

Saint-Lambert, September 29, 2009

Canadian Standards Association  
Attention to: Mrs. Manisha Mistry, Corporate OHS&E Manager  
178 Rexdale  
Mississauga, Ontario  
Canada  
M9W 1R3

**Subject:** Verification report concerning the Greenhouses gas inventory for the Canadian Standards Association.

**Period:** For the period between April 1<sup>st</sup> 2007 to March 31<sup>st</sup>, 2008

Mrs. Mistry,

As requested, we have verified the inventory report on greenhouse gas for Canadian Standards Association for the period between April 1<sup>st</sup> 2007 and March 31<sup>st</sup> 2008.

Our verification was done in conformity with the International Standard ISO 14064-3 entitled: *Specification with guidance for the validation and verification of greenhouse gas assertions, 2006*.

We have verified in depth the inventory report annexed and have corroborated the information included by asking the necessary questions and we have obtained all the answers to our questions, and this, to our entire satisfaction. Also we visited the company and observed the important elements of greenhouse gas.

The GHG inventory report indicates emissions of 11 103 tCO<sub>2</sub>e for the verification period from April 1, 2007 to March 31, 2008.

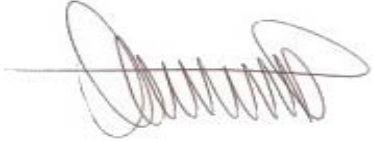
In our opinion; based on our review, the GHG emissions assertions presented in the quantification report dated September 29<sup>th</sup>, 2009 (version 13) are fairly presented and in accordance with relevant criteria. Therefore, the CSA GHG declared inventory quantification report covering the period from April 1, 2007 to March 31, 2008:

- Is free of Material misstatements and it is an appropriate representation of the data and GHG information.
- Is prepared in conformance with ISO 14064-1 standard: *Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals*.
- Is considered to have a low degree of uncertainty and taking into account the materiality paragraph included in our audit report, please refer to page 4 of 9.

# GDTs

Services Conseils (SPA) inc.

For further details, please consult an enclosed report thus the Greenhouse Gas Emissions (GHG) Inventory report prepared by the Canadian Standards Association dated September 29<sup>th</sup>, 2009 (version 13).



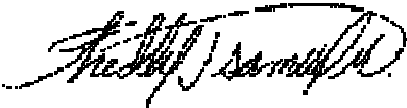
Roger Fournier CA  
GHG Partner  
GDTs Service Conseils (SPA) Inc.

**Verification of a Greenhouse-Gas Emissions inventory  
Canadian Standards Association  
File # 080323**

Attention to:

Canadian Standards Association  
Attention to: Mrs. Manisha Mistry,  
(Corporate OHS&E Manager)  
178 Rexdale  
Mississauga, Ontario  
Canada  
M9W 1R3

**Report drafted by:**

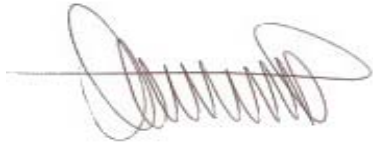


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Freddy Samuel CGA  
GHG Verifier

September 29<sup>th</sup> 2009

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Date

**Report reviewed by:**



.....  
Roger Fournier CA  
GHG Partner  
GDTs Services Conseils (SPA) Inc.

September 29<sup>th</sup> 2009

.....  
Date

**Verification of a Greenhouse-Gas Emissions inventory**  
**Canadian Standards Association**  
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**1. Verification objectives, Criteria, and assurance level**

a) Verification objectives:

The Verification steps followed on the documentation supporting the Greenhouse-Gas Emissions (GHG) worldwide inventory declaration of the Canadian Standards Association, thus the visit of the company's premises held on 23, 24, 27 and the 28 of May 2009, had the purpose of allowing GDTs Service Conseils (SPA) to issue a verification report regarding the Greenhouse-Gas Emissions Inventory of the Canadian Standards Association for the period of April 1st 2007 to March 31st 2008 and this is with a reasonable assurance degree, as agreed with the client.

