

VERIFICATION REPORT

RED HILLS 123 MW WIND POWER PROJECT



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Version	1
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Report Title	Fifth Verification of the Red Hills 123 MW Wind Power Project
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Summary:

Western Farmers Electric Cooperative (Client and/or WFEC) commissioned Conestoga-Rovers & Associates Limited (CRA) to perform the fifth verification of the Red Hills 123 MW Wind Power Project, VCS Project ID: 288 (Project) located near Elk City, Oklahoma, U.S.A. on behalf of Red Hills Wind Project, LLC (Project Proponent). The fifth consecutive verification period extends from 01 January 2013 through 31 December 2013.

The Project consists of the installation and operation of 82 Acciona Windpower AW-77/1500, 1.5 MW turbines for a total rated nameplate capacity of 123 MW. The turbines are located over an area of approximately 5,000 acres of rural and agricultural/grazing lands. Electricity generated by the turbines is upgraded from a 34.5-kilovolt (kV) collection line rating to a 138-kV rating at the Project's substation and then transferred via transmission line to the point of interconnection at the WFEC transmission line where the electricity is then delivered to the Southwest Power Pool (SPP) grid. The Project's intent is to generate electricity from renewable sources and therefore displace electricity that otherwise would have been produced for or distributed to the SPP grid in the absence of the Project.

The Project Proponent utilizes the United Nations Framework Convention on Climate Change (UNFCCC) Clean Development Mechanism (CDM) methodology entitled: "Consolidated baseline methodology for grid connected electricity generation from renewable sources (ACM0002), Version 09.0", dated 13 February 2009 as per the registered VCS Project Description (VCS PD), dated November 2008.

The scope of this verification is such that CRA, as an independent third party recognized as a Validation and Verification Body by the VCS (Registration Number 027), is responsible for reviewing the VCS Monitoring Report including accompanying materials, previous VCS Verification and Validation Reports, and the VCS PD including the monitoring plan, baseline assessment, and any supporting documentation. CRA utilized a risk-based analysis against the relevant requirements of both the interpretation from the CDM and, the VCS Program Guide Version 3.5 and VCS Standard Version 3.4, as applicable.

As part of the verification process, CRA reviewed the completeness, conservativeness, and accuracy of the underlying evidence for the assumptions and claims made, and data sources used. The results of this investigation were then, together with the results of the review of other areas, combined to form the necessary input for the verification report and opinion.

The verification report and associated annexes document a total of nine (9) findings which include:

- Eight (8) Corrective Action Requests (CARs)
- One (1) Clarification Request (CL)
- Zero (0) Forward Action Request (FARs)

Upon review of the documentation and explanations provided by the Project Proponent, all findings were closed in a clear and transparent manner.

Table of Contents

1	Introduction	5
1.1	Objective	5
1.2	Scope and Criteria	5
1.3	Summary Description of the Project	7
2	Verification Process	7
2.1	Method and Criteria.....	7
2.2	Document Review	9
2.3	Interviews	10
2.4	Site Inspections	10
2.5	Resolution of Findings.....	11
2.5.1	Forward Action Requests	19
2.6	Eligibility for Validation Activities	19
3	Validation Findings	19
3.1	Participation under Other GHG Programs	19
3.2	Methodology Deviations	19
3.3	Project Description Deviations	19
3.4	Grouped Project	19
4	Verification Findings	19
4.1	Project Implementation Status	19
4.2	Accuracy of GHG Emission Reduction and Removal Calculations	22
4.2.1	Monitoring Parameters	22
4.2.2	Methods for Recording Monitoring Parameters	22
4.2.3	Calculation of Emission Reductions	23

4.3	Quality of Evidence to Determine GHG Emission Reductions and Removals	24
4.4	Non-Permanence Risk Analysis	25
5	Verification conclusion	25

ANNEX A: ABBREVIATIONS

ANNEX B: VERIFICATION CHECKLIST

ANNEX C: CURRICULATIVE VITAE

1 INTRODUCTION

1.1 Objective

Western Farmers Electric Cooperative (Client and/or WFEC) commissioned Conestoga-Rovers & Associates Limited (CRA), on behalf of Red Hills Wind Project, LLC (Project Proponent), to complete the fifth independent third party verification for the registered Verified Carbon Standard (VCS) project entitled:

