



September 30, 2020

Reference No. 11212438

Mr. Evan Green
Manager – Energy and Carbon
University of Western Ontario
1393 Western Road
London, Ontario
N6G 1G9

Dear Mr. Green:

**Re: Verification Report
2019 Greenhouse Gas Emissions Report in Accordance with
Ontario Regulation 390/18 Section 12
University of Western Ontario, London Campus, London, Ontario**

1. Introduction

The University of Western Ontario (Western) retained GHD Limited (GHD) to undertake a verification of the 2019 Greenhouse Gas (GHG) Emissions Report (Emissions Report) for the Main Campus Facility (Facility or Site) for the compliance period of January 1 to December 31, 2019. GHD has completed the verification in accordance with the requirements of Ontario Regulation 390/18 (O. Reg. 390/18¹) – Greenhouse Gas Emissions: Quantification, Reporting and Verification, under the Environmental Protection Act, and promulgated amendments and updates including amending regulations Ontario Regulation 13/20 and Ontario Regulation 218/20. Western was responsible for the preparation and fair presentation of the GHG Emissions Report in accordance with O. Reg. 390/18.

O. Reg. 390/18 Sections 6(1) and 7 requires facilities that engage in a 'Specified GHG Activity' to quantify and submit a 2019 Emissions Report (Emissions Report) by July 31, 2020² to the Ministry of the Environment, Conservation and Parks (MECP). O. Reg. 390/18 Section 12(2) requires the Emissions Report for covered facilities be verified by an accredited verification body. Section 1(1) of O. Reg. 390/18 defines an accredited verification body as a verification body that is accredited to the ISO 14065 Standard by a member of the IAF. The third-party verification report is due on October 1, 2020 as per Section 12(2.1) of O. Reg. 390/18².

GHD has prepared this Verification Report 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) and with the requirements of O. Reg. 390/18.

¹ Ontario Regulation 390/18, current as of May 14, 2020. <https://www.ontario.ca/laws/regulation/180390>

² Per the MECP notice dated May 14, 2020, the reporting and verification deadlines under O. Reg. 390/18 have been extended to July 31, 2020 and October 1, 2020 respectively.



2. Verification Objective

The objective of the verification was for GHD to provide Western and the MECP with an opinion on whether the Facility's 2019 Emissions Report contained any material discrepancies and whether the Emissions Report was prepared in accordance with O. Reg. 390/18.

3. Level of Assurance

The verification was conducted to a reasonable level of assurance as per Section 18(1) of O. Reg. 390/18.

4. Verification Standards

GHD applied ISO 14064-3 as the verification standard.

5. Verification Criteria

GHD applied the following criteria for this verification:

- *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, March 2006 (ISO 14064-3)
- O. Reg. 390/18, Section 16 (Accredited verification bodies, general duties) and Section 17 (Accredited verification bodies, duties re impartiality)
- Ontario MECP. *Guideline for Quantification, Reporting and Verification of Greenhouse Gas Emissions*, February 2020 (MECP Guidelines)
- ECCC. *Canada's Greenhouse Gas Quantification Requirements*, Version 3.0, December 2019 (GGQR)

6. Verification Scope

The following sections describe the scope of the verification.

6.1 Facility Operations

Western is a post-secondary educational institution. Natural gas is consumed through general stationary combustion for the purpose of comfort heating and cooling, as well as in on-site boilers. General



stationary combustion of diesel also occurs at the Facility for the purpose of testing the on-site boilers and operating the emergency generators.

6.2 Facility Emission Sources

Per the MECP Guidelines the following emission sources are applicable to the Facility:

- Appendix 10 – Fuel combustion and flaring (carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O))
- Appendix 7 – Electricity Generation (CO₂, CH₄, N₂O)

6.3 Geographical and Organizational Boundaries

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

1393 Western Road
London, Ontario
N6G 1G9

6.4 Reporting Period

The reporting period is between January 1, 2019 and December 31, 2019.

6.5 Use of this Report

This report has been prepared for the use of Western and, upon request, the MECP.