b) Scope:

The following locations presented by CSA were subject to our verification

<b>Building Name</b>	<b>Address</b>	<b>City</b>	<b>Province/State</b>	<b>Country</b>
CSA Group	178 Rexdale Blvd	Toronto	Ontario	Canada
CSA Mississauga	5060 Spectrum Way	Mississauga	Ontario	Canada
QMI Toronto	20 Carlson Court, Suite 100	Toronto	Ontario	Canada
CSA Vancouver	13799 Commerce Parkway	Richmond	British Columbia	Canada
CSA Edmonton	1707 94th Street NW	Edmonton	Alberta	Canada
CSA Montreal	865 rue Ellingham Avenue	Pointe-Claire	Quebec	Canada
QMI Edmonton	4167-97th Street, Second floor	Edmonton	Alberta	Canada
CSA Ottawa	155 Queen Street, Suite 1300	Ottawa	Ontario	Canada
CSAI Hong Kong	Room 1604 Concordia Plaza; 1 Science Museum Road; Tsimhatsui East	Kowloon	Hong Kong	China
QMI Beijing	Beijing Auto Tower 510 (and 509), 708B Dong San Huan Rd. Beijing, China 1000021		Beijing	China
OnSpex Shanghai	Unit C, Flr 1, Bldg. 4, Qilal Industrial city, 889 Yishan Rd., Shanghai, CN 200233		Shanghai	China
OnSpex Shenzhen	R610-611, Unit West, Qushi Bldg, Zhuzilin, Futian District, Shenzhen, CN 518040		Shenzhen	Guangdong
CSAI Bangalore	No.239 A-1, 10th Cross Road; Rajmahal Vilas Extension, Of. C.V. Raman Road	Bangalore	Karnataka	India

CSAI Mumbai	The Avenue, 6th Floor; International Airport Road; Opp. Hotel Leena; Andheri-Kurla Road; Andheri (East)	Mumbai	Maharashtra	India
CSAI Korea	Room 170 Bigway Business Centre, Keungi Tower; 677-25 Yeoksam-dong	Gangnam-gu	Seoul	Korea
CSA Mexico City	Insurgentes Sur NO.586 Pusi 5-501 Colonia Del Valle	Mexico City	DF	Mexico
CSA America Inc.	2805 Barranca Parkway	Irvine	California	US
CSA America Inc.	8501 East Pleasant Valley Rd.	Cleveland	Ohio	US
CSA America Inc.	639 East Main St. - B202	Nashville	Tennessee	US
CSA America Inc.	5970 Fairview Rd., Suite 722	Charlotte	North Carolina	US
CSA America Inc.	2912 Kraft Street #10	Dallas	Texas	US
CSA America Inc.	1100 Jorie Boulevard Suite #330	Chicago	Illinois	US
CSA America Inc.	2210 Justin Trail	Atlanta	Georgia	US

The main CSA GHG sources are electricity, natural gas consumption, fossil fuel consumption of inspectors and auditor's vehicles thus for the air travel activity of the CSA personnel.

Types of GHG's: Carbon Dioxide CO<sub>2</sub>, Methane CH<sub>4</sub>, and Nitrous Oxide N<sub>2</sub>O

c) Criteria:

The verification mandate was conducted under ISO 14064-3 International Standard, entitled: *Specification with guidance for the validation and verification of greenhouse gas assertions (2006)*

The verification report is formally presented on section 6.0. However, it remains important the entire verification report should be taken into account for the purpose of project decision making.

d) Assurance level:

Reasonable assurance degree, as agreed with the client.

**1.1 Client Engagement**

It is the client's responsibility to ensure the information stated in the GHG quantification report is free from material misstatements, whether due to fraud or error.