- Red Hills 123 MW Wind Power Project located near Elk City, Oklahoma, U.S.A., VCS Project ID: 288. (Project)

CRA completed the verification pursuant to the relevant requirements of the VCS guidance (VCS Program Guide, Version 3.5, and VCS Standard, Version 3.4) as well as translational guidance from the United Nations Framework Convention on Climate Change (UNFCCC) Clean Development Mechanism (CDM). As detailed in Section 5.1.1 of the VCS Standard Version 3.4, *"Verification is the periodic ex-post independent assessment by a validation/verification body of the GHG emission reductions and removals that have occurred as a result of the project during the monitoring period, conducted in accordance with the VCS rules."* The objective of CRA, on behalf of the VCS, is to ensure that only Project Activities that meet the established criteria receive a positive and unconditional verification statement. Specifically, the criteria states that the registered Project must result in emission reductions that are:

- Relevant
- Complete
- Consistent
- Accurate
- Transparent
- Conservative

In the verification of this VCS Project, CRA used a risk-based verification approach to focus and determine the detailed scope of the verification. The VCS and the CDM are rules-based mechanisms; CRA has ensured that the rules for requesting registration as a proposed VCS Project are complied with, in accordance with the VCS Program Guide Version 3.5 and the VCS Standard Version 3.4.

The key risks associated with the project design, baseline, monitoring plan, emission reduction estimates, environmental impacts, and stakeholder comments are elements that are critical for meeting VCS criteria for achieving real, measurable, permanent, additional, independently audited, unique, transparent, and conservative greenhouse gas (GHG) reductions.

1.2 Scope and Criteria

The Client commissioned CRA to perform an independent third party verification for the fifth consecutive monitoring period (01 January 2013 through 31 December 2013) of the registered

Project, which is located 10 miles north of Elk City, Oklahoma, U.S.A., on approximately 5,000 acres of agricultural and grazing land at grid coordinates: latitude 35.5°N longitude: -99.4°W. The project consists of 82 turbines; 70 turbines and the substation are situated in Roger Mills County and 12 turbines and the interconnect point are situated in Custer County. Access to the project site is made from State Highways 34 and 73. The project boundary includes the project site and all power plants that the VCS project power plant is connected to through the electricity system.

The main GHG source considered for emission reductions is carbon dioxide (CO₂) emissions from fossil fuel electricity generation (baseline scenario) that are displaced due to the Project Activity. Methane and nitrous oxide emissions in the baseline scenario are not considered, and emissions from the Project are not included, as per the applied United Nations Framework Convention on Climate Change (UNFCCC) Clean Development Mechanism (CDM) methodology entitled: "Consolidated baseline methodology for grid connected electricity generation from renewable sources (ACM0002), Version 09.0".

Utilizing a risk-based approach as part of the verification process, CRA reviewed the completeness, conservativeness, and accuracy of the underlying evidence for the assumptions and claims made, and data sources used. The results of this investigation then, together with the results of the review of other areas, gave the necessary input for the verification opinion which is completed pursuant to guidance provided within the VCS Program Guide Version 3.5 and the VCS Standard Version 3.4. Specifically, it was verified that the emission reductions claimed as VCUs for the fifth consecutive monitoring period (01 January 2013 through 31 December 2013) met the following principles, as identified in the VCS Program Guide Version 3.5:

- Real
- Measurable
- Permanent
- Additional
- Independently Audited

In addition to the principles identified above, it was verified that the Project fully complied with the approved methodology and that accompanying guidance documents suitable for the Project scope were referenced, as required under the VCS Program Guide Version 3.5 and VCS Standard Version 3.4. The applied methodology, UNFCCC CDM ACM0002, is eligible under the VCS program and is appropriate as it consists of grid-connected electricity generation from renewable sources. Guidance documents associated with this methodology include methodological tools for the calculation of emission factors (Tool 07 V04.0) and for the demonstration of additionality (Tool 01 V07.0). Level of Assurance

CRA has conducted the verification activities and has prepared this report to a reasonable level of assurance with a maximum allowable materiality threshold of 5 percent, as outlined in Section 5.3.1 of the VCS Standard, Version 3.4.