Statements from GHD's Verification Report, including the Verification Opinion must reference the date of issuance of GHD's report, the applicable verification period and the associated programme for which the verification was conducted. The GHG opinion provided by GHD can be freely used by Western for marketing or other purposes other than in a manner misleading to the reader. The GHD mark shall not be used by Western in any way that might mislead the reader about the verification status of the organization. The GHD mark can only be used in relation to the specific time period verified by GHD.

7. Verification Plan

GHD developed a Verification Plan including a sampling plan based on a preliminary review of the data initially provided. GHD submitted the Verification Plan to Western on September 8 2020. GHD's Verification Plan was revised, as required, throughout the course of the verification to address questions or initial concerns with data originally provided.



7.1 Facility Emissions Sources

The Facility emissions sources include the following emission types, as listed in the Emissions Report:

Specified Emission Type	Specified Calculation Methodology	Percentage of Total Emissions (%)	Emissions (tCO ₂ e)
Fuel Combustion and Flaring	Equation 2-11 and Equation 2-14 from GHGRP 2.A and 2.B	99.68%	53,991
Electricity Generation	Equation 2-2 and Equation 2-13 from GHGRP 2.A and 2.B	0.32%	173
Total Reported Emissions			54,163

7.2 Assessment of Risk and Magnitude of Potential Errors, Omissions or Misrepresentations

Potential Risk Area	Percentage of total Site Emissions (%)	Risk Type (Inherent, Control, Detection)	Risk Level (High, Medium, Low)	Justification
Stationary Fuel Combustion: Natural Gas	99.68% (0.39% less than 2018)	Inherent	Low	Calculations associated with this source were low in complexity, resulting in a low inherent risk.
		Control	Low	The control risk was set to low as all data associated with this source was provided by a third-party fuel provider.
		Detection	Low	As the inherent and control risks were low, the allowable detection risk was high. To mitigate the detection risk to low, GHD reviewed all data associated with this source for the reporting period.
Stationary Fuel Combustion: Diesel	0.32% (40.38% less than 2018)	Inherent	Low	Calculations associated with this source were low in complexity, resulting in a low inherent risk.
		Control	Low	The control risk was set to low as all data associated with this source was provided by a third-party fuel provider.
		Detection	Low	As the inherent and control risks were low, the allowable detection risk was high. To mitigate the detection risk to



Potential Risk Area	Percentage of total Site Emissions (%)	Risk Type (Inherent, Control, Detection)	Risk Level (High, Medium, Low)	Justification
				low, GHD reviewed all data associated with this source for the reporting period.
Data Management Systems	N/A	Inherent	Low	There was low complexity in data management systems at the Facility.
		Control	Low	GHD conducted a review of the Facility's data management procedure and assess its capability.
		Detection	Low	As the inherent and control risks were low, the allowable detection risk was high. To mitigate the risk to low, GHD reviewed the Facility's data management systems.

7.3 Final Sampling Plan

GHD developed a sampling plan based on review of the objectives, criteria, scope, and level of assurance detailed above. The sampling plan is dynamic and was revised, as required, throughout the course of the verification process.

The following table summarizes the final sampling plan of material sources:

Data/Information Description	Percentage of total Site Emissions (%)	Data/Information Source	Collection Frequency	Sample size/Action
Detailed Process Overview	N/A	<ul style="list-style-type: none"> Process flow diagram for the Facility 	N/A	<ul style="list-style-type: none"> Review Process Details
Stationary fuel combustion emissions: Diesel	0.32%	<ul style="list-style-type: none"> Third-party supplier 	Monthly	<ul style="list-style-type: none"> Reviewed data from the complete reporting period
Stationary fuel combustion emissions: Natural Gas	99.68%	<ul style="list-style-type: none"> Third-party supplier (consumption and HHV) 	Monthly	<ul style="list-style-type: none"> Reviewed data from the complete reporting period



