enhanced fossil fuel recovery operation, expressed in tonnes (t); and

(i) utilized in products or processes, other than for enhanced fossil fuel recovery, expressed in tonnes (t).

3. Any person subject to this schedule shall, for paragraph 2(i), report the product or process in which CO_2 is utilized.

4. Any person subject to this schedule shall use section 1 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the

(a) annual mass of material transferred, expressed in tonnes (t), if using the mass flow method;

(b) annual weighted average density of volumetric flow of material transferred with density expressed in kilograms per cubic metre (kg/m^3), temperature expressed in degrees Celsius (°C) and pressure expressed in kilopascals (kPa), if using the volumetric flow method;

(c) annual weighted average CO_2 concentration in the volumetric flow or mass flow, expressed as a mass fraction; and

(d) method used to determine the quantities and parameters reported under section 2.

5. Any person subject to this schedule shall use section 1 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity, expressed in tonnes (t), of CO_2 leakage emissions from equipment and infrastructure used for

(a) CO_2 capture;

(b) CO_2 transport;

(c) CO_2 injection at a long-term geological storage site;

(d) CO_2 injection at enhanced fossil fuel recovery operations;

(e) CO_2 utilization in products or processes, other than for enhanced fossil fuel recovery; and

(f) the method used to determine the quantities and parameters reported under paragraphs 5(a), (b), (c), (d) and (e).

6. Any person subject to this schedule shall report the total annual quantity, expressed in tonnes (t), of CO_2 surface leakage from each long-term geological storage site and enhanced fossil fuel recovery operation.

7. Any person subject to this schedule shall use section 1 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity, expressed in tonnes (t), of CO_2 venting emissions from equipment and infrastructure used for

(a) CO_2 capture;

(b) CO_2 transport;

(c) CO_2 injection at a long-term geological storage site;

(d) CO_2 injection at enhanced fossil fuel recovery operations; and

(e) CO_2 utilization in products or processes, other than for enhanced fossil fuel recovery.

SCHEDULE 7

Fuel combustion and flaring reporting requirements

1. This schedule applies to any person who operates a facility described in paragraph 1(b) of Schedule 3 of this notice.

2. Any person subject to this schedule and whose facility is classified under NAICS 221112 shall use section 2 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity, expressed in tonnes (t), of CO_2, CH_4 and N_2O emissions, by fuel type and source, from

(a) each electricity generating unit;

(b) heat and steam generation;

(c) all other stationary fuel combustion;

(d) on-site transportation; and

(e) flaring.

3. Any person subject to this schedule who is not subject to section 2 of this schedule shall use section 2 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity, expressed in tonnes (t), of CO_2, CH_4 and N_2O emissions, by fuel type and source, from

(a) electricity generation;

(b) heat and steam generation;

(c) all other stationary fuel combustion;

(d) on-site transportation; and

(e) flaring.

4. Any person subject to this schedule shall report the methods used to quantify each greenhouse gas under section 2 and section 3 of this schedule, by fuel type and source.

5. Any person subject to this schedule who operates a facility with stacks monitored by CEMS may use the annual emissions data from CEMS to report the total emissions from fuel combustion of CO_2, CH_4 and N_2O. The person shall report their fuel information by fuel type, in accordance with sections 6 and 7 below.

6. Any person subject to this schedule shall, for each fuel used under section 2 and section 3, report the

(a) gaseous quantities, expressed in cubic metres (m^3) or in megajoules (MJ);

(b) solid quantities, expressed in tonnes (t), for coal by rank and by country, province and state of origin; and

(c) liquid quantities, expressed in kilolitres (kl) or in megajoules (MJ).

7. Any person subject to this schedule shall, for each fuel used under section 2 and section 3, report the annual measured and weighted

(a) higher heating value following Equation 2-26 in section 2 of Canada's 2024 Greenhouse Gas Quantification Requirements, expressed in megajoules (MJ) higher heating value per unit of fuel consumed for all methods, except when applying Equation 2-2, Equation 2-4, Equation 2-11, Equation 2-19 or Equation 2-21 to calculate CO_2 emissions for that fuel use;

(b) carbon content following Equation 2-27 in section 2 of Canada's 2024 Greenhouse Gas Quantification Requirements, expressed in kilograms of carbon per unit of fuel consumed, when using CEMS or the variable fuels or flaring methods (except when applying Equation 2-9, Equation 2-11, Equation 2-20 and for fuels identified in Table 2-3);

(c) temperature, expressed in degrees Celsius (°C), and pressure, expressed in kilopascals (kPa), for gaseous quantities;

(d) moisture content, expressed as a percentage (%), for solid quantities; and

(e) CH_4 and N_2O emission factors, when using the facility-specific emission factors measured directly or provided by the fuel supplier or equipment manufacturers, expressed in grams per unit of fuel.

8. Any person subject to this schedule shall, for each fuel used under section 2 and section 3, report the default CO_2, CH_4 and N_2O emission factors, when using values presented in Table 2-1 to Table 2-12 and in Equation 2-20, Equation 2-22 and Equation 2-23 of Canada's 2024 Greenhouse Gas Quantification Requirements.

9. Any person subject to this schedule shall report, for each fuel, the combustion oxidation factor when applied and provide supporting documentation used in its derivation.

10. Any person subject to this schedule shall, for steam used to quantify emissions under section 2 and section 3 above, report the

(a) steam quantities expressed in tonnes (t);

(b) quantity, expressed in tonnes (t), and type of each biomass fuel combusted;

(c) CO_2, CH_4 and N_2O emission factors expressed in kilograms of CO_2, CH_4 and N_2O/megajoules (MJ) of steam or kilograms of CO_2, CH_4 and N_2O/tonnes (t) of steam; and

(d) the measured temperature, expressed in degrees Celsius (°C), the measured pressure expressed in kilopascals (kPa) and the ratio of the boiler's design rated heat input capacity to its design rated steam output capacity, expressed in megajoules (MJ)/tonnes of steam, if using the steam default emission factor method.

11. Any person subject to this schedule and whose facility is classified under NAICS 221112 shall report the annual quantities of

- (a) gross electricity generated on-site by each electricity generating unit, expressed in megawatt-hours (MWh);
- (b) electricity sold off-site, expressed in megawatt-hours (MWh);
- (c) electricity lost on-site, expressed in megawatt-hours (MWh); and
- (d) electricity purchased, expressed in megawatt-hours (MWh).

12. Any person subject to this schedule who is not subject to section 11 above shall report the annual quantities of

- (a) gross electricity generated on-site, expressed in megawatt-hours (MWh);
- (b) electricity sold off-site by type of client (industrial, institutional, commercial or residential), expressed in megawatt-hours (MWh);
- (c) electricity lost on-site, expressed in megawatt-hours (MWh); and
- (d) electricity purchased, expressed in megawatt-hours (MWh).

13. Any person subject to this schedule who operates one or more co-generators or purchases or sells steam or heat shall report the annual quantities of

(a) gross steam and heat generated on-site, expressed in megajoules (MJ);

(b) gross steam and heat used to generate electricity on-site, expressed in megajoules (MJ);

(c) steam and heat sold off-site by type of client (industrial, institutional, commercial or residential), expressed in megajoules (MJ); and

(d) steam and heat purchased, expressed in megajoules (MJ).

14. Any person subject to section 11, section 12 and section 13 of this schedule shall use methods conforming to the *Weights and Measures Act* to measure the reported annual quantities purchased and sold.