1.3 Summary Description of the Project

The Project consists of the installation and operation of 82 Acciona Windpower AW-77/1500, 1.5-MW turbines, for a total rated nameplate capacity of 123 MW. The turbines are located over an area of approximately 5,000 acres of rural and agricultural/grazing lands. Electricity generated by the turbines is upgraded from a 34.5-kilovolt (kV) collection line rating to a 138-kV rating at the Project's substation and then transferred via transmission line to the point of interconnection at the WFEF transmission line where the electricity is then delivered to the Southwest Power Pool (SPP) grid. The Project's intent is to generate electricity from renewable sources and therefore displace electricity that otherwise would have been produced for or distributed to the SPP grid in the absence of the Project.

2 VERIFICATION PROCESS

2.1 Method and Criteria

The CRA Project Team has assessed and verified that the implementation of the Project and the steps taken to report emission reductions comply with the VCS criteria and relevant guidance provided by the VCS and the UNFCCC. The verification criteria are those established in VCS Version 3. The verification included a review of relevant documentation, records, and an on-site visit.

CRA followed a risk-based verification approach. As such, CRA identified the key reporting risks related to the claimed emission reductions and assessed to what extent the project's control systems are adequate for mitigating any perceived reporting risks.

Key reporting risks that are not sufficiently addressed by the project control system represent residual risks. The CRA Project Team conducted detailed verification/testing to investigate the residual risks. Key issues assessed during verification included: verification of correct use of emission factors, accurate fuel consumption estimates, correct use of conversion factors, and consistency in aggregation of emissions data, as applicable. Wherever practical, direct reading instruments are preferred to be used to ensure that any reporting risks are kept within equipment and instrumentation performance limits.

The CRA Project Team ranked reporting risks and assessed the control systems implemented to mitigate these risks. The ranks are assigned as follows:

- **Fully Implemented** - All best practice expectations are implemented, resulting in a low risk
- **Partially Implemented** - A portion of the best practice expectations are implemented, resulting in a moderate risk
- **Limited Implementation** - Few or none of the expected system components or best practice expectations are implemented, resulting in a high risk

During the verification process, the CRA Project Team considered both quantitative and qualitative information on emission reductions. Quantitative data was comprised of the monitoring report and accompanying information submitted to the CRA Project Team by the Project Proponent/Client. Qualitative data was comprised of information on internal management

controls, calculation procedures, and procedures for transfer, frequency of emissions reports, and review and internal audit of calculations/data transfers.

The audit conclusion was based on the interaction of three key verification principles as follows:

1. Compliance with the monitoring plan
2. Accuracy
3. Quality of evidence

During the desk review, the CRA Project Team became familiar with the Project in order to be able to compare the situation and status on-site with the situation as described in the underlying documentation. The CRA Project Team reviewed the following items:

- Review of the data and information presented to verify completeness
- Review of the monitoring plan and monitoring methodology, paying particular attention to the frequency of measurements, the quality of metering equipment, including calibration requirements, and the quality assurance and quality control procedures
- Evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions
- Review of the last revision of the previous verification and validation reports
- Review of the written management manual
- Review of operation licenses from local authorities

Other documents such as process flow diagrams, technical drawings, manuals of equipment suppliers, and performance records were reviewed.

The CRA Project Team used a risk-based approach for on-site investigation conducted during the verification process. The Lead Auditor and other Project Team members followed the audit trails and data sets on-site for specific indicators, and cross checked with the monitoring plan and records. Direct reading instrumentation and redundancy in the data used to support the verification were identified in the verification reporting.

During the on-site assessment, the CRA Project Team focused on the key areas identified as follows:

- An assessment of the implementation and operation of the VCS Project Activities as per the registered VCS PD
- A review of information flows for generating, aggregating, and reporting the monitoring parameters
- Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the monitoring plan in the VCS PD
- A cross-check between information provided in the monitoring report and data from other sources such as plant log books, inventories, purchase records, or similar data sources

- A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the VCS PD and the selected methodology
- A review of calculations and assumptions made in determining the GHG data and emission reductions
- An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters

The outcome of the on-site assessment and the desk-top review was the creation of a Draft Findings Assessment. The Draft Findings Assessment was issued to the Project Proponent/Client for response to any corrective actions or clarification requests. Upon receipt of the Project Proponent's/Client's response to these requests, the CRA Project Team prepared a Draft Verification Report. The CRA Technical Reviewer completed a peer review of this Draft Verification Report. Any additional findings were presented to the Project Proponent/Client. Upon receipt of the Project Proponent's/Client's response and agreement by the Technical Reviewer that all findings were satisfactorily addressed, the CRA Project Team issued a Final Verification Report along with a completed Verification Statement and Verification Representation.