Data/Information Description	Percentage of total Site Emissions (%)	Data/Information Source	Collection Frequency	Sample size/Action
Back-up Generators	N/A	<ul style="list-style-type: none"> Nameplate Capacity Fuel Usage 	Various	<ul style="list-style-type: none"> Determined presence of back-up generators Determined whether generators on site meet O. Reg. 390/18 requirements for nameplate capacity (greater than 50 kW or generate more than 2 MWh) Obtained fuel usage records for units greater than required nameplate capacity
Back up of data acquisition systems	N/A	<ul style="list-style-type: none"> General Data Management System Controls and QA/QC procedures Document retention policy 	N/A	Reviewed frequency of data backup and interview Facility personnel
Data Acquisition and flow from meters to data collection/process monitoring system software to data historian	N/A	Facility	N/A	Reviewed data systems at Facility and interviewed Facility personnel
2019 Emissions Report	N/A	Facility's 2019 Emissions Report and associated calculations	N/A	Reviewed 2019 Emissions Report and supporting calculations
2018 Emissions Report and Verification Report (if applicable)	N/A	Facility	N/A	Reviewed 2018 Emissions Report for comparison to the 2019 Emissions Report

7.4 Materiality

The quantitative materiality for this verification is set at plus or minus 5 percent of the reported 2019 emissions as per Section 19(4) of O. Reg. 390/18. In addition, a series of discrete errors, omissions or



misrepresentations or individual or a series of qualitative factors, when aggregated may be considered material.

Per the MECP's notice dated February 11, 2020, verification of production parameters has been delayed and is not required for the 2019 emissions year³.

8. Verification Procedures

8.1 Methodologies Used to Assess/Verify Emissions Data

GHD used the verification procedures detailed in the Verification Plan to assess the following:

1. Accuracy and completeness of annual Emissions Report
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. The components of the document review and follow-up interviews were:

- Document Review:
 - Review of data and information to confirm the correctness and completeness of presented information.
 - Cross-checks between information provided in the Emissions Report and information from independent background investigations.
 - Determine sensitivity and magnitude analysis for parameters that may be the largest sources of error.
 - Comparison of emissions from 2019 with emissions from previous reporting year(s).
- Follow-up Interviews:
 - Via telephone
 - Via email

Through the document review GHD established to what degree the presented Emissions Report documentation met the verification standards and criteria.

³ <https://ero.ontario.ca/notice/019-0570>



The GHD Project Team's document review during the review process comprised an evaluation of whether or not:

- The documentation is complete and comprehensive and follows the structure and criteria given in O. Reg. 390/18 and its associated 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.

The GHD Project Team interviewed Facility personnel to:

- Cross-check information provided
- Test the correctness of critical formulae and calculations
- Review data management and recording procedures

9. Verification Findings

The following subsections provide details of GHD's findings as well as GHD's conclusions.

9.1 Data and Information

GHD reviewed the following documents and information sources provided by the Facility as part of the verification:

Information Source	Description
2019 Emissions Report	Facility's 2019 Emissions Report
Fuel Invoices	Invoices for fuel consumed at the Facility during the Compliance Period
Covered Facility Certificate	Covered Facility Certificate indicating acceptance of voluntary participation
Calculation Spreadsheet	Spreadsheet containing the calculations that support the reported emissions

9.2 Details of Site Visit

GHD visited the Site on May 22, 2018 during the verification of the 2018 Emissions Report and was not required to complete a Site Visit in 2020 per Section 16(3) of O. Reg. 390/18. However, the GHD Project



Team conducted a remote assessment on September 14, 2020 for the verification of the Facility's 2019 Output Based Pricing System Annual Report.

During the remote assessment, GHD reviewed on-Site emissions sources, production parameters and data management systems.