15. Any person subject to this schedule shall submit documentation describing the methodology used, when

(a) developing equipment-specific on-site transportation emission factors, as directed in section 2.A.1a(3) of Canada's 2024 Greenhouse Gas Quantification Requirements;

(b) determining the mass of biomass combusted for premixed fuels containing biomass and fossil fuels, as directed in section 2.A.4 of Canada's 2024 Greenhouse Gas Quantification Requirements; or

(c) developing facility or equipment-specific CH_4 and N_2O emission factors, as directed in section 2.B(3) of Canada's 2024 Greenhouse Gas Quantification Requirements.

16. Any person subject to this schedule, who obtains from a supplier or performs fuel sampling, analysis and consumption measurement, as outlined in section 2.D of Canada's 2024 Greenhouse Gas Quantification Requirements, shall submit documents supporting and summarizing fuel quantity, carbon content and higher heating value for all sampling and measurement periods. This must include, where applicable, tables of values for each fuel and measurement period, laboratory reports, and any other relevant documentation.

17. Any person subject to this schedule is not required to report fuels and their associated emissions when the sum of CO_2, CH_4 and N_2O emissions (excluding CO_2 from biomass), in CO_2 eq., from the combustion of one or more of these fuels does not exceed 0.5% of the total facility GHG emissions from all fuels combusted (excluding CO_2 from biomass combustion).

18. Any person subject to this schedule is not required to report flaring emissions when the sum of CO_2, CH_4 and N_2O emissions, in CO_2 eq., from these flares does not exceed 0.5% of the facility total flaring GHG emissions, or 0.05% of the facility total combustion GHG emissions, whichever is larger.

SCHEDULE 8

Lime production reporting requirements

1. This schedule applies to any person who operates a facility described in subparagraph 1(b)(ii)c. of Schedule 3 of this notice. For fuel combustion and flaring emissions, the person shall report using Schedule 7 of this notice. For lime kilns at pulp and paper facilities, the person shall report using Schedule 17 of this notice.

2. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 3 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the

(a) total annual quantity of CO_2 emissions from lime production, expressed in tonnes (t);

(b) total monthly quantity of lime, by lime type, expressed in tonnes (t);

(c) monthly plant-specific emission factor, by lime type, expressed in tonnes of CO_2/tonnes of lime;

(d) monthly calcium oxide (CaO) content of lime, by lime type, expressed in tonnes of CaO/tonnes of lime;

(e) monthly magnesium oxide (MgO) content of lime, by lime type, expressed in tonnes of MgO/tonnes of lime;

(f) total quarterly quantity of calcined by-products/wastes, by calcined by-product/waste type, expressed in tonnes (t);

(g) quarterly plant-specific emission factor of calcined by-products/wastes, by calcined by-product/waste type, expressed in tonnes of CO_2/tonnes of by-product/waste;

(h) quarterly weighted average calcium oxide (CaO) content of calcined by-products/wastes, by calcined by-product/waste type, expressed in tonnes of CaO/tonnes of by-product/waste; and

(i) quarterly weighted average magnesium oxide (MgO) content of calcined by-products/wastes, by calcined by-product/waste type, expressed in tonnes of MgO/tonnes of by-product/waste.

3. Any person subject to this schedule who uses data from CEMS to report emissions, must report

(a) Emissions information required under paragraph 2(a). This shall not include the emissions information specified for CEMS in Schedule 7 of this notice; and

(b) Production information required under paragraphs 2(b) and 2(f).

4. Any person subject to this schedule shall report the methods used to quantify emissions.

SCHEDULE 9

Cement production reporting requirements

1. This schedule applies to any person who operates a facility described in subparagraph 1(b)(ii)d. of Schedule 3 of this notice. For fuel combustion and flaring emissions, the person shall report using Schedule 7 of this notice.

2. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 4 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the

(a) total annual quantity of CO_2 emissions from clinker production, expressed in tonnes (t);

(b) total monthly quantity of clinker, expressed in tonnes (t);

(c) monthly plant-specific emission factor of clinker, expressed in tonnes of CO_2/tonnes of clinker;

(d) monthly calcium oxide (CaO) content of clinker, expressed in tonnes of CaO/tonnes of clinker;

(e) monthly magnesium oxide (MgO) content of clinker, expressed in tonnes of MgO/tonnes of clinker;

(f) monthly non-calcined calcium oxide (CaO) content of clinker, expressed in tonnes of CaO/tonnes of clinker;

(g) monthly non-calcined magnesium oxide (MgO) content of clinker, expressed in tonnes of MgO/tonnes of clinker;

(h) total annual quantity of CO_2 emissions from organic carbon oxidation, expressed in tonnes (t);

(i) total annual quantity of raw material consumption, expressed in tonnes (t);

(j) annual weighted average organic carbon content in raw material consumption, expressed in tonnes of carbon (C)/tonnes of raw material consumption;

(k) total annual quantity of CO_2 emissions from cement kiln dust (CKD) not recycled back to the kiln, expressed in tonnes (t);

(l) total quarterly quantity of CKD not recycled back to the kiln, expressed in tonnes (t);

(m) quarterly plant-specific emission factor of CKD not recycled back to the kiln, expressed in tonnes of CO_2/tonnes of CKD;

(n) quarterly calcium oxide (CaO) content of CKD not recycled back to the kiln, expressed in tonnes of CaO/tonnes of CKD;

(o) quarterly magnesium oxide (MgO) content of CKD not recycled back to the kiln, expressed in tonnes of MgO/tonnes of CKD;

(p) quarterly non-calcined calcium oxide (CaO) content of CKD not recycled back to the kiln, expressed in tonnes of CaO/tonnes of CKD; and

(q) quarterly non-calcined magnesium oxide (MgO) content of CKD not recycled back to the kiln, expressed in tonnes of MgO/tonnes of CKD.

3. Any person subject to this schedule who uses data from CEMS to report emissions, must report

(a) Emissions information required under paragraphs 2(a), 2(h), and 2(k). This shall not include the emissions information specified for CEMS in Schedule 7 of this notice; and

(b) Production information required under paragraphs 2(b), 2(i), and 2(l).

4. Any person subject to this schedule shall report the methods used to quantify emissions.

SCHEDULE 10

Aluminum production reporting requirements

1. This schedule applies to any person who operates a facility described in subparagraph 1(b)(ii)e. of Schedule 3 of this notice. For fuel combustion and flaring emissions, the person shall report using Schedule 7 of this notice.

2. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 5.A.1 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the

(a) total annual quantity of CO_2 emissions from prebaked anode consumption, expressed in tonnes (t);

(b) annual anode consumption, expressed in tonnes of anodes/tonnes of liquid aluminium production;

(c) annual weighted average sulphur content of prebaked anodes, expressed in kilograms of sulphur (S)/kilograms of prebaked anodes; and

(d) annual weighted average ash content of prebaked anodes, expressed in kilograms of ash/kilograms of prebaked anodes.

3. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 5.A.2 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the

(a) total annual quantity of CO_2 emissions from anode consumption from Søderberg electrolysis cells, expressed in tonnes (t);

(b) total annual quantity of CSM emissions, expressed in tonnes, or the International Aluminium Institute factor used, expressed in kilograms of CSM/tonnes of liquid aluminium;

(c) total annual anode paste consumption, expressed in tonnes of paste/tonnes of liquid aluminium;

(d) annual average content of pitch or other binding agent in paste, expressed in kilograms of pitch or other binding agent/kilograms of paste;

(e) annual average sulphur content in pitch or other binding agent, expressed in kilograms of S/kilograms of pitch or other binding agent;

(f) annual average ash content in pitch or other binding agent, expressed in kilograms of ash/kilograms of pitch or other binding agent;

(g) annual average hydrogen content in pitch or other binding agent, expressed in kilograms of H_2/kilograms of pitch or other binding agent, or the International Aluminium Institute factor used;

(h) annual average sulphur content in calcinated coke, expressed in kilograms of S/kilograms of calcinated coke;

(i) annual average ash content in calcinated coke, expressed in kilograms of ash/kilograms of calcinated coke; and

(j) annual average carbon content in dust from Søderberg electrolysis cells, expressed in kilograms of C/kilograms of liquid aluminium, or a value of 0.

4. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 5.A.3 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity of CO_2 emissions from anode and cathode baking, expressed in tonnes (t).

5. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 5.A.4 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the

(a) total annual quantity of CO_2 emissions from packing material consumption, expressed in tonnes (t);

(b) annual packing material consumption, expressed in tonnes of packing material/tonnes of baked anodes or cathodes;

(c) total annual quantity of baked anodes and cathodes removed from furnace, expressed in tonnes (t);

(d) annual weighted average ash content of packing material, expressed in kilograms of ash/kilograms of packing material; and

(e) annual weighted average sulphur content of packing material, expressed in kilograms of S/kilograms of packing material.

6. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 5.A.5 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the

(a) total annual quantity of CO_2 emissions from coking of pitch or other binding agent, expressed in tonnes (t);

(b) total annual quantity of green anodes or cathodes put into furnace, expressed in tonnes (t);

(c) total annual quantity of baked anodes or cathodes removed from furnace, expressed in tonnes (t);

(d) annual weighted average hydrogen content of pitch or other binding agent, or the International Aluminium Institute factor used, expressed in kilograms of H_2/kilograms of pitch or other binding agent;

(e) annual weighted average pitch content of green anodes or cathodes, expressed in kilograms of pitch or other binding agent/kilograms of anodes or cathodes; and

(f) total annual quantity of recovered tar, expressed in tonnes (t).

7. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 5.A.6 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the

(a) total annual quantity of CO_2 emissions from green coke calcination, expressed in tonnes (t);

(b) total annual quantity of CO_2 emissions from coke dust, expressed in tonnes (t);

(c) total annual quantity of green coke consumption, expressed in tonnes (t);

(d) total annual quantity of calcinated coke production, expressed in tonnes (t);

(e) total annual quantity of under-calcinated coke production, expressed in tonnes (t);

(f) annual average water content in green coke, expressed in kilograms of H_2O/kilograms of green coke;

(g) annual average volatile materials content in green coke, expressed in kilograms of volatile materials/kilograms of green coke;

(h) annual average sulphur content in green coke, expressed in kilograms of S/kilograms of green coke; and

(i) annual average sulphur content in calcinated coke, expressed in kilograms of S/kilograms of calcinated coke.

8. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 5.A.7 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the

(a) total annual quantity of CF_4 emissions from anode effects, expressed in tonnes (t);

(b) annual slope, if using the slope method, by a series of pots, expressed in tonnes of CF_4/tonnes of liquid aluminium/anode effect minute/pot-day/year;

(c) annual anode effect duration, if using the slope method, expressed in anode effect minutes/pot-day calculated per year and obtained by multiplying the anode effects frequency, in number of anode effects per pot-day, by the average duration of anode effects in minutes;

(d) overvoltage coefficient, if using the overvoltage coefficient method, expressed in tonnes of CF_4/tonnes of liquid aluminium/millivolt;

(e) annual anode effect overvoltages, if using the overvoltage coefficient method, expressed in millivolts/pot;

(f) current efficiency of the aluminium production process, if using the overvoltage coefficient method, expressed as a percentage; and

(g) method used to determine the quantities reported under paragraph (a).

9. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 5.A.7 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the

(a) total annual quantity of C_2F_6 emissions, expressed in tonnes (t); and

(b) weight fraction of C_2F_6 to CF_4 or selected from Table 5-2, expressed in kilograms of C_2F_6/kilograms of CF_4.

10. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 5.A.8 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity of emissions from SF_6 used as a cover gas, expressed in tonnes (t).

11. Any person subject to this schedule shall report the total annual quantity of liquid aluminium production, expressed in tonnes (t).

12. Any person subject to this schedule who uses data from CEMS to report emissions must report

(a) emissions information required under sections 2 to 7. This shall not include the emissions information specified for CEMS in Schedule 7 of this notice; and

(b) additional information required under sections 8 to 11.

13. Any person subject to this schedule shall report the methods used to quantify emissions.

SCHEDULE 11

Iron and steel production reporting requirements

1. This schedule applies to any person who operates a facility described in subparagraph 1(b)(ii)f. of Schedule 3 of this notice. For fuel combustion and flaring emissions, the person shall report using Schedule 7 of this notice.

2. Any person subject to this schedule shall report the

(a) total annual quantity of biomass consumed, by biomass type, expressed in tonnes (t); and

(b) type of use for biomass (such as flux material, reducing agent).

3. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 6.A.1 of Canada's 2024 Greenhouse Gas Quantification Requirements for an induration furnace to report the

(a) total annual quantity of CO_2 emissions, expressed in tonnes (t);

(b) total annual quantity of green pellets consumption, expressed in tonnes, if using equation 6-1;

(c) annual weighted average carbon content of green pellets consumption, expressed in tonnes of C/tonnes of green pellets, if using equation 6-1;

(d) total annual quantity of additive material consumption, by material type, expressed in tonnes, if using equation 6-2;

(e) annual weighted average carbon content of additive material consumption, expressed in tonnes of C/tonnes of additive material, if using equation 6-2;

(f) total annual quantity of iron ore concentrate fed to the furnace, expressed in tonnes, if using equation 6-2;

(g) annual weighted average carbon content of iron ore concentrate fed to the furnace, expressed in tonnes of C/tonnes of iron ore concentrate;

(h) total annual quantity of fired pellet production, expressed in tonnes (t);

(i) annual weighted average carbon content of fired pellet production, expressed in tonnes of C/tonnes of fired pellets;

(j) annual quantity of air pollution control residue collected, expressed in tonnes (t);

(k) annual weighted average carbon content of air pollution control residue collected, expressed in tonnes of C/tonnes of residue; and

(l) method used to determine the quantities under paragraph (a) above.

4. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 6.A.2 of Canada's 2024 Greenhouse Gas Quantification Requirements for a basic oxygen furnace to report the

(a) total annual quantity of CO_2 emissions, expressed in tonnes (t);

(b) total annual quantity of molten iron charged to the furnace, expressed in tonnes (t);

(c) annual weighted average carbon content of molten iron charged to the furnace, expressed in tonnes of C/tonnes of molten iron;

(d) total annual quantity of ferrous scrap charged to the furnace, expressed in tonnes (t);

(e) annual weighted average carbon content of ferrous scrap charged to the furnace, expressed in tonnes of C/tonnes of ferrous scrap;

(f) total annual quantity of carbonaceous material consumption, by material type, expressed in tonnes (t);

(g) annual weighted average carbon content of non-biomass carbonaceous material consumption, by material type, expressed in tonnes of C/tonnes of carbonaceous material;

(h) total annual quantity of non-biomass flux material charged to the furnace, by material type, expressed in tonnes (t);

(i) annual weighted average carbon content of non-biomass flux material charged to the furnace, expressed in tonnes of C/tonnes of flux;

(j) total annual quantity of molten raw steel production, expressed in tonnes (t);

(k) annual weighted average carbon content of molten raw steel production, expressed in tonnes of C/tonnes of molten raw steel;

(l) total annual quantity of slag production, expressed in tonnes (t);

(m) annual weighted average carbon content of slag production, expressed in tonnes of C/tonnes of slag;

(n) total annual quantity of furnace gas transferred off-site, expressed in tonnes (t);

(o) annual weighted average carbon content of furnace gas transferred off-site, expressed in tonnes of C/tonnes of furnace gas transferred;

(p) total annual quantity of air pollution control residue collected, expressed in tonnes (t); and

(q) annual weighted average carbon content of air pollution control residue collected, expressed in tonnes of C/tonnes of residue.