2.2 Document Review

The VCS verification process relies heavily upon documentation review. The primary document for review is the VCS Monitoring Report. The Project Proponent provided CRA with the VCS Monitoring Report and revised VCS Monitoring Reports as detailed below:

<i>Document Date</i>	<i>Date Issued to CRA</i>	<i>Version Number</i>	<i>Methodology</i>
13 March 2014	13 March 2014	1	ACM0002, Ver. 09.0
27 March 2014	27 March 2014	2	ACM0002, Ver. 09.0
04 April 2014	07 April 2014	3	ACM0002, Ver. 09.0

Each of the above submissions was reviewed by CRA. As part of the verification process, additional documentation supplemental to the VCS Monitoring Report was requested and reviewed by CRA. This supplemental information included the following documents:

<i>Issued to CRA Date</i>	<i>Type of Document</i>
07 March 2014	• VCS Monitoring Report, "Fifth Monitoring Report" Version 1, dated 13 March 2013 • Check versus Meter Records V1 2013, Microsoft Excel file • Generator Attestation - Red Hills 1Q-4Q 2013 • Meter of Record Test Report Nov 20, 2013, Microsoft Excel file • RH1-13 - RH12-13, Microsoft Excel file
10 March 2014	• Red Hills Consumption Invoices January 1, 2013 through December 31, 2013 • Red Hills Production Invoices Payment Wires 1 January 2013 to 31 December 2013

<i>Issued to CRA Date</i>	<i>Type of Document</i>
	- Red Hills Production Invoices 1 January 2013 through 31 December 2013 - Bonneville Executed VCU Agreement Dated June 20 2012
17 March 2014	140101 Daily Report, Microsoft Excel file
27 March 2014	- Conestoga-Rovers Finding Assessments Fifth Monitoring Report WFEC Response - VCS Monitoring Report Template v3 3 Version 2 03242014
07 April 2014	- Response to Conestoga-Rovers Finding Assessment Version 02 of Fifth Monitoring Report WFEC Response - VCS Monitoring Report Template v3 3 Version 3 04042014

2.3 Interviews

CRA completed a Site Inspection for the verification on 13 March 2014. During this portion of the verification process, CRA was able to interview a series of project stakeholders regarding various aspects of the Project. Mr. Brent Boss and Mr. Zachary Zehr of CRA completed the Site Inspection. The following Project Stakeholders were interviewed by CRA:

<i>Name of Interviewee</i>	<i>Position and Company</i>	<i>Details of Items Discussed</i>
Mr. Richard Ross	Manager – Risk Management – WFEC	Represented WFEC on the Site and assisted in conducting Site Visit tour. Discussed technical details of the Project implementation and operation and Monitoring Report details.
Mr. Wayne Atkinson	Manager, Operations and Maintenance – Acciona Energy North America Corporation	Represented Acciona on the Site and assisted in conducting Site Visit tour. Discussed technical details of the Project implementation and operation and Monitoring Report details.
Mr. Jeremy Retzlaff	Red Hills Wind Farm Site Manager – Acciona Energy North America Corporation	Was available by telephone, and discussed technical details of the Project implementation and operation, and Monitoring Report details.

2.4 Site Inspections

The verification process is primarily a document review process. The completion of a Site Inspection provided the CRA Project Team with an added level of assurance that the information provided within documentation from the Project Proponent is complete and accurate as it relates to the registered Project. As stated above, CRA completed a Site Inspection for the verification on 13 March 2014. Aside from interviewing project stakeholders as per Section 2.4 of this report, the CRA Project Team reviewed the implementation status of the Project. During the Site

Inspection the CRA Project Team noted that there were a total of 82 installed turbines. At the time of the Site Inspection, 82 turbines were installed: 80 were operational and the remaining 2 turbines were inactive due to maintenance. The turbines were in accordance with the registered VCS PD. The implementation status of the Project will be discussed in Section 3.1 below.

2.5 Resolution of Findings

Each Corrective Action Request (CAR), Future Action Request (FAR), and Clarification Request (CL) raised by CRA was presented in individual tables within the Findings Assessment. The Project Proponent/WFEC was required to complete the appropriate responses and to provide, where necessary, documentation as evidence of their assumptions and/or responses.