9.3 Verification Findings

The following present a summary of the independent quantifications from the document review:

Scope Item Verified	Facility Boundary
Scope Item Description	Review of Facility boundary to ensure all required emissions sources are included.
Verification Procedure	Review of Emissions Report and all supporting data provided and comparison with the Western emission estimates to ensure reporting of all relevant Facility sources and confirm no material discrepancies in the emissions estimates.
Verification Findings	Western provided the Emissions Report and all supporting data related to GHG emissions. GHD reviewed all information provided and interviewed Facility personnel during the remote Site assessment to confirm no changes to emission sources had occurred since the 2018 reporting period. Western reported emissions stationary fuel combustion emissions of natural gas and diesel. GHD noted that emissions from on-Site transportation sources were not reported. Western provided GHD with calculations that demonstrated that on-Site transportation emissions sources comprise less than 0.5 percent of on-Site emissions and can therefore be classified as de minimis per the Regulations. Based on GHD's review these source categories are appropriate and comprise all reportable emission sources at the Facility.
Conclusion	GHD verified that Western included all reportable emissions sources within their Emissions Report.

Scope Item Verified	Annual Emissions Check
Scope Item Description	Determination of year-over-year consistency in reported emissions.
Verification Procedure	Review emission categories from previous year and conduct a comparison.
Verification Findings	GHD determined that between 2018 and 2019, total site emissions increased by approximately 2.29 percent. This increase was the result of an increase in natural gas emissions by 2.17 percent and an increase in diesel emissions by 64.32 percent. The 2.29 percent increase in natural gas emissions is fairly consistent with the 0.51 percent increase in natural gas consumption at the Facility over the same period. Another contributing factor to the difference in the emissions year-over-year is the use of different calculation



Scope Item Verified	Annual Emissions Check
	methodologies in 2018 and 2019. GHD notes the minimal increase in emissions is not indicative of a material error.
Conclusion	GHD reviewed the annual increase in emissions at the Site and determined that increases in emissions are relatively consistent with increases in fuel consumption.

Scope Item Verified	Data Management Systems
Scope Item Description	Review the Facility's data management systems to assess compliance with the requirements of the Regulation.
Verification Procedure	GHD interviewed Site personnel and reviewed documentation to assess the Facility's data management systems.
Verification Findings	GHD interviewed Western staff regarding the details of Western's data management systems. Evan Green of Western shared his screen and reviewed the Facility's data management policies and procedures document that outlines the Facility's data management systems. Following the meeting, Western provided GHD with a copy of the document. Western confirmed that the Facility retains documentation associated with GHG reporting for a minimum of seven years. GHD determined that the Facility's data management policies are consistent with the requirements of the Regulation.
Conclusion	GHD verified that the Facility's data management systems meet the requirements of the Regulations.

Scope Item Verified	Fuel Combustion and Flaring Emissions: Natural Gas
Scope Item Description	Fuels combusted within this category include natural gas.
Verification Procedure	GHD reviewed reported emissions and conducted a comprehensive data review and recalculation. GHD compared the results of the recalculation to Western's reported values to identify any discrepancies.
Verification Findings	<p>The Facility is comprised of a number of separate buildings located on Western's Main campus. Natural gas consumed in each of these buildings is metered and invoiced separately. Most of the invoiced accounts consume natural gas solely for building heating purposes. There is a steam plant on Site that provides district steam for other nearby buildings. The district steam plant contains five boilers which consume the majority of natural gas on-Site.</p> <p>GHD conducted a comprehensive recalculation for the emissions sources reported under this category. GHD's initial review determined that within the Emissions Report, Western had indicated that they had used the OBPS calculation methods to quantify their emissions reported in their Emissions Report. Upon review, GHD</p>



Scope Item Verified	Fuel Combustion and Flaring Emissions: Natural Gas
	<p>determined that this statement was inaccurate. GHD requested that Western correct the discrepancy within an Issues Log. Western resubmitted their Emissions Report with updated calculations that matched what was reported within their Emissions Report.</p> <p>Following resubmission, GHD determined that Western sourced natural gas consumption values from third-party invoice data and used HHVs provided by the third-party supplier. GHD identified that Western applied equation 2-11 to quantify CO₂ emissions associated with the combustion of natural gas and Equation 2-14 to quantify CH₄ and N₂O emissions from the combustion of natural gas. GHD notes that per the GHGRP, the Facility used the correct equation to quantify CH₄ and N₂O emissions. However, for the quantification of CO₂ emissions, the correct equation to use would have been Equation 2-10 from the GHGRP as carbon content details were available from the third-party supplier. GHD conducted recalculations using Equation 2-10 and determined that the use of Equation 2-10 results in a 0.32 percent immaterial discrepancy. GHD is issuing a qualification based on this inconsistency with the requirements of the GHGRP.</p>
Conclusion	GHD verified that this source is free of material error or misstatement. GHD identified an immaterial discrepancy associated with the use of an incorrect equation.