5. Any person subject to this schedule and not able to report coke oven battery emissions under Schedule 7 shall use the greenhouse gas quantification methods in section 6.A.3 of Canada's 2024 Greenhouse Gas Quantification Requirements for coke oven battery to report the

(a) total annual quantity of CO_2 emissions, expressed in tonnes (t);

(b) total annual quantity of coking coal charged to battery, expressed in tonnes (t);

(c) annual weighted average carbon content of non-biomass coking coal charged to battery, expressed in tonnes of C/tonnes of coking coal;

(d) total annual quantity of non-biomass carbonaceous material consumption, other than coking coal charged to battery, by material type, expressed in tonnes (t);

(e) annual weighted average carbon content of non-biomass carbonaceous material consumption, other than coking coal charged to battery, by material type, expressed in tonnes of C/tonnes of carbonaceous material;

(f) total annual quantity of coke produced, expressed in tonnes (t);

(g) annual weighted average carbon content of coke produced, expressed in tonnes of C/tonnes of coke;

(h) total annual quantity of coke oven gas transferred off-site, expressed in tonnes (t);

(i) annual weighted average carbon content of coke oven gas transferred off-site, expressed in tonnes of C/tonnes of coke oven gas;

(j) total annual quantity of by-product from coke oven battery, expressed in tonnes (t);

(k) annual weighted average carbon content of non-biomass by-product from coke oven battery, expressed in tonnes of C/tonnes of by-product;

(l) total annual quantity of air pollution control residue collected, expressed in tonnes (t); and

(m) annual weighted average carbon content of air pollution control residue collected, expressed in tonnes of C/tonnes of residue.

6. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 6.A.4 of Canada's 2024 Greenhouse Gas Quantification Requirements for sinter production to report the

(a) total annual quantity of CO_2 emissions, expressed in tonnes (t);

(b) total annual quantity of non-biomass carbonaceous material consumption, by material type, expressed in tonnes (t);

(c) annual weighted average carbon content of non-biomass carbonaceous material consumption, by material type, expressed in tonnes of C/tonnes of carbonaceous material;

(d) total annual quantity of sinter feed material, expressed in tonnes (t);

(e) annual weighted average carbon content of sinter feed material, expressed in tonnes of C/tonnes of sinter feed;

(f) total annual quantity of sinter production, expressed in tonnes (t);

(g) annual weighted average carbon content of sinter production, expressed in tonnes of C/tonnes of sinter production;

(h) total annual quantity of air pollution control residue collected, expressed in tonnes (t); and

(i) annual weighted average carbon content of air pollution control residue collected, expressed in tonnes of C/tonnes of residue.

7. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 6.A.5 of Canada's 2024 Greenhouse Gas Quantification Requirements for an electric arc furnace to report the

(a) total annual quantity of CO_2 emissions, expressed in tonnes (t);

(b) total annual quantity of direct reduced iron charged to furnace, expressed in tonnes (t);

(c) annual weighted average carbon content of direct reduced iron charged to furnace, expressed in tonnes of C/tonnes of direct reduced iron;

(d) total annual quantity of ferrous scrap charged to furnace, expressed in tonnes (t);

(e) annual weighted average carbon content of ferrous scrap charged to furnace, expressed in tonnes of C/tonnes of ferrous scrap;

(f) total annual quantity of carbonaceous material consumption, by material type, expressed in tonnes (t);

(g) annual weighted average carbon content of non-biomass carbonaceous material consumption, by material type, expressed in tonnes of C/tonnes of carbonaceous material;

(h) total annual quantity of carbon electrode consumption, expressed in tonnes (t);

(i) annual weighted average carbon content of non-biomass carbon electrode consumption, expressed in tonnes of C/tonnes of carbon electrode;

(j) total annual quantity of flux material charged to the furnace, by material type, expressed in tonnes (t);

(k) annual weighted average carbon content of non-biomass flux material charged to the furnace, expressed in tonnes of C/tonnes of flux;

(l) total annual quantity of molten raw steel production, expressed in tonnes (t);

(m) annual weighted average carbon content of molten raw steel production, expressed in tonnes of C/tonnes of molten raw steel;

(n) total annual quantity of slag production, expressed in tonnes (t);

(o) annual weighted average carbon content of slag production, expressed in tonnes of C/tonnes of slag;

(p) total annual quantity of air pollution control residue collected, expressed in tonnes (t); and

(q) annual weighted average carbon content of air pollution control residue collected, expressed in tonnes of C/tonnes of residue.

8. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 6.A.6 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the following information in relation to an argon-oxygen decarburization vessel, unless this information is integrated with the information reported under paragraph 4 or 7 of this schedule:

(a) total annual quantity of CO_2 emissions, expressed in tonnes (t);

(b) total annual quantity of molten steel charged to the vessel, expressed in tonnes (t);

(c) annual weighted average carbon content of molten steel charged to the vessel, expressed in tonnes of C/tonnes of molten raw steel;

(d) annual weighted average carbon content of molten steel before decarburization, expressed in tonnes of C/tonnes of molten steel;

(e) annual weighted average carbon content of molten steel after decarburization, expressed in tonnes of C/tonnes of molten steel;

(f) total annual quantity of air pollution control residue collected, expressed in tonnes (t); and

(g) annual weighted average carbon content of air pollution control residue collected, expressed in tonnes of C/tonnes of residue.

9. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 6.A.7 of Canada's 2024 Greenhouse Gas Quantification Requirements for a direct reduction furnace to report the

(a) total annual quantity of CO_2 emissions, expressed in tonnes (t);

(b) total annual quantity of iron ore or iron ore pellets consumption, expressed in tonnes (t);

(c) annual weighted average carbon content of iron ore or iron ore pellets consumption, expressed in tonnes of C/tonnes of iron ore or consumed iron ore pellets;

(d) total annual quantity of consumed raw material, other than carbonaceous material and ore, by material type, expressed in tonnes (t);

(e) annual weighted average carbon content of consumed raw material, other than carbonaceous material and ore, by material type, expressed in tonnes of C/tonnes of raw material;

(f) total annual quantity of carbonaceous material consumption, by material type, expressed in tonnes (t);

(g) annual weighted average carbon content of non-biomass carbonaceous material consumption, by material type, expressed in tonnes of C/tonnes of carbonaceous material;

(h) total annual quantity of iron production, expressed in tonnes (t);

(i) annual weighted average carbon content of iron production, expressed in tonnes of C/tonnes of iron;

(j) total annual quantity of non-metallic material production, expressed in tonnes (t);

(k) annual weighted average carbon content of non-metallic material production, expressed in tonnes of C/tonnes of non-metallic material;

(l) total annual quantity of air pollution control residue collected, expressed in tonnes (t); and

(m) annual weighted average carbon content of air pollution control residue collected, expressed in tonnes of C/tonnes of residue.

10. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 6.A.8 of Canada's 2024 Greenhouse Gas Quantification Requirements for a blast furnace to report the

(a) total annual quantity of CO_2 emissions, expressed in tonnes (t);

(b) total annual quantity of iron ore or iron ore pellets consumption, expressed in tonnes (t);

(c) annual weighted average carbon content of iron ore or iron ore pellets consumption, expressed in tonnes of C/tonnes of iron ore or iron ore pellets;

(d) total annual quantity of consumed raw material, other than carbonaceous material and ore, by material type, expressed in tonnes (t);

(e) annual average carbon content of consumed raw material, other than carbonaceous material and ore, by material type, expressed in tonnes of C/tonnes of raw material;

(f) total annual quantity of carbonaceous material consumption, by material type, expressed in tonnes (t);

(g) annual weighted average carbon content of non-biomass carbonaceous material consumption, by material type, expressed in tonnes of C/tonnes of carbonaceous material;

(h) total annual quantity of flux material charged to the furnace, by material type, expressed in tonnes (t);

(i) annual weighted average carbon content of non-biomass flux material charged to the furnace, expressed in tonnes of C/tonnes of flux;

(j) total annual quantity of iron production, expressed in tonnes (t);

(k) annual weighted average carbon content of iron production, expressed in tonnes of C/tonnes of iron;

(l) total annual quantity of non-metallic material production, expressed in tonnes (t);

(m) annual weighted average carbon content of non-metallic material production, expressed in tonnes of C/tonnes of non-metallic material;

(n) total annual quantity of blast furnace gas transferred off site, expressed in tonnes (t);

(o) annual weighted average carbon content of blast furnace gas transferred off site, expressed in tonnes of C/tonnes of blast furnace gas;

(p) total annual quantity of air pollution control residue collected, expressed in tonnes (t); and

(q) annual weighted average carbon content of air pollution control residue collected, expressed in tonnes of C/tonnes of residue.

11. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 6.A.9 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the following information in relation to the ladle furnace, unless this information is integrated with the information reported under paragraph 4 or 7 of this schedule:

(a) total annual quantity of CO_2 emissions, expressed in tonnes (t);

(b) total annual quantity of molten steel fed to the furnace, expressed in tonnes (t);

(c) annual weighted average carbon content of molten steel fed to the furnace, expressed in tonnes of C/tonnes of molten steel;

(d) total annual quantity of additive material consumed by the furnace, by material type, expressed in tonnes (t);

(e) annual weighted average carbon content of additive material consumed by the furnace, by material type, expressed in tonnes of C/tonnes of additive material;

(f) total annual carbon electrodes consumed by the furnace, expressed in tonnes (t);

(g) annual weighted average carbon content of carbon electrodes consumed by the furnace, expressed in tonnes of C/tonnes of carbon electrodes;

(h) total annual quantity of molten steel production, expressed in tonnes (t);

(i) annual weighted average carbon content of molten steel production, expressed in tonnes of C/tonnes of molten steel;

(j) total annual quantity of slag production, expressed in tonnes (t);

(k) annual weighted average carbon content of slag production, or a default value of 0, expressed in tonnes of C/tonnes of slag;

(l) total annual quantity of air pollution control residue collected, expressed in tonnes (t);

(m) annual weighted average carbon content of air pollution control residue collected, expressed in tonnes of C/tonnes of residue;

(n) total annual quantity of other residue produced, expressed in tonnes (t); and

(o) annual weighted average carbon content of other residue produced or a default value of 0, expressed in tonnes of C/tonnes of residue.

12. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 6.B.1 of Canada's 2024 Greenhouse Gas Quantification Requirements for the atomization of molten cast iron to report the

(a) total annual quantity of CO_2 emissions, expressed in tonnes (t);

(b) total annual quantity of molten cast iron fed into the process, expressed in tonnes (t);

(c) annual weighted average carbon content of molten cast iron fed into the process, expressed in tonnes of C/tonnes of molten cast iron;

(d) total annual quantity of other material used in the process, by material type, expressed in tonnes (t);

(e) annual weighted average carbon content of other material used in the process, by material type, expressed in tonnes of C/tonnes of other material;

(f) total annual quantity of atomized cast iron production, expressed in tonnes (t);

(g) annual weighted average carbon content of atomized cast iron production, expressed in tonnes of C/tonnes of atomized cast iron;

(h) total annual quantity of by-products, by by-product type, expressed in tonnes (t); and

(i) annual weighted average carbon content of by-products, reported by by-product type, expressed in tonnes of C/tonnes of by-product.

13. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 6.B.2 of Canada's 2024 Greenhouse Gas Quantification Requirements for the decarburization of iron powder to report the

(a) total annual quantity of CO_2 emissions, expressed in tonnes (t);

(b) total annual quantity of iron powder fed into the process, expressed in tonnes (t);

(c) annual weighted average carbon content of iron powder fed into the process, expressed in tonnes of C/tonnes of iron powder;

(d) total annual quantity of decarburized iron powder production, expressed in tonnes (t);

(e) annual weighted average carbon content of decarburized iron powder production, expressed in tonnes of C/tonnes of decarburized iron powder production;

(f) total annual quantity of by-product, by by-product type, expressed in tonnes (t); and

(g) annual weighted average carbon content of by-product, by by-product type, expressed in tonnes of C/tonnes of by-product.

14. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 6.B.3 of Canada's 2024 Greenhouse Gas Quantification Requirements for steel grading to report the

(a) total annual quantity of CO_2 emissions, expressed in tonnes (t);

(b) total annual quantity of molten steel fed into the process, expressed in tonnes (t);

(c) annual weighted average carbon content of molten steel fed into the process, expressed in tonnes of C/tonnes of molten steel;

(d) total annual quantity of additive used in the process, expressed in tonnes (t);

(e) annual weighted average carbon content of additive used in the process, by additive type, expressed in tonnes of C/tonnes of additive;

(f) total annual quantity of carbon electrode consumption, expressed in tonnes (t);

(g) annual weighted average carbon content of carbon electrode consumption, expressed in tonnes of C/tonnes of carbon electrode consumption;

(h) total annual quantity of molten steel production, expressed in tonnes (t);

(i) annual weighted average carbon content of molten steel production, expressed in tonnes of C/tonnes of molten steel production;

(j) total annual quantity of slag production, expressed in tonnes (t);

(k) annual weighted average carbon content of slag production, expressed in tonnes of C/tonnes of slag production;

(l) total annual quantity of air pollution control residue collected, expressed in tonnes (t);

(m) annual weighted average carbon content of air pollution control residue collected, expressed in tonnes of C/tonnes of residue;

(n) total annual quantity of other residue production, expressed in tonnes (t); and

(o) annual weighted average carbon content of other residue production, expressed in tonnes of C/tonnes of other residue.

15. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 6.B.4 of Canada's 2024 Greenhouse Gas Quantification Requirements for steel powder annealing to report the

(a) total annual quantity of CO_2 emissions, expressed in tonnes (t);

(b) total annual quantity of steel powder fed into the process, expressed in tonnes (t);

(c) annual weighted average carbon content of steel powder fed into the process, expressed in tonnes of C/tonnes of steel powder;

(d) total annual quantity of steel powder production, expressed in tonnes (t);

(e) annual weighted average carbon content of steel powder production, expressed in tonnes of C/tonnes of steel powder;

(f) total annual quantity of by-product, by by-product type, expressed in tonnes (t); and

(g) annual weighted average carbon content of by-product, by by-product type, expressed in tonnes of C/tonnes of by-product.