A summary of the final results of the findings assessments is presented as follows:

<i>Finding Category</i>	<i>Number of Findings</i>
CAR	8
FAR	0
CL	<u>1</u>
Total	9

No material discrepancies were observed by CRA in the verification of the Project.

Date:	17/03/2014		Raised by:	Brent Boss/Zach Zehr	
Type:	CAR	Number:	#1	Reference:	1.1
Lead Auditor Comment:					
Section 1.1 of the Monitoring Report is not in full compliance with the VCS Monitoring Report template, version 3.3. The requirement that the number of credits WFEC is applying for, for the period of January 1, 2013 through December 31, 2013 is not clearly stated.					
In order to maintain transparency and consistency with the VCS Standard, the CRA Project Team is requesting that the Fifth Monitoring Report be revised to reflect the full details as required per above.					
Project Proponent Response:				Date: 27/03/2014	
Please see last paragraph of Section 1.1					
Documentation Provided by Project Proponent:					
Version 2 of Fifth Monitoring Report dated 27/03/2014					
Information Verified by Lead Auditor:					
The CRA Project Team reviewed the Project Proponent response and documentation provided, and confirmed that the Fifth Monitoring Report Version 3 was provided with Section 1.1 updated to contain the statement on the number of credits WFEC applied for, for the period of January 1, 2013 through December 31, 2013.					

Date:	17/03/2014		Raised by:	Brent Boss/Zach Zehr	
Type:	CAR	Number:	#1	Reference:	1.1
Reasoning for Acceptance and Close Out:				Date: 27/03/2014	
Based on the finding raised and response provided by Project Proponent (based on the above evidences), the finding was closed out.					
<u>CAR #1 is closed Out.</u>					
Acceptance and Close out by Lead Auditor:				Date: 27/03/2014	

Date:	17/03/2014		Raised by:	Brent Boss/Zach Zehr	
Type:	CAR	Number:	#2	Reference:	Monitoring Report
Lead Auditor Comment:					
The CRA Project Team identified that the most up-to-date Monitoring Report template was not applied to the Fifth Monitoring Report.					
In order to obtain consistency with the VCS Standard, the CRA Project Team is requesting that the Fifth Monitoring Report be revised to the most up-to-date Monitoring Report template.					
Project Proponent Response:				Date: 27/03/2014	
v 3.3 template has now been used					
Documentation Provided by Project Proponent:					
Version 2 of Fifth Monitoring Report dated 27/03/2014					
Information Verified by Lead Auditor:					
The CRA Project Team reviewed the Project Proponent response and documentation provided, and confirmed that the Fifth Monitoring Report Version 2 was provided using the most-up-to-date VCS Monitoring Report template.					
Reasoning for Acceptance and Close Out:				Date: 27/03/2014	
Based on the finding raised and response provided by Project Proponent (based on the above evidences), the finding was closed out.					
<u>CAR #2 is closed Out.</u>					
Acceptance and Close out by Lead Auditor:				Date: 27/03/2014	

Date:	17/04/2014		Raised by:	Brent Boss/Zach Zehr	
Type:	CAR	Number:	#3	Reference:	4.4
Lead Auditor Comment:					
Section 4.4 of the Fifth Monitoring Report includes a table with a line item labeled “Estimated reduction for the period”. This line item includes units of “tCO2 for the 366 days”. The monitoring period (1 January 2013 to 31 December 2013) lasted a total of 365 days. The CRA Project Team requests that the Project Proponent revise the emission units of line item “Estimated reduction for the period” of the table in Section 4.4 of the Fifth Monitoring Report to reflect the number of days of the monitoring period.					
Project Proponent Response:				Date: 27/03/2014	
With utilization of new template v 3.3 the table changed and 366 days was removed.					
Documentation Provided by Project Proponent:					
Version 2 of Fifth Monitoring Report dated 27/03/2014					
Information Verified by Lead Auditor:					
The CRA Project Team reviewed the Project Proponent response and documentation provided, and confirmed that the Fifth Monitoring Report Version 2 was provided with the erroneous line item in Section 4.4 removed.					
Reasoning for Acceptance and Close Out:				Date: 27/03/2014	
Based on the finding raised and response provided by Project Proponent (based on the above evidences), the finding was closed out.					
<u>CAR #3 is closed Out.</u>					
Acceptance and Close out by Lead Auditor:				Date: 27/03/2014	