Scope Item Verified	Fuel Combustion Emissions: Flaring
Scope Item Description	Fuels combusted within this category include diesel.
Verification Procedure	GHD reviewed reported emissions and conducted a comprehensive data review and recalculation. GHD compared the results of the recalculation to Western's reported values to identify any discrepancies.
Verification Findings	<p>Diesel is consumed within multiple sources on-Site. Two of the on-Site boilers combust diesel for testing purposes each month. Diesel is also combusted within 52 on-Site emergency generators. All generators on-Site are between 25kW and 800kW in capacity.</p> <p>GHD's recalculation of diesel emissions determined that Western applied calculation equation 2-2 from the GHGRP to quantify CO₂ emissions and equation 2-14 to quantify CH₄ and N₂O emissions. GHD determined that Western applied the appropriate calculation methodologies for these emissions. GHD identified a 0.08 tCO₂e discrepancy associated with the quantification of CH₄ and N₂O emissions from diesel combustion that is related to the use of incorrect emissions factors for diesel consumption within the Site's emergency generators. As the emergency generators at the Facility are producing electricity, the correct emissions factors to apply were identified within Schedule 3, Part 38 1(1)(2) of the OBPS</p>



Scope Item Verified	Fuel Combustion Emissions: Flaring
	Regulations (OBPS emissions factors were determined to be appropriate as Western indicated the use of OBPS methods on their Emissions Report). As the identified error results in a discrepancy of less than 0.001 percent, GHD determined that it is immaterial and does not present a material risk. GHD determined that this source is free of material error or misstatement.
Conclusion	GHD verified that this source is free of material error or misstatement.

9.4 Summary of Errors, Omissions, Misstatements or Non-compliances Identified

The quantitative materiality for this verification is set at plus or minus 5 percent of the reported 2019 emissions as per Section 19(4) of O. Reg. 390/18.

The quantitative aggregated magnitude of errors, omissions, and misstatements for the Facility's 2019 emissions is 175 tonnes CO₂e, which results in an overstatement of 0.32 percent in total reported emissions, which is less than the materiality threshold of 5 percent.

9.5 Corrections Made to GHG Emissions Report

As a result of the issues identified in the issues log, the Facility made changes to the 2019 Emissions Report. These changes have been documented in the Verification Findings in Section 9.1 above.

9.6 Follow up on Issues from Previous Verification

GHD has reviewed the issues from the previous verification report. There were no issues from the previous verification report which required follow-up.

10. Verification Team

The roles and qualification of the members of the verification team are provided below.

Lead Verifier	
Name	Dana Lauder
Role	Ms. Lauder led the verification and was responsible for development of the verification plan. Ms. Lauder reviewed the risk assessment, recalculation of raw data, data management, and draft findings. Ms. Lauder prepared and signed the verification statement and verification report.



Lead Verifier	
Qualifications	<p>Ms. Lauder is a Project Manager with GHD in the Air Quality Services group and is a Lead Verifier and Ontario Program Manager in GHD's Greenhouse Gas Assurance Services Group. Ms. Lauder is a licensed professional engineer in the Province of Ontario. Ms. Lauder has over 14 years of practical experience with air quality, emissions inventories, dispersion modelling, compliance and greenhouse gas emissions assessment.</p> <p>Ms. Lauder has extensive experience completing GHG inventories and verification projects in accordance with the ISO protocols for regulatory and voluntary reporting. Ms. Lauder has acted as Lead Verifier, Peer Reviewer and Technical expert for verifications in Ontario, Alberta, and Quebec. Ms. Lauder is well versed with the current regulations and reporting guidance, with respect to reporting GHG emissions.</p>

