08 January 2024

Verification Statement – 2022 Greenhouse Gas Emissions Inventory
IPC Canada Ltd., Canadian Operations

IPC Canada Ltd. (IPC) retained GHD Limited (GHD) to conduct verifications of the following reports for the 2022 calendar year:

Onion Lake Thermal (Saskatchewan)

– OLT 2022 Reporting Year Emissions Return*

* Note: Verification was combined with 2021 Emissions Return

– OLT 2020-2022 Re-established Baseline Submission (limited scope review of flaring and on-site transportation)

Onion Lake Primary (Saskatchewan)

– OLP 2022 Reporting Year Emissions Return

IPC Aggregate Facility (Alberta)

– 2022 Reporting Year IPC TIER Aggregate Facility Compliance Report
– Limited Scope Facility-Specific Benchmark (FSB) restatement, including 2020 – 2022 calendar years

GHD has prepared this Verification Statement in accordance with ISO Standard ISO 14064 Greenhouse gases - Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions (ISO 14064-3).

Verification Objectives, Standards, and Criteria

The objective of the verifications was to provide IPC with assurance that the Emissions Return/Compliance Reports contained no material discrepancies and were prepared in general accordance with ISO 14064. The verifications were conducted to a reasonable level of assurance. GHD applied ISO 14064-3 as the verification standard and conducted the verifications in accordance with the following criteria:

– ISO 14064 Greenhouse gases - Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals, ISO, December 2018 (ISO 14064-1)
– ISO 14064 Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions, ISO, April 2019 (ISO 14064-3:2019) (Alberta verifications and Saskatchewan Re-established Baseline Submissions)
– ISO 14064 Greenhouse gases - Part 3: Specification with guidance for the greenhouse gas assertions, ISO, March 2006 (ISO 14064-3:2006) (Saskatchewan Emissions Return verifications)

Additional provincial regulations incorporated as necessary to cover individual operation's provincial reporting, and include the following standards and criteria:

Alberta

– Emissions Management and Climate Resilience Act, Technology Innovation and Emissions Reduction Regulation, Alberta Regulation 133/2019 (TIER) and amendments

– Standard for Completing Greenhouse Gas Compliance and Forecasting Reports, Version 3.3 (Compliance Standard) (January 2023)
– Standard for Validation, Verification and Audit, Version 5.2 (VVA Standard) (January 2023)
– Alberta Greenhouse Gas Quantification Methodologies Technology Innovation and Emissions Reduction Regulation, Version 2.2 (Quantification Methods) (December 2021) (Alberta 2022 Compliance Report)
– Alberta Greenhouse Gas Quantification Methodologies Technology Innovation and Emissions Reduction Regulation, Version 2.3 (Quantification Methods) (September 2023) (Alberta FSB Restatement)

Saskatchewan (2022 Emissions Returns)

– The Management and Reduction of Greenhouse Gases Act, Chapter M-2.01 of The Statutes of Saskatchewan, 2010
– The Management and Reduction of Greenhouse Gases (Standards and Compliance) Regulations, Chapter M 2.01 Reg. 3, under The Management and Reductions of Greenhouse Gases Act (Government of Saskatchewan, September 2020) (Regulations)
– The Management and Reduction of Greenhouse Gases (Upstream Oil and Gas Aggregate Facility) Standard (Government of Saskatchewan, August 2021) (UOG Standard)
– Baseline Guidance Document for Regulated Emitters Subject to The Management and Reduction of Greenhouse Gases (Upstream Oil and Gas Aggregate Facility) Standard, Version 02.00 (Government of Saskatchewan, June 2021)
– Emissions Return Guidance Document for Regulated Emitters Subject to The Management and Reduction of Greenhouse Gases (Upstream Oil and Gas Aggregate Facility) Standard, Version 02.00 (Government of Saskatchewan, August 2021)

Saskatchewan (OLT Re-established Baseline Submission)

– The Management and Reduction of Greenhouse Gases Act, Chapter M-2.01 of The Statutes of Saskatchewan, 2010
– The Management and Reduction of Greenhouse Gases (Standards and Compliance) Regulations, Chapter M 2.01 Reg. 4, under The Management and Reductions of Greenhouse Gases Act (Government of Saskatchewan, September 2023) (Regulations) or promulgated update
– The Industrial Facility Standard, (Government of Saskatchewan, May 2023) (Standard)
– Baseline Emissions Intensity Guidance for Regulated Emitters, April 2019

Verification Scope

The verification scope for each Facility included the following:

Onion Lake Thermal

The verifications included the emission sources from the OLT Facility, which is located at the following address:

14-05-056-27W3
Near Onion Lake, Saskatchewan

The Facility production unit to represent all Site operations is heavy oil, in units of cubic metres oil equivalent (m3OE). GHD confirmed that the same products were used for the Facility's Baseline and 2021 Emissions Return.

