

# Western Climate Initiative



## Final Essential Requirements of Mandatory Reporting

### Amended for Harmonization of Reporting in Canadian Jurisdictions

December 17, 2010

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# 1 Introduction

This document and the attachments provide an overview of the amendments made to WCI Final Essential Requirements of Mandatory Reporting for harmonization of reporting for Canadian jurisdictions.

On July 15, 2009, the WCI partners published the Final Essential Requirements for Mandatory Reporting (the “ERs”) to be implemented by the WCI Partner jurisdictions. On September 22, 2009, U.S. EPA adopted its final Mandatory Greenhouse Gas Reporting Rule (the “EPA rule”), implementing its Greenhouse Gas (GHG) Reporting Program. Many U.S. facilities in the WCI region will be subject to both reporting programs.

The WCI partners were concerned that the existence of two different reporting systems in a WCI state could result in the imposition of duplicative or conflicting reporting obligations on facilities subject to both programs. The Partners therefore directed the WCI Reporting Committee to develop amended ERs that are harmonized with the EPA rule.

On November 12, 2010, the WCI published the “Harmonization of Essential Requirements for Mandatory Reporting in U.S. Jurisdictions with EPA Mandatory Reporting Rule” (U.S. ER’s), WCI’s approach for harmonizing the ERs and the EPA rule in U.S. jurisdictions. It takes the form of a markup of the EPA rule showing the changes to the EPA program that are needed to support a cap-and-trade program. WCI jurisdictions in the U.S., particularly those implementing a cap-and-trade program, may implement the harmonized U.S. ERs by adopting a rule that incorporates the EPA rule by reference with the changes shown in the markup.

To ensure that the amended ERs are provided that are methodologically consistent with the harmonized U.S. ERs but appropriate for use in the Canadian partner jurisdictions, the WCI released two packages to stakeholders. The first draft for stakeholder comment “Harmonization of Essential Requirements for Mandatory Reporting in Canadian Jurisdictions with the WCI Essential Requirements for Mandatory Reporting and the EPA Greenhouse Gas Reporting Program” covering most reporting sectors was released on September 8, 2010 and the second draft covering the remainder was released on October 29, 2010.

This “Final Essential Requirements for Mandatory Reporting – Canadian Harmonization Version” (Canadian ERs) represents WCI’s adoption of the amended quantification methods for use in Canadian Partner jurisdictions for all source categories as modified in WCI.1(a)(1). These methods replace the original ERs in use for 2010 reporting and are designed to be adopted for use by Canadian jurisdictions for 2011 calendar year emissions, reported in 2012.

To ensure that a complete package of quantification methods can be referenced, the ER for imported electricity is re-published within the amended ERs. Several modifications to the general provisions in the ERs made in the November 12, 2010 U.S. harmonization document are

also incorporated into the Canadian version. The format of the harmonized Canadian ERs follows the original WCI format, a format that had already been used in guidance documents and regulations in several Canadian WCI jurisdictions.

Since the U.S. EPA only finalized quantification methods for Petroleum and Natural Gas Systems (Subpart W) on November 8, 2010 it has been possible to incorporate only a subset of elements, some addressing stakeholder comments, into the WCI Canadian ERs. In 2011, the WCI will develop cap and trade quality requirements for sources covered by Subpart W for use in both Canadian and U.S. jurisdictions.

Further evaluation with respect to “reporting only” sources within the scope of the methods in ERs, particularly for specific oil and gas sources will be occurring as will analysis and incorporation of further reporting implementation and compliance requirements for cap and trade system.

This document and the attachments provide an overview of the amendments made to WCI Final Essential Requirements of Mandatory Reporting for harmonization of reporting for Canadian jurisdictions. A summary of the comments received and WCI’s response is set forth in section 5. Changes made to the general provisions of the harmonized ERs are listed in section 6 below.