Verifier	
Name	Ben Gerber
Role	Mr. Gerber developed and revised the verification plan and sample plan, developed a risk assessment, recalculated raw data, reviewed management of data quality, and prepared draft findings.
Qualifications	<p>Mr. Gerber holds a Master of Climate Change degree from the University of Waterloo. Mr. Gerber has been a verifier since 2018, completing various GHG assurance work in numerous jurisdictions throughout North America including Ontario, Alberta, California and other voluntary markets. Mr. Gerber has experience conducting GHG assurance work for a variety of industrial sectors including iron and steel production, electricity generation, manufacturing, petroleum importation, ethanol production and food production. Mr. Gerber has also conducted offset verifications and validations under the Climate Action Reserve, Verra (VCS), and the American Carbon Registry.</p> <p>In addition to GHG assurance services, Ben has been a technical expert on project teams providing advisory services to Canadian provinces preparing to develop provincial offset programs. This work involved analysis of the various carbon offset programs and regulations in place throughout North America and the provision of recommendations related primarily to offset protocol applicability and program feature design.</p>

Peer Reviewer	
Name	Gordon Reusing
Role	Mr. Reusing conducted a peer review of the verification plan, risk assessment, verification report, and findings.



Peer Reviewer	
Qualifications	Mr. Reusing is a greenhouse gas (GHG) Lead Verifier, Lead Validator, and Peer Reviewer with extensive experience including GHG programmes in Alberta, British Columbia, Ontario, Quebec, Nova Scotia, California, and programmes operated by the United Nations Framework Convention on Climate Change (UNFCCC) Clean Development Mechanism (CDM), The Gold Standard, The Climate Registry (TCR), the Carbon Disclosure Project (CDP), and Verra: Verified Carbon Standard (VCS). He has completed numerous GHG quantification studies for the oil and gas sector, including upstream, midstream and downstream facilities. Mr. Reusing has conducted GHG verifications as a Lead Verifier, Technical Expert and Peer Reviewer in many jurisdictions, including, but not limited to, the Alberta Carbon Competitiveness Incentive Regulation (CCIR), Ontario Regulations, British Columbia Greenhouse Gas Reduction (Cap and Trade) Act, (B.C. Reg. 272/2009), and Quebec Regulation R.Q.c.Q 2, r.15 (Quebec Regulation).

11. Verification Opinion

The Verification Opinion has been provided as Attachment A.

12. Limitation of Liability

Because of the inherent limitations in any internal control structure, it is possible that fraud, error, or non-compliance with laws and regulations may occur and not be detected. Further, the verification was not designed to detect all weakness or errors in internal controls so far as they relate to the requirements set out above as the verification has not been performed continuously throughout the period and the procedures performed on the relevant internal controls were on a test basis. Any projection of the evaluation of control procedures to future periods is subject to the risk that the procedures may become inadequate because of changes in conditions, or that the degree of compliance with them may deteriorate.

The verification opinion expressed in this report has been formed on the above basis.

GHD's review of the 2019 Emissions Report included only the information discussed above. While the review included observation of the systems used for determination of the 2019 Emissions Report, GHD did not conduct any direct field measurements and has relied on the primary measurement data and records provided by Western as being reliable and accurate. No other information was provided to GHD or incorporated into this review. GHD assumes no responsibility or liability for the information with which it has been provided by others.

The information and opinions rendered in this report are exclusively for use by Western. GHD will not distribute or publish this report without Western's consent except as required by law or court order. The information and opinions expressed in this report are given in response to a limited assignment and



should only be evaluated and implemented in connection with that assignment. GHD accepts responsibility for the competent performance of its duties in executing the assignment and preparing this report in accordance with the normal standards of the profession, but disclaims any responsibility for consequential damages.

All of Which is Respectfully Submitted,

GHD

A handwritten signature in black ink, appearing to read "Dana", followed by a horizontal line.

Dana Lauder, P.Eng.

A handwritten signature in purple ink, appearing to read "Gordon", followed by a horizontal line.