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**2. Verification team**

The team conducting the Verification was composed by:

- Roger Fournier CA, verifier in charge
- Freddy Samuel CGA, verifier
- Laurent Fournier, verifier

**3. Information about the organization aimed by the Verification**

We took knowledge of the quantification report and asked necessary questions to the GHG inventory project promoter with the purpose of ensuring ourselves of having a good comprehension of the aforementioned GHG inventory.

3.1 Organisational and operational boundaries

The Emissions inventory includes CSA Worldwide offices. The CSA GHG inventory report adequately describes the different services offered by the Association for its worldwide operations. Information on the types of GHG involved and their sources of emissions are well stated on the inventory report.

3.2 Description of the organisation GHG declaration

The Association GHG inventory report establishes that emissions for the period from April 1<sup>st</sup> 2007 to March 31<sup>st</sup> 2008 are 11103 tCO<sub>2</sub>e as per the consolidation method based on control, step presented in the ISO 14064-1 Standard *entitled: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals*.

As stated on the report and in order to post Carbon Neutral for the period from April 1<sup>st</sup> 2007 to March 31<sup>st</sup> 2008, the Association desires to compensate the GHG emissions related to its operation via purchase of carbon credits from GHG emissions project reductions.

3.3 Period covered by the GHG inventory

April 1, 2007 to March 31, 2008

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3.4 Organisation GHG inventory declaration (Table drawn from the inventory Excel file calculations)

<b>EMISSIONS FOR FY 07-08</b>	
<b>SUB CATEGORY</b>	<b>EMISSIONS (tCO<sub>2</sub>e)</b>
<b>AIR TRAVEL</b>	
NORTH AMERICA	3420,95
INTERNATIONAL	882,81
<b>BUILDING EMISSIONS SUMMARY</b>	
ELECTRICITY	3 840,00
SPACE HEATING	1 886,20
TESTING	53,53
<b>FLEET VEHICLES</b>	
TOTAL	124,03
<b>INSPECTOR AND AUDITOR TRAVEL</b>	
CLEVELAND	190,25
EDMONTON	60,94
REXDALE	151,91
MONTREAL AND MARITIME	84,46
IRVINE AND DENVER	41,01
INDIA	1,53
MEXICO	11,70
QMI	353,98
<b>TOTAL EMISSIONS</b>	<b>11 103,29</b>

3.5 Materiality

The Verification planning process ought to take into account the concept of materiality. Materiality threshold was evaluated as an aggregated issue for the entire file. During the Verification process we pointed the materiality threshold had not been surpassed.

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**4. Context and verification activities**

GDTS Service Conseils (SPA) was mandated by the Canadian Standards Association to conduct the verification. The first version of its inventory report was provided to us for verification purposes on March 23, 2009. Thereafter, a visit of 5 Association offices was held and located as follows: Toronto and Montreal offices were visited on April 27<sup>th</sup> 2009 and 24<sup>th</sup> respectively. Regarding the other three remaining CSA US offices visited, they were Nashville, Hendersonville and Charlotte. Their respective visits were held on April 24<sup>th</sup>, 27<sup>th</sup> and 28<sup>th</sup> 2009 respectively. A Verification plan was also sent to CSA management on April 22<sup>nd</sup> 2009, discussed and also given while we were visiting all the selected sampled CSA offices.

4.1 Conflict of interest review:

Prior to beginning any verification project or inventory, GDTS Services Conseils (SPA) Inc. conducts an evaluation to identify any potential conflicts of interest associated with the project. No potential conflicts of interest were found for this inventory.

4.2 Preparation and site visits.

With the purpose of planning the sites visit, a first look at the CSA documentation was given on April 20<sup>th</sup> 2009 before the visits took place. Therefore, this allows us to plan ahead the aforementioned visit, among others.