## **2 Harmonization Principles**

### **2.1 For U.S. Jurisdictions**

The harmonization principles for U.S. jurisdictions are outlined in the “Harmonization of Essential Requirements for Mandatory Reporting in U.S. Jurisdictions with EPA Mandatory Reporting Rule<sup>1</sup>.”

### **2.2 For Canadian Jurisdictions**

In developing harmonized ERs for use in Canadian Partner jurisdictions that modify the existing ERs, the WCI Reporting Committee adhered to the following principles:

1. A Canadian facility should apply the same functions, equations, sampling protocols and measurement criteria as U.S. facilities subject to the U.S. version of the harmonized ERs. This means that the harmonized ERs will achieve the same level of reporting accuracy for Canadian and U.S. facilities, but the U.S. version may require more data elements to be reported to harmonize with the EPA rule.

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<sup>1</sup> <http://www.westernclimateinitiative.org/news-and-updates/125-harmonization-of-essential-requirements-for-mandatory-reporting-in-us-jurisdictions-with-epa-mandatory-reporting-rule>

2. The quantification methods included in the harmonized ERs must remain sufficiently reliable and accurate to be employed in a GHG cap-and-trade program.
3. The WCI reporting system must remain suitable for use in Canadian Partner jurisdictions. For example, it must allow reporting in metric as well as English units and must where necessary include Canada-specific emission factors.
4. The harmonized ERs should facilitate harmonization with Canadian federal reporting. Some Canadian Partner jurisdictions are working with Environment Canada to develop a one-window reporting tool for provincial and national GHG reporting requirements.

WCI intends to follow the same principles with regard to future additions or amendments to the EPA rule, such as the recently finalized Subpart W for the oil and gas industry, and the recently proposed revisions to Subpart A (general provisions) and several source category subparts.<sup>2</sup> WCI will review each proposed revision to assess its suitability for cap-and-trade before incorporating it into the harmonized ERs.

## **3 Harmonization Approach**

### **3.1 For U.S. Jurisdictions**

The harmonization approach for U.S. jurisdictions is outlined in the “Harmonization of Essential Requirements for Mandatory Reporting in U.S. Jurisdictions with EPA Mandatory Reporting Rule”<sup>3</sup>.

### **3.2 For Canadian Jurisdictions**

For the Canadian jurisdictions, the key requirement is that the WCI reporting system as a whole require the use of comparable methodologies and produce comparable results for facilities of the same type, so that a “tonne is a tonne” in both the U.S. and Canada. For Canadian jurisdictions it is not nearly as important to avoid small differences between the ERs and the EPA rule as it is for the U.S. jurisdictions, where such differences could create a risk of inadvertent non-compliance.

Canadian Partners have invested substantial resources in developing regulations to implement the existing WCI ERs. In addition, the provinces face technical and legal issues with the

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<sup>2</sup> Pre-publication version posted on July 20, 2010 at: <http://www.epa.gov/climatechange/emissions/technical-corrections.html#revisions>

<sup>3</sup> <http://www.westernclimateinitiative.org/news-and-updates/125-harmonization-of-essential-requirements-for-mandatory-reporting-in-us-jurisdictions-with-epa-mandatory-reporting-rule>

incorporation by reference of the EPA rule that do not apply to the states. Therefore, in this document, the WCI finalizes amendments to the existing WCI ERs to assure that they conform in substance with the U.S. version of the harmonized ERs, as well as facilitating harmonization with Environment Canada and the use of Canada-specific reporting metrics and factors.

### **3.3 Verification**

Consistent with the Design Recommendations for the WCI Regional Cap-and-Trade Program, the harmonized U.S. and Canadian ERs require third party verification of emission reports by entities and facilities included in the cap. Minor revisions to the verification rule, WCI.8, are included in Section 6 of this document as an amendment to the Canadian ERs.

The amount of data to be reported for Canadian jurisdictions has been reduced to reflect third party verification requirements for emissions reports at a certain threshold of emissions as compared to that which is required to be reported to the EPA for their internal verification.