Date:	17/04/2014		Raised by:	Brent Boss/Zach Zehr	
Type:	CAR	Number:	#4	Reference:	1.3 &1.4
Lead Auditor Comment:					
Section 1.3 and 1.4 of the Fifth Monitoring Report includes the Project Proponent contact information and the contact information for other entities involved. The CRA Project Team identified that not all the required contact information was provided and that the contact information was not presented in the specified format. The CRA Project Team is requesting that the Fifth Monitoring Report be revised to reflect the full details as required per above and in accordance with the most up-to-date Monitoring Report template.					
Project Proponent Response:				Date: 27/03/2014	

Date:	17/04/2014		Raised by:	Brent Boss/Zach Zehr	
Type:	CAR	Number:	#4	Reference:	1.3 & 1.4
With utilization of new template v3.3 the required data is now complete					
Documentation Provided by Project Proponent:					
Version 2 of Fifth Monitoring Report dated 27/03/2014					
Information Verified by Lead Auditor:					
The CRA Project Team reviewed the Project Proponent response and documentation provided, and confirmed that the Fifth Monitoring Report Version 2 was provided with the required information in the specified format for Sections 1.3 and 1.4.					
Reasoning for Acceptance and Close Out:				Date: 27/03/2014	
Based on the finding raised and response provided by Project Proponent (based on the above evidences), the finding was closed out.					
<u>CAR #4 is closed Out.</u>					
Acceptance and Close out by Lead Auditor:				Date: 27/03/2014	

Date:	17/04/2014		Raised by:	Brent Boss/Zach Zehr	
Type:	CAR	Number:	#5	Reference:	1.2,3.1 and 3.2
Lead Auditor Comment:					
The CRA Project team reviewed the Fifth Monitoring Report and identified the following conditions of the Monitoring Report template that were not clearly defined:					
- Statement indicating if the project is grouped or not - Section on other environmental credit programs or trading programs - Statement for justification of choice of data or description of measurement methods and procedures applied for parameters - Statement indicating the purpose of data for monitored parameters					
In order to maintain consistency with the VCS Standard, the CRA Project Team is requesting that the Fifth Monitoring Report be revised to include the missing information.					
Project Proponent Response:				Date: 27/03/2014	
Grouped information is documented in Section 1.2, Environmental credit or trading programs documented in Section 1.9, Measurement methods and purpose of data documented in Sections 3.1 and 3.2.					
Documentation Provided by Project Proponent:					

Date:	17/04/2014		Raised by:	Brent Boss/Zach Zehr	
Type:	CAR	Number:	#5	Reference:	1.2,3.1 and 3.2
Version 2 of Fifth Monitoring Report dated 27/03/2014					
Information Verified by Lead Auditor:					
The CRA Project Team reviewed the Project Proponent response and documentation provided, and confirmed that the Fifth Monitoring Report Version 2 was provided with the required information on: 1. Statement indicating if the project is grouped or not 2. Section on other environmental credit programs or trading programs 3. Statement for justification of choice of data or description of measurement methods and procedures applied for parameters 4. Statement indicating the purpose of data for monitored parameters					
Reasoning for Acceptance and Close Out:				Date: 27/03/2014	
Based on the finding raised and response provided by Project Proponent (based on the above evidences), the finding was closed out. <u>CAR #5 is closed Out.</u>					
Acceptance and Close out by Lead Auditor:				Date: 27/03/2014	

Date:	17/04/2014		Raised by:	Brent Boss/Zach Zehr	
Type:	CAR	Number:	#6	Reference:	3.3
Lead Auditor Comment:					
The CRA Project team identified in Section 3.3 of the Fifth Monitoring Report that the procedures for handling any internal auditing performed and any non-conformances identified were not defined. The CRA Project Team is requesting that the Fifth Monitoring Report be revised to reflect the full details as required per above.					
Project Proponent Response:				Date: 27/03/2014	
See language added at the end of Section 3.3					
Documentation Provided by Project Proponent:					
Version 2 of Fifth Monitoring Report dated 27/03/2014					