16. Any person subject to this schedule who uses data from CEMS to report emissions, must report

(a) emissions information required under paragraphs 3 to 15. This shall not include the emissions information specified for CEMS in Schedule 7 of this notice; and

(b) production information required under paragraphs 3(h), 4(j), 4(l), 5(d), 6(f), 7(l), 7(n), 8(b), 9(h), 9(j), 10(j), 10(l), 11(h), 11(j), 12(f), 13(d), 14(h), 14(j) and 15(d).

17. Any person subject to this schedule shall report the methods used to quantify emissions.

SCHEDULE 12

Electricity and heat generation

1. This schedule applies to any person who operates a facility described in subparagraph 1(b)(ii)g. of Schedule 3 of this notice. For fuel combustion and flaring emissions, the person shall report using Schedule 7 of this notice.

2. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 7 of Canada's 2024 Greenhouse Gas Quantification Requirements to report the

(a) total annual quantity of CO_2 emissions from acid gas scrubbing, expressed in tonnes (t); and

(b) total annual consumption of limestone or other sorbent, by sorbent type, expressed in tonnes (t).

3. Any person subject to this schedule shall report the methods used to quantify emissions.

SCHEDULE 13

Ammonia production

1. This schedule applies to any person who operates a facility described in subparagraph 1(b)(ii)h. of Schedule 3 of this notice. For fuel combustion and flaring emissions, the person shall report using Schedule 7 of this notice.

2. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 8.A of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity of feedstock consumption, by feedstock type, expressed in

(a) cubic metres (m^3), for gaseous quantities;

(b) kilolitres (kl), for liquid quantities; and

(c) tonnes (t), for solid quantities.

3. Any person subject to this schedule shall, for each feedstock type used under section 3, report the annual weighted average carbon content expressed in

(a) kilograms (kg) of C/cubic metres (m^3) of feedstock, for gaseous quantities;

(b) kilograms (kg) of C/kilolitres (kl) of feedstock, for liquid quantities; and

(c) kilograms (kg) of C/kilograms (kg) of feedstock, for solid quantities.

4. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 8.A of Canada's 2024 Greenhouse Gas Quantification Requirements to report the

(a) total annual quantity of urea, expressed in tonnes (t);

(b) total annual quantity of ammonia produced, expressed in tonnes (t);

(c) total annual quantity of gross CO_2 emissions from ammonia production, expressed in tonnes (t);

(d) total annual quantity of CO_2 consumed in urea production, expressed in tonnes (t); and

(e) total annual quantity of CO_2 recovered/captured (excluding CO_2 consumed in urea production), expressed in tonnes (t).

5. Any person subject to this schedule shall for paragraph 4(e) indicate

(a) if the CO_2 that is recovered or captured is used on-site or sent off-site; and

(b) the purpose for which the recovered or captured CO_2 is used or the type of facility to which the recovered or captured CO_2 is sent.

6. Any person subject to this schedule who uses data from CEMS to report emissions, must report

(a) Emissions information required under paragraph 4(c). This shall not include the emissions information specified for CEMS in Schedule 7 of this notice; and

(b) Production information required under paragraphs 4(a), 4(b), 4(d), 4(e), and section 5.

7. Any person subject to this schedule shall report the methods used to quantify emissions.

SCHEDULE 14

Nitric acid production

1. This schedule applies to any person who operates a facility described in subparagraph 1(b)(ii)i. of Schedule 3 of this notice. For fuel combustion and flaring emissions, the person shall report using Schedule 7 of this notice.

2. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 9.A of Canada's 2024 Greenhouse Gas Quantification Requirements to report the

(a) total annual quantity of N_2O industrial process emissions, per acid train, expressed in tonnes (t); and

(b) total annual quantity of nitric acid produced, per acid train, expressed in tonnes (t).

3. Any person subject to this schedule who operates a facility where there is abatement downtime shall report, per acid train and per periodic measurement, the

(a) N_2O generation factor measured upstream of N_2O abatement, expressed in kilograms (kg) of N_2O/tonnes (t) of nitric acid, 100% acid base;

(b) annual abatement factor of N_2O abatement technology, expressed as a fraction of annual nitric acid production per acid train in which abatement technology is operating;

(c) destruction efficiency of N_2O abatement technology used, expressed as percent of N_2O removed from air stream, by type of abatement technology. Documentation demonstrating how process knowledge was used to estimate destruction efficiency shall be provided, if not specified by the manufacturer or estimated using Equation 9-3 of Canada's 2024 Greenhouse Gas Quantification Requirements;

(d) date of the periodic measurement;

(e) performance test method from section 9.C.(3) of Canada's 2024 Greenhouse Gas Quantification Requirements used to measure the N_2O concentration upstream of N_2O abatement; and

(f) performance test method from section 9.C.(3) of Canada's 2024 Greenhouse Gas Quantification Requirements used to measure the N_2O concentration from the final stack gas stream downstream of N_2O abatement, if Equation 9-3 of Canada's 2024 Greenhouse Gas Quantification Requirements is used to estimate the destruction efficiency of N_2O abatement technology.

4. Any person subject to this schedule who operates a facility where the N_2O abatement is integrated within the operating process and cannot be bypassed shall report, per acid train and per periodic measurement, the

(a) N_2O emission factor measured from the final stack gas stream downstream of N_2O abatement, expressed in kilograms (kg) of N_2O/tonnes (t) of nitric acid, 100% acid base;

(b) date of the periodic measurement; and

(c) performance test method from section 9.C.(3) of Canada's 2024 Greenhouse Gas Quantification Requirements used to measure the N_2O concentration from the final stack gas stream downstream of N_2O abatement.

5. Any person subject to this schedule who uses data from CEMS to report N_2O emissions, must report

(a) emissions information required under paragraph 2(a); and

(b) production information required under paragraph 2(b).

6. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 9.B of Canada's 2024 Greenhouse Gas Quantification Requirements to report the

(a) total annual quantity of CO_2 industrial process emissions, per acid train, expressed in tonnes (t); and

(b) total annual quantity of CH_4 industrial process emissions, per acid train, expressed in tonnes (t).

7. Any person subject to this schedule who uses the unreacted fraction of reducing agents method in section 9.B.(1) of Canada's 2024 Greenhouse Gas Quantification Requirements to estimate CO_2 and CH_4 industrial process emissions shall report, per acid train, the

(a) annual quantity of each reducing agent used in NO_x and/or N_2O abatement systems (solids in tonnes, liquids in kilolitres, and gases in cubic metres at reference temperature and pressure conditions);

(b) annual average carbon content of each reducing agent used in NO_x and/or N_2O abatement systems, expressed as a fraction (tonnes of C per unit of reducing agent);

(c) annual average methane content of each reducing agent used in NO_x and/or N_2O abatement systems, expressed as a fraction (tonnes of CH_4 per unit of reducing agent);

(d) annual average fraction of each reducing agent that did not react in the NO_x and/or N_2O abatement systems. Documentation demonstrating how process knowledge was used to estimate the fraction of each reducing agent that did not react in the NO_x and/or N_2O abatement systems shall be provided, if not specified

by the manufacturer or estimated using Equation 9-11 of Canada's 2024 Greenhouse Gas Quantification Requirements;

(e) fraction of each reducing agent that did not react in the NO_x and/or N_2O abatement systems, per periodic measurement, if the direct CH_4 stack measurement method is used;

(f) date of the direct CH_4 stack measurement, per periodic measurement, if the direct CH_4 stack measurement method is used; and

(g) performance test method from section 9.C.(3) of Canada's 2024 Greenhouse Gas Quantification Requirements used to measure the CH_4 concentration downstream of the NO_x and/or N_2O abatement systems, per periodic measurement, if the direct CH_4 stack measurement method is used.