### **3.4 Missing Data Procedures**

The EPA rule includes procedures in each subpart for replacing missing data resulting from monitoring failures. With the exception of methodologies for facilities subject to 40 CFR Part 75 (the acid rain program), these missing data procedures do not appear to be sufficiently rigorous to support a cap-and-trade system. There is no limitation on the amount of data that may be missing, and replacement methods appear to be both inadequate (for example, many use only one or two available data points) and inequitable (for example, Part 75 power plants have to apply punitive methods, while other facilities do not).

In order to move forward with a harmonization proposal in time to allow implementation for the 2011 reporting year, the Canadian harmonized ERs incorporate the EPA missing data procedures. Before implementation of the cap-and-trade program, however, the WCI intends to revisit this issue. The WCI is investigating how the EPA missing data procedures can be modified to be more consistent with the needs of a cap-and-trade program while adhering to the harmonization principles and intends to propose and implement the necessary modifications in time for the 2012 reporting year.

As a partial measure to address the possibility of gaming, the harmonized ERs include a provision making it clear that the use of a missing data procedure does not excuse a facility's failure to follow the monitoring requirements of the rule.

## 4 Summary of Changes to the Original WCI ERs

The following table summarizes the changes to the ER's general provisions that the WCI is finalizing for implementation in Canadian jurisdictions. The specific language for the amendments to the general provisions is made in Section 6 of this document. The specific language for the changes to the quantification methods is set forth in the republished Final Essential Requirements of Mandatory Reporting – Amended for Canadian Harmonization.

Section	Change to WCI Rule	Rationale
WCI.1(a)(1)	Revised and updated source category list	Reflects current state of WCI quantification methods.
WCI.1(g)	Creates preliminary list of “reporting only” sources for identification of data that will be reported for informational purposes only	Provides indication of which source categories and/or specific emission sources are considered reporting only by the WCI.
WCI.2(b)(2)(B)	Post-2011 verification date established as September 1.	Clarifies verification date for WCI jurisdictions.
WCI.2(h)	Added a method for calculating weighted averages.	This subsection provides clarity on how to determine averages from samples, and produces more accurate emissions estimates.
WCI.4(b)	Modifies requirement to submit records to within 20 days of a request from a WCI jurisdiction.	Modified from 10-day response time in existing WCI.4(b) in response to stakeholder comments.
WCI.5(c)	Added section make it clear the missing data procedures included in the harmonized ERs do not excuse facilities from possible enforcement action for failure to conduct the monitoring required by the rule.	See section 3.4.

Section	Change to WCI Rule	Rationale
WCI.8(a)(4.1)	Added new section to ensure that “reporting only” sources will not be counted towards the threshold for verification. Consequential change required to section WCI.8(a)(1)	Not all quantification methods specified by the harmonized ERs are suitable for a cap-and-trade system. The “reporting only” label provides notice to stakeholders on WCI’s current view on which emissions should not be subject to the cap-and-trade program.
WCI.8(b)(4)(C)	Modification of language for oversight and accreditation of verification bodies	Clarifies language on verification body oversight and accreditation
WCI.8(p)(1) and (2)	Modification of requirements for a verification statement	Clarifies verification statement requirements

## 5 Stakeholder Comments and Response

### 5.1 General Comments

Twenty separate stakeholder responses were received on the Canadian harmonization proposals. The majority of these comments were from companies active in the oil and gas industry and addressed specific items in the general stationary combustion, petroleum and natural gas systems, and natural gas transmission and distribution quantification methods. Several comments were also received from the forest products industry.

Each comment was reviewed and modifications made to the quantification methods where appropriate. Comments addressing policy items were noted and will be discussed by the Reporting Committee. Several commenters indicated the need to declare further sources as “reporting only” (as discussed in the table in Section 4, above).

Since the amended package was built off of the “Harmonization of Essential Requirements for Mandatory Reporting in U.S. Jurisdictions with EPA Mandatory Reporting Rule”<sup>4</sup>, the response to stakeholder comments in that document can be referenced as a preliminary way of understanding the modifications that were made.