Gordon Reusing, M.Sc., P.Eng.

BG/cb/3

cc: Ben Gerber, MCC

General Information

Information in this Verification Statement is collected under the authority of the *Environmental Protection Act*, R.S.O. 1990, Chapter 19 and sections 12, 18, 19 and 20 of Ontario Regulation 390/18 Greenhouse Gas Emissions: Quantification, Reporting and Verification (O. Reg.390/18).

Information submitted in this form is subject to the *Freedom of Information and Protection of Privacy Act* (FIPPA), R.S.O. 1990, c. F.31. Under this regulatory framework, the Ministry of the Environment, Conservation and Parks (Ministry) may make certain information available to the public without further notice to you. If you have questions about the collection, use and the disclosure of personal or confidential information please contact the Ministry's Access and Privacy Office at (416) 314-4075.

Instructions

This form is required to be used by accredited verification bodies (AVBs) to provide a written declaration that attests to whether or not there is a reasonable level of assurance that:

- 1) the report contains no material discrepancy; and,
- 2) the report was prepared in accordance with the regulation.

The statement should be completed on your computer, then either printed, signed and scanned electronically, or have an electronic signature added to the form.

The completed statement must be submitted by the reporting facility or its operator through Environment and Climate Change Canada's Single Window System (Single Window) by **October 1, 2020**. The statement must be uploaded to Single Window as a PDF file.

Fields marked with an asterisk (*) are mandatory.

Section A - Administrative Information

Reporting Year *	GHG ID *
2019	1153
Date GHG report submitted to the ministry (yyyy/mm/dd)	Please indicate whether the GHG report is
2020/09/30	<input type="checkbox"/> An initial submission <input checked="" type="checkbox"/> A resubmission
Does this verification statement include production parameter(s)? *	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If the answer is "Yes", complete Sections B and C. If the answer is "No", complete Section B only.	
Did the AVB identified in Part 1 (below) submit a Compromised Impartiality Assessment Form in respect of the activities for the 2019 report? *	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
If a Mitigation Plan was submitted with the Compromised Impartiality Assessment Form, was it approved? *	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Did a site visit occur in preparation of this verification statement? *	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If a site visit occurred, when did it occur? (yyyy/mm/dd)	
Was a site visit that would otherwise be required for the 2019 Reporting Year cancelled according to s.16(4) of O. Reg.390/18?	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

If "Yes", was a notice provided to the Director?

☐ Yes

☐ No

Please provide an explanation, if needed

Part 1 - Accredited Verification Body (AVB) Information

AVB Name *

GHD Limited

Lead Verifier

First Name *

Dana

Last Name *

Lauder

Title *

Engineer

Mailing Address

Unit Number

Street Number *

455

Street Name *

Phillip Street

PO Box

City/Town *

Waterloo

Province/State *

Ontario

Country *

Canada

Postal/Zip Code *

N2L 3X2

Telephone Number *

519 884 0510

Email Address *

Dana.Lauder@ghd.com

Part 2 - Peer Reviewer Information

Company Name *

GHD Limited

Contact Information

First Name *

Gordon

Last Name *

Reusing

Title *

Principal

Mailing Address

☒ Same as above

Unit Number

Street Number *

455

Street Name *

Phillip Street

PO Box

City/Town *

Waterloo

Province/State *

Ontario

Country *

Canada

Postal/Zip Code *

N2L 3X2

Telephone Number *

519 884 0510

Email Address *

gordon.reusing@ghd.com

Part 3 - Facility Information (as reported in the GHG report)

Organization Name *

The University of Western Ontario

Facility Name *

Main Campus

Physical Address

Unit Number

Street Number *

1151

Street Name *

Richmond Street

PO Box

City/Town *

London

Province/State *

Ontario

Country *

Canada

Postal/Zip Code *

N6A 3K7

Mailing Address <input type="checkbox"/> Same as above			
Unit Number	Street Number *	Street Name *	PO Box
	1393	Western Road	
City/Town *		Province/State *	Country *
London		Ontario	Canada
			Postal/Zip Code *
			N6G 1G9