4.3 Verification steps while visiting the sites

While conducting the verification at the Canadian Standards Association, we met in Toronto Mrs. Manisha Mistry; Corporate OHS&E Manager, project lead, Mrs. Numaira Obaid, Project coordinator and Mr. Dave McLean. We also visited a few others US Locations. The several sites visited were mainly administrative offices but Toronto, Montreal and Hendersonville offices which are testing facilities and administrative offices as well.

We revised the following points with the CSA concerned people at all visited locations:

- Company's internal control with the purpose of assessing Verification risk
- Take information about the Association's operations
- Environmental aspects
- Emission sources

The necessary documents for the application of our verification sampling procedures were provided to us. During the course of our Verification, we got all the necessary cooperation and documents required from company's management.

4.4 Preparation of the verification report

The preparation of the verification report was done after the sites visit thus the revision of the documentation gathered. After having received from the Association, which quantified its emissions, all the necessary information and answers to our corrections requests, the verification report was finalized

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**5. Evaluation of the GHG inventory quantification mode and the several parameters used**

5.1 Inventory Standard

From information provide by the Association the project report was prepared in conformity with the ISO 14064-1, *entitled: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals*. The verification report respects the principles of relevance, completeness, coherence, accuracy and transparency as required by the ISO 14064-1 standard.

5.2 Emissions types, exclusions and quantification method

The Quantification method used was the operational control approach. This method is presented on ISO 14064-1 appendix A.2 and considered acceptable. Our comprehension of the quantification method used was based on the above reference.

At the time of the sites visit, we were able to confirm the emissions types included in the quantification report. Moreover, sinks or reservoirs were identified as windmill and solar panels installed in the Rexdale office affecting current and future GHG inventories.

**Certain sources of emissions were not calculated and are:**

- 1- Mileage to go to the airports while travelling by plane;
- 2- Other vehicles not owned by CSA but that could be used for CSA business purposes;
- 3- The GHG emissions related to by an electricity generator, thus fridges and the various buildings air conditioning systems;
- 4- Emissions coming from common areas where the Association offices are located.

We have estimate, from our best knowledge, the GHG emissions inventory understatement related to these above sources and we conclude the understatement will not affect our verification report

The Association quantified its related emissions to the following four activities:

- 1- Employee Air Travel;
- 2- Mileage driven by vehicles rented by the Association;
- 3- Mileage driven by QMI verifiers and CSA international inspectors;
- 4- Buildings owned and rented by the Association.

CSA has made methodology changes in accounting GHG emissions for some activities with regards to the previous quantification reporting period. Moreover, for some comparative figures, CSA has indicated restated values based on the current year GHG inventory methodology with the purpose to have more comparable data.

We agree with the new quantification methods and with the inclusion of more comparable data.

Although on certain occasions, the client evaluates his emissions based on estimates (this fact does not have a material impact on emissions quantities), we have analyzed the various quantification methods used for every emission type and we are comfortable with the used methods.

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5.3 Company activity data emission factors choice and calculations

5.3.1-Employee air travel:

The emission factors for every flight category were taken from DEFRA (department for environment, food and rural affairs of the UK). This data shows information regarding air travel for flights; including length, frequency and airplane type. For every flight haul category an emissions factor was applied to the total category km flown with the purpose of calculating total GHG emissions per flight category.

We consider the various references used by the Association appear accurate and are adequate compared to this type of activity. All the data being used to verify the emissions calculations were provided by the client. We have conducted our data verification using random sampling procedures.

5.3.2- Mileage driven by vehicles rented by the Association and CSA international Auditors and inspectors:

The emissions factors used are the UK Government Department of Environment, Food and Rural Affairs (DEFRA) for the whole Association rented vehicles emissions thus kilometres driven by CSA International verifiers and inspectors; The DEFRA study appears precise and complete to us.

It is important to note that as of February 2008, QMI does not fall under the ownership of CSA Group. As a result, future inventories will not be including data from any of the QMI offices in their quantification. This includes QMI Toronto, QMI Edmonton, QMI Beijing, and QMI Mexico.