The Facility's reportable GHG emission sources include those associated with thermal in-situ oil production, including steam generators, boiler and heaters from the combustion of natural gas and on-Site produced gas. Additionally, propane is used for stationary combustion in secondary equipment. Flaring of waste gases also occurred. These emissions have been reported by IPC under the following source categories:

– Stationary Combustion – carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O)

– Flaring - CO2, CH4, N2O*
– On site Transportation - CO_2, CH_4, N_2O*

***** Re-established baseline submission only

Onion Lake Primary

The verification included the emission sources from IPC's Aggregated Facility, which consists of 245 individual facilities located across Saskatchewan.

The Facility's saleable products fall within Production Class 1 – Lloydminster Heavy and Non-Heavy. The Facility production unit to represent all Site operations is barrels of oil equivalent (BOE).

GHD confirmed that the same products were used for the Facility's Baseline and 2021 Emissions Return.

The Aggregate Facility is classified in the upstream oil and gas sector. Reportable emissions from the Aggregated Facility originate from the following regulated source categories, in accordance with Section 8(1) of the UOG Standard:

– General Stationary Combustion – Natural Gas Combustion: CO2, CH4, N2O

IPC Aggregate Facility

The IPC Aggregate Facility consists of 291 COGs, including those of the following Petrinex facility types:

– Single and Multi-well oil batteries
– Single and Multi-well bitumen batteries
– Single and Multi-well gas batteries
– Gas Gathering Systems
– Gas Plants
– Injection and Storage Facilities

The specified GHG sources, reportable categories and gas types as per the requirements of the TIER include emissions from the following source categories:

– Stationary Combustion: CO2, CH4, N2O
– Flaring: CO2, CH4, N2O*

* FSB Restatement only

The Facility production is reported under TIER as Production (PROD) in m3OE.

Verification Procedures

GHD conducted a risk-based verifications to assess the following:

1. Accuracy and completeness of annual GHG emissions
2. Uncertainty of external data sources used
3. Emission assumptions
4. Accuracy of emission calculations
5. Potential magnitude of errors and omissions

To sustain a risk-based assessment, the GHD Project Team identified and determined risks related to annual GHG emissions during both the desk reviews and the follow-up interviews. The GHD Project Team particularly focused on the accuracy and completeness of provided information. Through the document review GHD established to what degree the presented Emissions Inventory documentation met the verification standards and criteria.

The GHD Project Team's document review during the review process comprised an evaluation of whether:

– The documentation is complete and comprehensive and follows the structure and criteria given in ISO 14064 and/or other supporting guidance.
– The methodologies are justified and appropriate.
– The assumptions behind the inventory are conservative and appropriate.
– The GHG emission calculations are appropriate and use conservative assumptions for estimating GHG emissions.
– The GHG information system and its controls are sufficiently robust to minimize the potential for errors, omissions, or misrepresentations.

Site Assessments

GHD conducted virtual site assessments as part of the verifications conducted under both the Alberta and Saskatchewan regulations for each operation.

Verification Opinion

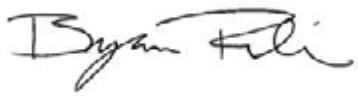
Based on the verification conducted by GHD's, the GHG assertion provided in each Facility's 2022 Emissions Return/Compliance Report was determined to be free of material misstatements, fairly presented and substantiated by sufficient and appropriate evidence in all material aspects with the following qualifications:

– Onion Lake Primary (2022 Emissions Return): Engineering calculations are used to obtain the oil well gas production and combustion volumes. The volumes are estimated based on engineering calculations, using manufacturer estimates for the volumes of gas consumed per equipment. While there are no specific requirements for quantifying gas consumption in the Regulations or UOG Standard, there is inherent uncertainty in the consumption volumes. This will result in a qualified positive verification statement.
– Onion Lake Thermal (Re-established Baseline Submission for flaring): Gas composition is allocated between fuel gas and produced gas from the metered volumes according to the daily permissible flaring quantity of 900m^3/day in Saskatchewan. GHD requested explanation on the allocation of flare gas. Client explained that any gas flared under the daily threshold is classified as fuel gas and any gas flared above the daily threshold is classified as produced gas and the associated compositions and emissions factors are used for that measured volume for the period of time. Client only has one meter that measures the total volume flared for the Facility, so the exact gas composition allocation is estimated. As such, GHD performed a sensitivity analysis to quantify the potential of material misstatement associated with the use each gas composition. From this sensitivity analysis, the percent error with respect to additional source categories calculated when allocating the total flare volume to produced gas is above the materiality threshold in 2022 relative to the specific source categories added as part of this limited scope change to the Baseline Submission; however, when considering the total regulated emissions, the percent error is below the materiality threshold (as flaring emissions are typically less than 0.2% of total emissions). Given the potential uncertainty with the flaring emissions, GHD has noted this as part of a modified verification opinion.

All of Which is Respectfully Submitted,

GHD

Sean Williams, P. Eng.
Lead Verifier



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