Contact Information

First Name *	Last Name *	Contact Title *
Evan	Green	Manager - Energy & Carbon
Telephone Number *	Email Address *	
226 378 5514	egreen@uwo.ca	

Section B – Specified GHG Activities

Section B1 – Verification Attestation and Declaration

Part 1 - Greenhouse Gas Emissions Assertion

Reporting Amount (rounded up to the nearest tonne in CO ₂ e) s.6 and 14(5) *	Verification Amount (rounded up to the nearest tonne in CO ₂ e) s.12 and 14(5) *
54163	54165

Part 2 - Verification Amount Conclusion

Based on the verification process and procedures conducted, which were conducted in accordance with the requirements set out in O. Reg. 390/18, ISO 14064-3 and ISO 14065, it is the determination of the Accredited Verification Body that the result of the verification of the GHG report submitted by the aforementioned facility is (check one)

☐ **Positive**

1. There is a reasonable level of assurance that the report contains no material discrepancy in emissions; and,
2. The report was prepared in accordance with this Regulation.

☒ **Qualified Positive**

1. There is a reasonable level of assurance that the report contains no material discrepancy in emissions; and
2. The report was prepared substantially in accordance with this Regulation.

☐ **Adverse**

1. There is a reasonable level of assurance that the report contains a material discrepancy in emissions; and,
2. The report was not prepared substantially in accordance with this Regulation.

Required for All Statements: Please describe the key findings of the verification that led to the above conclusion, including any limitations to the findings, in accordance with guidance provided in ISO 14064-3. *

GHD's recalculation identified an immaterial discrepancy associated with the use of an incorrect quantification methodology. The Emissions Report was determined to be free of material error or misstatement.

Additional Requirement for Qualified Positive and Adverse Statements: Please provide additional details, including references to specific sections of the Regulation and the Guideline as applicable, related to the report's demonstrated or potential (due to lack of substantiating evidence obtained) departure from the requirements specified by the Regulation or by the Guideline.

The Facility chose to quantify emissions using the same methodology's which they used to report emissions under the Federal OBPS system which was determined to be appropriate. The Facility applied Equation 2-11 of the GHGRP, whereas GHD determined the appropriate equation would have been 2-10 of the GHGRP as carbon content values were available from the fuel supplier. GHD recalculated emissions using both equations and determined that the discrepancy was 0.32 percent which is less than the materiality threshold.

Section B2 - Lead Verifier Declaration

I, the undersigned, do hereby declare that

- At the time of verification, the Accredited Verification Body held a valid accreditation to ISO 14065 by a member of the International Accreditation Forum;
- To the best of my knowledge, the information provided in this Statement is true and complete;
- The verification was conducted in accordance with the requirements set out in O.Reg.390/18, ISO 14064-3 and ISO 14065; and
- I am aware of the penalties of providing false information or omitting mandatory statements and information as per the *Environmental Protection Act*, R.S.O. 1990 and its regulations.

Printed Name *

Dana Lauder

Title *

Engineer

Signature of Lead Verifier *



Date (yyyy/mm/dd) *

2020/09/30

Section B3 - Peer Reviewer Declaration and Confirmation

I, the undersigned, do hereby declare that

- I was not involved in the verification documented in this Statement, other than to provide a peer review in accordance with ISO 14065, as it relates to verification activities; and I am aware of the penalties of providing false information or omitting mandatory statements and information as per the *Environmental Protection Act*, R.S.O. 1990 and its regulations.

I, the undersigned, do further confirm, based on my evaluation of the verification and its outcome, that

- All verification activities required under the requirements set out in O.Reg.390/18, ISO 14064-3 and ISO 14065, have been completed; and
- The verification determinations and conclusion presented above (Section B1, Part 2) are appropriate based on the activities conducted.

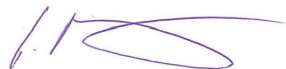
Printed Name *

Gordon Reusing

Title *

Principal and Vice President

Signature of Lead Verifier *



Date (yyyy/mm/dd) *

2020/09/30