The approach that was chosen for the GHG inventory quantification refers to the usage of emissions factors coming from DEFRA, which takes into account the type of vehicle. The emissions factors are subsequently combined with the quantities of kilometres driven or consumed fuel in litres.

Indeed, DEFRA proposes emissions factors either by kilometres driven or consumed fuel in litres by taking into account the type of vehicles.

All the data regarding fuel consumption were provided by the client. We have conducted our data verification using random sampling

5.3.3 Association rented and owned buildings.

The Association has calculated its direct emissions coming from building operations located at Cleveland, Rexdale, Montreal, Richmond, Edmonton and Shanghai.

Regarding Rexdale emissions, although the client consumed gases during the last years, it did not account for in the current and last inventory periods. The client quantifies its emissions in connection with gas purchases without taking into account inventory levels. Even if CSA states that it has not carried out gases purchases for Rexdale for the current and previous GHG inventory reporting periods, we are rather convinced that the emissions are underestimated.

Moreover, CSA has also calculated its indirect emissions related to energy usage.

With the exception of Rexdale facility, we are comfortable with the calculation methods used for direct and indirect emissions, as well as for the emissions factors used.

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Regarding GHG emissions for buildings, the calculation of emissions was conducted based on real data with the exception of QMI Toronto (natural gas consumption), QMI Edmonton (natural gas consumption). Also, Beijing and QMI Mexico offices energy usage GHG emissions were estimated based on (square footage, Energy bills, etc.). As previously mentioned, we are still comfortable with these estimates.

5.4 Evaluation and consideration of the uncertainty

For each one of the activities where the emissions were calculated, the report precisely explain and detail the degree of uncertainty related to the emissions factors used thus activity data and the calculation used regarding Global Warming Potentials. The factors used come from reliable sources and a big part of the activity data was verified.

Regarding direct emissions associated to buildings, we do not agree with the CSA estimation of the uncertainty level which is stated at low

Since no calculation of emission was made for Rexdale gases usage although there was use of gases during the last years and moreover the client is not able to calculate gases consumption based on inventory levels resulting in client emissions calculations based on gases purchases. Although the emissions these last above two points generate are limited, they contribute in our opinion to increase the level of uncertainty.

However, it should be taken into account that few association activities use estimations which could creates a higher level of uncertainty. Taking into account the estimates and their impact over total emissions quantities, we are of opinion that the general level of uncertainty for the entire file would be set at low.

5.5 Quality Inventory Management, safeguard of documentation.

Concerning data management and conservation of documents, the report is explicit on this subject. We have corroborated with the Association the validity of its internal control that satisfies us as well as the reliability of the output data. Also, the verifications that we performed on this data as well as the information received from our meeting with management has confirmed that there is adequate data management and conservation of documents.

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**6- Verification notice on the declaration of GHG reductions.**

In our opinion; based on our review, the GHG emissions assertions presented in the quantification report dated September 29<sup>th</sup>, 2009 (version 13) are fairly presented and in accordance with relevant criteria. Therefore, the CSA GHG declared inventory quantification report covering the period from April 1, 2007 to March 31, 2008:

- Is free of Material misstatements and it is an appropriate representation of the data and GHG information.
- Is prepared in conformance with ISO14064-1 standard: *Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals*.
- Is considered to have a low degree of uncertainty and taking into account the materiality paragraph included in our audit report, please refer to page 4 of 9.

**Confidentiality**

**GDTS Service Conseils (SPA) Inc. assures the confidentiality of all information provided to them during the course of the verification as well as documents provided by the company will be preserved in their files afterwards over a 5 year period. No relative information to the present Verification will be communicated to a third party, other than the organization that accredit without obtaining the written authorization from the client. Besides, the content of this verification report cannot be used in it's entirely or in part without obtaining the authorization from GDTS Service Conseils (SPA) Inc.**