## 6 Modifications to the General Provisions

The following is a list of the modifications to the general provisions (WCI.1 to WCI.9) as published by the WCI on July 15, 2009 that are being made in the “Final Essential Requirements of Mandatory Reporting – Canadian Harmonization version”, published on December 17, 2010.

### **WCI.1(a)(1) is replaced by the following:**

(1) Any facility that emits 10,000 metric tons CO<sub>2</sub>e or more per year in combined emissions from one or more of the source categories listed in this paragraph in any calendar year starting in 2010.

- Adipic acid manufacturing [WCI.050]
- Aluminum manufacturing [WCI.070]
- Ammonia manufacturing [WCI.080]
- Carbon dioxide transfer recipients [still being assessed]
- Cement manufacturing [WCI.090]
- Coal storage [WCI.100]
- Copper and nickel [WCI.260]
- Electricity generation [WCI.040]
- Electricity transmission [WCI.230]
- Electronics manufacturing [WCI.110]
- Ferroalloy production [WCI.270]
- General stationary fuel combustion [WCI.020]
- Glass Production [WCI.140] HCFC-22 production [WCI.120]
- Hydrogen production [WCI.130]
- Industrial wastewater [WCI.203(g)]
- Iron and steel manufacturing [WCI.150]
- Lead production [WCI.160]
- Lime manufacturing [WCI.170]
- Magnesium production [WCI.290]
- Miscellaneous uses of carbonates [WCI.180]
- Natural gas transmission and distribution systems [WCI.350]
- Nitric acid manufacturing [WCI.310]
- Mobile equipment [WCI.280]

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<sup>4</sup> <http://www.westernclimateinitiative.org/news-and-updates/125-harmonization-of-essential-requirements-for-mandatory-reporting-in-us-jurisdictions-with-epa-mandatory-reporting-rule>

Petroleum and natural gas systems [WCI.360]  
Petrochemical production [WCI.300]  
Petroleum refineries [WCI.200]  
Phosphoric acid production [WCI.340]  
Pulp and paper manufacturing [WCI.210]  
Refinery fuel gas [WCI.030]  
Soda ash manufacturing [WCI.220]  
Underground coal mines [WCI.250]  
Zinc production [WCI.240]

**WCI.1(g) is added:**

1(g): The following emissions data shall be submitted for information only and may not be subject to cap-and-trade requirements<sup>5</sup>:

- (1) Data submitted by a source category designated as “reporting only.” This provision does not apply to emissions from general stationary combustion at a source in a “reporting only” category.
- (2) Emissions data calculated with a methodology identified as “reporting only.”
- (3) Reporting only sources are identified as the following:
  - Carbon dioxide from biomass determined to be carbon neutral by the jurisdiction
  - Fugitive HFC emissions in electrical generation
  - Coal storage
  - Asphalt blowing at refineries
  - Equipment leaks at refineries
  - Storage tanks at refineries
  - Industrial wastewater treatment
  - Product loading at refineries
  - Mobile equipment

**WCI.2(b)(2)(B) is modified to read:**

“For reporting years 2012 and later, ~~{date to be determined}~~ by September 1 of the year following the reporting year.’

**WCI.2(h) is added:**

- (j) The following shall apply unless in conflict with any other provision in the quantification methods
- (1) Samples must be spaced apart as evenly as possible over time, taking into account the operating schedule of the relevant unit or facility.
  - (2) A weighted average of the values derived from the samples must be calculated and reported by using the following formula:

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<sup>5</sup> The identification of data as “reporting only” may be subject to review before the adoption of a cap-and-trade program. On adoption the jurisdiction will likely substitute a citation to the rules implementing the program for the words “cap-and-trade requirements.” Further analysis of reporting only sources is occurring, particularly for specific emission sources within the Petroleum and Natural Gas Systems and Natural Gas Transmission and Distribution quantification methods.

$$V_E = \frac{\sum_{j=1}^n (V_j \times M_j)}{\sum_{j=1}^n M_j}$$

Where:

VE = The value of the parameter to be reported under the quantification method for period E.

j = Each period during period E for which a sample is required by [jurisdiction] under the applicable quantification method

n = The number of periods j in period E.