8. Any person subject to this schedule who uses the emission factor and mass balance method in section 9.B.(2) of Canada's 2024 Greenhouse Gas Quantification Requirements to estimate CO_2 and CH_4 industrial process emissions shall report, per acid train and per periodic measurement, the

(a) CH_4 emission factor, measured from the final stack gas stream downstream of the NO_x and/or N_2O abatement systems, expressed in kilograms (kg) of CH_4/tonnes (t) of nitric acid, 100% acid base;

(b) date of the periodic measurement;

(c) performance test method from section 9.C.(3) of Canada's 2024 Greenhouse Gas Quantification Requirements used to measure the CH_4 concentration downstream of the NO_x and/or N_2O abatement systems;

(d) annual quantity of each reducing agent used in NO_x and/or N_2O abatement systems (solids in tonnes, liquids in kilolitres, and gases in cubic metres at reference temperature and pressure conditions); and

(e) annual average carbon content of each reducing agent used in NO_x and/or N_2O abatement systems, expressed as a fraction (tonnes of C per unit of reducing agent).

9. Any person subject to this schedule shall report the methods in Canada's 2024 Greenhouse Gas Quantification Requirements used to quantify emissions.

10. For calendar year 2024 only, any person subject to this schedule who for logistical reasons cannot fulfill the increased N_2O source testing requirements and the CO_2 and CH_4 reporting requirements in this schedule of the notice and in Canada's 2024 Greenhouse Gas Quantification Requirements is permitted to revert to Canada's 2022 Greenhouse Gas Quantification Requirements for N_2O source testing and to omit the nitric acid-specific CO_2 and CH_4 reporting requirements.

SCHEDULE 15

Hydrogen production

1. This schedule applies to any person who operates a facility described in subparagraph 1(b)(ii)j. of Schedule 3 of this notice. For fuel combustion and flaring emissions, the person shall report using Schedule 7 of this notice. For ammonia production, the person shall report using Schedule 13 of this notice.

2. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 10.A of Canada's 2024 Greenhouse Gas Quantification Requirements to report the

(a) total annual quantity of gross CO_2 emissions, expressed in tonnes (t);

(b) total annual quantity of CO_2 recovered/captured, expressed in tonnes (t);

(c) total annual quantity of hydrogen production, expressed in tonnes (t); and

(d) total annual quantity of hydrogen purchased, expressed in tonnes (t).

3. Any person subject to this schedule shall for paragraph 2(b) indicate

(a) if the CO_2 that is recovered or captured is used on-site or sent off-site; and

(b) the purpose for which the recovered or captured CO_2 is used or the type of facility to which the recovered or captured CO_2 is sent.

4. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 10.A of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity of feedstock charged, reported by feedstock type, expressed in

(a) cubic metres (m^3), for gaseous quantities;

(b) litres (l), for liquid quantities;

(c) tonnes (t), for non-biomass solid quantities; and

(d) bone-dry tonnes (t), for biomass-derived solid fuel quantities.

5. Any person subject to this schedule shall, for each feedstock type used under section 4, report the annual weighted average carbon content expressed in

(a) kilograms (kg) of C/cubic metres (m^3) of feedstock, for gaseous quantities;

(b)kilograms (kg) of C/kilolitres (kl) of feedstock, for liquid quantities; and

(c) kilograms (kg) of C/kilograms (kg) of feedstock, for solid quantities.

6. Any person subject to this schedule shall, when an accepted Alberta-specific methodology is used to report the emissions under paragraph 2(a), report the quantity of CO_2 in the feed gas, by feedstock type, expressed in tonnes (t).

7. Any person subject to this schedule who uses data from CEMS to report emissions, must report

(a) emissions information required under paragraph 2(a). This shall not include the emissions information specified for CEMS in Schedule 7 of this notice; and

(b) additional information required under paragraphs 2(b), 2(c), 2(d), and 3.

8. Any person subject to this schedule shall report the methods used to quantify emissions.

SCHEDULE 16

Petroleum refining

1. This schedule applies to any person who operates a facility described in subparagraph 1(b)(ii)k. of Schedule 3 of this notice. For fuel combustion and flaring emissions, the person shall report using Schedule 7 of this notice. For hydrogen production emissions, the person shall report using Schedule 15 of this notice.

2. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 11.A of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity of CO_2, CH_4, and N_2O emissions from catalyst regeneration, expressed in tonnes (t).

3. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 11.B of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity of CO_2, CH_4, and N_2O emissions from process vents, expressed in tonnes (t).

4. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 11.C of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity of CO_2 and CH_4 emissions from asphalt production, expressed in tonnes (t).

5. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 11.D of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity of CO_2 emissions from sulphur recovery units, expressed in tonnes (t). Any person subject to this schedule shall provide documentation of the methodology if they are using a source-specific molar fraction of CO_2 in sour gas in Equation 11-14.

6. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 11.F of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity of CH_4 emissions from above-ground storage tanks, expressed in tonnes (t).

7. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 11.G of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity of CO_2, CH_4 and N_2O emissions from wastewater treatment plants, expressed in tonnes (t).

8. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 11.H of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity of CH_4 emissions from oil-water separators, expressed in tonnes (t).

9. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 11.I of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity of CH_4 emissions from equipment leaks at refineries, expressed in tonnes (t).

10. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 11.J of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity of CO_2, CH_4, and N_2O emissions from coking calcining units, expressed in tonnes (t).

11. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 11.K of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity of CO_2, CH_4, and N_2O emissions from uncontrolled blowdown systems, expressed in tonnes (t).

12. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 11.L of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity of CH_4 emissions from loading operations, expressed in tonnes (t).

13. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 11.M of Canada's 2024 Greenhouse Gas Quantification Requirements to report the total annual quantity of CH_4 emissions from delayed coking units, expressed in tonnes (t).

14. Any person subject to this schedule shall report, using data available through typical operations, for each of crude oil, propane, butane and ethanol brought into the facility for input into the refining process or as a fuel additive, the

(a) total annual quantities

(i) of crude oil and ethanol expressed in kilolitres (kl), and

(ii) of propane and butane expressed in cubic metres (m^3);

(b) annual higher heating value, expressed in megajoules (MJ) per unit; and

(c) annual average carbon content, expressed in kilograms (kg) of carbon per unit.

15. Any person subject to this schedule shall, for each feedstock used under sections 2 to 13, report the total annual

(a) gaseous quantities, expressed in cubic metres (m^3);

(b) solid quantities, expressed in tonnes (t);

(c) liquid quantities, expressed in kilolitres (kl); and

(d) biomass-derived solid quantities, expressed in bone-dry tonnes (t).

16. Any person subject to this schedule who operates a facility with stacks monitored by CEMS may use the annual emissions data from CEMS to report the emissions and production information under sections 2 to 13. This shall not include the emissions information specified for CEMS in Schedule 7 and Schedule 15 of this notice.

17. Any person subject to this schedule shall report the methods used to quantify emissions.

SCHEDULE 17

Pulp and paper production

1. This schedule applies to any person who operates a facility described in subparagraph 1(b)(ii)l. of Schedule 3 of this notice. For fuel combustion and flaring emissions, the person shall report using Schedule 7 of this notice.

2. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 12.A of Canada's 2024 Greenhouse Gas Quantification Requirements to report the

(a) total annual quantity of CO_2 emissions from the addition of carbonates in the chemical recovery of chemical pulp mills, expressed in tonnes (t);

(b) total annual quantity of CO_2, CH_4 and N_2O emissions from on-site wastewater treatment plants, expressed in tonnes (t);

(c) total annual quantity of pulp, expressed in tonnes (t) of air-dried pulp;

(d) total annual quantity of input carbonate material, by carbonate type, expressed in tonnes (t);

(e) annual weighted average carbon content of input carbonate material, by carbonate type, expressed in tonnes of C/tonnes of carbonate material, if using equation 12-2 in section 12 of Canada's 2024 Greenhouse Gas Quantification Requirements;

(f) total annual quantity of carbon-containing process output material, by material type, expressed in tonnes (t), if using equation 12-2 in section 12 of Canada's 2024 Greenhouse Gas Quantification Requirements;

(g) annual weighted average carbon content of carbon-containing process output material, by material type, expressed in tonnes of C/tonnes of material, if using equation 12-2 in section 12 of Canada's 2024 Greenhouse Gas Quantification Requirements; and

(h) annual weighted average of fraction of calcination achieved, by type of carbonate used, if using equation 12-3 in section 12 of Canada's 2024 Greenhouse Gas Quantification Requirements. If not using the default value, the method used must be provided.

3. Any person subject to this schedule who uses data from CEMS to report emissions, must report

(a) emissions information required under paragraphs 2(a) and 2(b). This shall not include the emissions information specified for CEMS in Schedule 7 of this notice; and

(b) production information required under paragraph 2(c).

4. Any person subject to this schedule shall report the methods used to quantify emissions.

SCHEDULE 18

Base metal production

1. This schedule applies to any person who operates a facility described in subparagraph 1(b)(ii)m. of Schedule 3 of this notice. For fuel combustion and flaring emissions, the person shall report using Schedule 7 of this notice.

2. Any person subject to this schedule shall use the greenhouse gas quantification methods in section 13.A of Canada's 2024 Greenhouse Gas Quantification Requirements to report the

(a) total annual quantity of CO_2 emissions from base metal production, by type of base metal, expressed in tonnes (t);

(b) total annual quantity of carbon-containing process input material (e.g. flux reagents, reducing agents or electrode consumption), by material type, expressed in tonnes (t);

(c) annual weighted average carbon content of carbon-containing process input (e.g. flux reagents, reducing agents or electrode consumption) by material type, expressed in tonnes of C/tonnes of carbon-containing process input material;

(d) total annual quantity of carbon-containing process output material, by material type, expressed in tonnes (t);

(e) annual weighted average carbon content of carbon-containing process output, by material type, expressed in tonnes of C/tonnes of material; and

(f) total annual quantity of individual base metal or nickel matte produced, by type, expressed in tonnes (t).

3. Any person subject to this schedule who uses data from CEMS to report emissions, must report

(a) emissions information required under paragraph 2(a). This shall not include the emissions information specified for CEMS in Schedule 7 of this notice; and

(b) production information required under paragraph 2(f).

4. Any person subject to this schedule shall report the methods used to quantify emissions.

EXPLANATORY NOTE

(*This note is not part of the notice*.)

The Government of Canada established the Greenhouse Gas Reporting Program (GHGRP) in 2004 to collect and publish greenhouse gas (GHG) emissions information annually from the largest emitting Canadian facilities. Through this mandatory reporting program, a notice is issued in accordance with section 46 of the *Canadian Environmental Protection Act, 1999* (the Act) and published in the *Canada Gazette*, outlining the reporting requirements. Operators of facilities that meet the criteria specified in the notice are required to submit their information to Environment and Climate Change Canada (ECCC) by June 1 of each year. The GHGRP is part of Canada's ongoing effort to develop, through a collaborative process with provinces and territories, a harmonized and efficient reporting system that will meet the information needs of all levels of government, provide Canadians with reliable and timely information on greenhouse gas emissions and support regulatory initiatives.

In December 2016, the Government of Canada published the *Notice of intent to inform stakeholders of upcoming consultations on proposed changes to the Greenhouse Gas Reporting Program* to pursue an expansion to the GHGRP in order to

- enable direct use of the reported data in Canada's National Greenhouse Gas Inventory;
- increase the consistency and comparability of GHG data across jurisdictions; and
- obtain a more comprehensive picture of emissions by Canadian facilities.

The notice requiring the reporting of 2017 GHG information, published in December 2017, represented Phase 1 of the expansion. In this phase, the reporting threshold was lowered to require all facilities emitting 10 000 tonnes or more of GHGs (in CO_2 eq. units) to report. Specific industry sectors were also required to report additional information, using prescribed methods. These sectors were cement, lime, aluminium, iron and steel producers, as well as facilities involved in CO_2 capture, transport, injection and storage activities.

The notice requiring the reporting of 2018 GHG information, published in January 2019, continued the expansion through Phase 2 by requiring more industry sectors to report additional information, using prescribed methods. These sectors were ammonia producers, base metal producers, electric power generation, ethanol producers, hydrogen producers, mining operations (except oil and gas), nitric acid producers, petroleum refineries, and pulp and paper producers.

This notice covers two years of reporting (2024 and 2025) and maintains the requirements of the two initial phases of the expansion as well as several changes that were consulted on in summer 2022 (see ECCC's response to stakeholder feedback). Some additional minor updates have also been introduced. Note that the GHGRP no longer allows facilities subject to expanded reporting requirements to upload provincial reports. Further expansion of the program will be assessed in future reporting cycles.

Information required to be reported as outlined in this notice will continue to be collected via the ECCC Single Window (SW) system. This system currently collects data for ECCC's GHGRP and for British Columbia, Alberta, Ontario, and New Brunswick to support provincial GHG reporting regulations; and for the National Pollutant Release Inventory, its partners and various other partner programs. Facilities that must report to the GHGRP for either the 2024 or 2025 calendar year, or both, and that are subject to the federal *Output-Based Pricing System Regulations* will report the information required by each program in separate reports through the same reporting system. Facilities that are not subject to these Regulations are still subject to the requirements in this notice and must submit a report to the GHGRP. Further information on the GHGRP and step-by-step instructions on how to navigate the SW system are available on the program website.

Compliance with the Act is mandatory and specific offences are established by subsections 272(1) and 272.1(1) of the Act. Subsections 272(2), (3), (4) and 272.1(2), (3) and (4) of the Act set the penalties for persons who contravene section 46 of the Act. Offences include the offence of failing to comply with an obligation arising from the present notice and the offence of providing false or misleading information. Penalties for a first offence include fines of up to $1,000,000 for an individual and $6,000,000 for a corporation. The minimum and maximum fines are doubled for second or subsequent offences.

The text of the Act is available on Justice Canada's website.

The Act is enforced in accordance with the *Compliance and Enforcement Policy* for the Canadian Environmental Protection Act, 1999. Suspected violations under the Act can be reported to the Enforcement Branch by email at Enviroinfo@ec.gc.ca.

For more information on the GHGRP, including guidance documents, annual summary reports, and access to reported data, please visit the GHGRP website.

Footnotes

1 Since many greenhouse gases (GHGs) exist and their GWPs vary, the emissions are added in a common unit, CO_2 equivalent. To express GHG emissions in units of CO_2 equivalent, the quantity of a given GHG (expressed in units of mass) is multiplied by its GWP. GWPs are listed in Table 1 of this notice.

2 This distinction is in accordance with that provided by the Intergovernmental Panel on Climate Change (IPCC). Source: IPCC 2006, 2006 IPCC Guidelines for National Greenhouse Gas Inventories.