Date:	17/04/2014		Raised by:	Brent Boss/Zach Zehr	
Type:	CAR	Number:	#6	Reference:	3.3
Information Verified by Lead Auditor:					
The CRA Project Team reviewed the Project Proponent response and documentation provided, and confirmed that the Fifth Monitoring Report Version 2 was provided with the required information on procedures for handling any internal auditing performed and any-non conformances identified in Section 3.3.					
Reasoning for Acceptance and Close Out:				Date: 27/03/2014	
Based on the finding raised and response provided by Project Proponent (based on the above evidences), the finding was closed out. <u>CAR #6 is closed Out.</u>					
Acceptance and Close out by Lead Auditor:				Date: 27/03/2014	

Date:	31/03/2014		Raised by:	Brent Boss/Zach Zehr	
Type:	CAR	Number:	#7	Reference:	1.1
Lead Auditor Comment:					
The title of Section 1.1 of the Monitoring Report is not in full compliance with the VCS Monitoring Report template, version 3.3. In order to maintain transparency and consistency with the VCS Standard, the CRA Project Team is requesting that the Fifth Monitoring Report be revised to reflect the correct title in Section 1.1.					
Project Proponent Response:				Date: 04/04/2014	
The title of Section 1.1 was corrected.					
Documentation Provided by Project Proponent:					
Fifth Monitoring Report Version 2 04/04/2014					
Information Verified by Lead Auditor:					
The CRA Project Team reviewed the Project Proponent response and documentation provided, and confirmed that the Fifth Monitoring Report Version 3 included the correct title for Section 1.1.					

Date:	31/03/2014		Raised by:	Brent Boss/Zach Zehr	
Type:	CAR	Number:	#7	Reference:	1.1
Reasoning for Acceptance and Close Out:				Date: 07/04/2014	
Based on the finding raised and response provided by Project Proponent (based on the above evidences), the finding was closed out.					
<u>CAR #7 is closed Out.</u>					
Acceptance and Close out by Lead Auditor:				Date: 07/04/2014	

Date:	31/03/2014		Raised by:	Brent Boss/Zach Zehr	
Type:	CAR	Number:	#8	Reference:	1.8
Lead Auditor Comment:					
The CRA Project teams identified in Section 1.8 of the Fifth Monitoring Report that the tools used to calculate the TCO _{2e} /MWh emission factor were not defined.					
The CRA Project Team is requesting that the Fifth Monitoring Report be revised to reflect the full details as required per above.					
Project Proponent Response:				Date: 04/04/2014	
The tools used were noted in Section 1.8 of the monitoring report.					
Documentation Provided by Project Proponent:					
Fifth Monitoring Report Version 2 04/04/2014.					
Information Verified by Lead Auditor:					
The CRA Project Team reviewed the Project Proponent response and documentation provided, and confirmed that the Fifth Monitoring Report Version 3 included the tools used to calculate the TCO _{2e} /MWh emission factor.					
Reasoning for Acceptance and Close Out:				Date: 07/04/2014	
Based on the finding raised and response provided by Project Proponent (based on the above evidences), the finding was closed out.					
<u>CAR #8 is closed Out.</u>					
Acceptance and Close out by Lead Auditor:				Date: 07/04/2014	

Date:	17/04/2014		Raised by:	Brent Boss/Zach Zehr	
Type:	CL	Number:	#1	Reference:	N/A
Lead Auditor Comment:					
To check the reported electricity production by WFEC, the CRA Project Team requests a copy of the Acciona daily report that includes the year to date production, capacity factor and availability for the applicable crediting period.					
Project Proponent Response:				Date: 27/03/2014	
Report requested by Conestoga-Rovers and Associates was provided to Brent Boss and Zachary Zehr by email on 17/03/2014					
Documentation Provided by Project Proponent:					
17/03/2014 email sent to Brent Boss and Zachary Zehr with Conestoga-Rovers					
Information Verified by Lead Auditor:					
The CRA Project Team reviewed the Project Proponent response and documentation provided, and confirmed that the Acciona daily report, including year-to-date production, capacity factor, and availability, for the applicable crediting period, was provided.					
Reasoning for Acceptance and Close Out:				Date: 27/03/2014	
Based on the finding raised and response provided by Project Proponent (based on the above evidences), the finding was closed out.					
CL #1 is closed Out.					
Acceptance and Close out by Lead Auditor:				Date: 27/03/2014	

2.5.1 Forward Action Requests

The CRA Project Team did not raise any forward action requests for this verification period.