Vj = The value of the sample for period j.

Mj = The mass of the sampled material processed or otherwise used by the relevant unit or facility in period j.

- (3) You must keep records of the date and result for each sample and mass measurement used in the equation in subsection (2) and of the calculation of each weighted average included in your report must be kept.

**WCI.4(b) is modified to read:**

- (b) Upon request by [jurisdiction], the operator shall provide within ~~10-20 working~~ days all documents and data used to develop an emissions data report.

**WCI.5(c) is added**

- (c) Notwithstanding the missing data procedures in the quantification methods the failure to conduct monitoring in accordance with these methods shall constitute a violation.

**WCI.8(a)(1) is modified to read:**

- (1) Except as provided in WCI.8(a)(2) through (44.1) owners or operators [Each jurisdiction will select the specific terminology for the regulated persons in accordance with their customary rule-writing practices] are required to obtain annual verification for a facility that emits 25,000 metric tons CO<sub>2</sub>e or more per year in combined emissions from one or more of the source categories listed in WCI.1 in any calendar year starting on or after 2010.

**WCI.8(a)(4.1) is added:**

“Emissions designated “reporting only” in this article shall be excluded from the determination regarding verification applicability.

**WCI.8(b)(4)(C) Accreditation Requirements for Verification Bodies** is revised to read:

- (1) The accreditation requirements specified in this subsection shall apply to all verification bodies that wish to provide verification services under this rule.
- (2) A verification body is qualified to conduct verification services for the WCI in [the jurisdiction] if
- (A) it has demonstrated knowledge of [the WCI jurisdiction] reporting requirements; and
  - (B) it has the characteristics and capabilities deemed necessary by [the jurisdiction] to perform verification services; and
  - (C) it is accredited to ISO 14065 through
    - (i) a program developed under ISO 17011 by an accreditation body that is a member of the International Accreditation Forum.; or

- (ii) a program developed or authorized [the jurisdiction] under [the jurisdiction's] required statutory or regulatory process that is at least as stringent as the process defined in ISO 17011.

*[Note the details of the WCI's specific accreditation process for verification bodies ~~(which has yet to be developed)~~ will be consistent with ISO 14065 through an accreditation program that will developed under ISO 17011 and will include demonstrated knowledge of the WCI reporting requirements. The WCI will explore additional accreditation requirements and/or other criteria for individual lead verifiers, general verifiers, and/or sector specialists.]*

**WCI.8(p)(1) and (2) are revised as follows:**

(p) Completion of verification services shall include:

(1) Verification Statement. Upon completion of the verification services required by WCI.8, the verification body shall prepare either a positive or adverse verification statement, for each emissions data report, based on its findings during the verification process. The verification body shall provide the verification statement(s) to the reporter and to the AVA [alternatively, this could be the reporter's responsibility to submit the statement to the AVA], according to the schedule specified in section WCI.2(b). Before each statement is completed, the verification body shall have the verification services and findings of the verification team independently reviewed and approved by an Independent Peer Reviewer.

~~(1) Verification Statement. Upon completion of the verification services required by WCI.8, the verification body shall complete a verification statement for each emissions data report, and provide that statement to the owner or operator and [the jurisdiction or other body] according to the schedule specified in section WCI.2(b). Before that statement is completed, the verification body shall have the verification services and findings of the verification team independently reviewed and approved by an Independent Peer Reviewer.~~

~~(2) The verification body shall provide either a positive or adverse verification statement to the reporter and to the AVA [alternatively, this could be the reporter's responsibility to submit the statement to the AVA] based on its findings during the verification process.~~