2.6 Eligibility for Validation Activities

CRA did not perform the validation for this project. Therefore, this section is not applicable.

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

In the past, the Project Proponent has claimed renewable energy credits (RECs) for this Project; however, for this verification period, the Project Proponent did not participate in any other GHG Programs.

3.2 Methodology Deviations

The Project Proponent utilizes the UNFCCCDDM methodology entitled: "Consolidated baseline methodology for grid connected electricity generation from renewable sources (ACM0002), Version 09.0", dated 13 February 2009 as per the registered VCS Project Description (VCS PD), dated November 2008. No methodology deviations have occurred.

3.3 Project Description Deviations

The Project description has not deviated since the Validation Report was completed.

3.4 Grouped Project

Grouped projects are projects structured to allow the expansion of a project activity subsequent to project validation. This does not apply to the Red Hills Project since the project description did not set out geographic areas within which new project activity instances would be developed.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

The Project received its Validation Representation with the VCS dated 18 November 2009 as a Renewable Energy Industries type project under Sectoral Scope 1 defined by the UNFCCC and adopted by the VCS. The Project was registered utilizing the approved consolidated large-scale methodology entitled "Grid connected electricity generation from renewable sources", Version 09 (ACM0002) with a renewable crediting period of 10 years commencing on 11 November 2008 and concluding on 10 November 2018.

During the verification, a Site Visit was conducted during which the Project implementation status was reviewed. The following paragraphs outline the information that was confirmed regarding the implementation status of the Project.

The Project's intent is to generate electricity from renewable sources and therefore displace electricity that otherwise would have been produced for, or distributed to, the SPP grid in the absence of the Project.

The Project is located over approximately 5,000 acres with the grid connection point geographic coordinates as follows:

Latitude: 35.5° N
Longitude: -99.4° W

The Project achieves GHG emissions reductions through the installation and operation of 82 Acciona Windpower AW-77/1500, 1.5-MW turbines for a total rated nameplate capacity of 123 MW. The turbines are located over an area of approximately 5,000 acres of rural and agricultural/grazing lands. Electricity generated by the turbines is upgraded from a 34.5-kilovolt (kV) collection line rating to a 138-kV rating at the Project substation and then transferred via transmission line to the point of interconnection at the WFEC transmission line where the electricity is then delivered to the SPP grid.

The CRA Project Team confirmed the implementation status of the Project during the Site Visit and confirmed the following details:

- At the time of the Site Visit there were 82 erected turbines capable of operation with a total nameplate capacity of 123 MW
- Regular maintenance activities to replace various turbine parts are executed as required throughout the year. Operating issues related to malfunctioning gear boxes in two (2) of the turbines were noted in 2013. Both were repaired within the fifth consecutive monitoring period.
- 2013 witnessed several severe storms during which the wind turbines were shut down. Other than this downtime, turbine operations were not affected outside of regular maintenance and normal troubleshooting.
- Monitoring of required parameters as per the approved Monitoring Plan is conducted via two electricity meters; a revenue meter and the check meter. The revenue meter is owned by WFEC and the check meter is owned by the Project Proponent. Each meter monitors the net electricity generated as per the approved Monitoring Plan. The revenue meter, as per the signed interconnection agreement, is the meter of record. The Project Proponent does not have access to the revenue meter.



Figure 1 - Custody Meter (SN # 82093242)



Figure 2 - Check Meter (SN# LT-0808A309-01)

No material discrepancies were noted between the Project and the Project Description.

4.2 Accuracy of GHG Emission Reduction and Removal Calculations

4.2.1 Monitoring Parameters

The following is a list of monitoring parameter(s) that the Project Proponent measured and recorded in order to calculate the claimed emission reductions throughout the Monitoring Period:

<i>Symbol</i>	<i>Monitoring Parameter Description (Units)</i>	<i>Frequency</i>
EG _y	Electricity supplied to the SPP Grid (MWh)	Continuous/Real-Time (electricity meter)
TEG _y	Total electricity produced by the Project, including the electricity supplied to the grid and the electricity supplied to internal loads (MWh)	Continuous/Real-Time (electricity meter)

Upon review of the approved methodology, ACM0002, Version 09, the CRA Project Team has determined that previous verifications of the Project applied a conservative factor in calculation of total emission reductions. As per ACM0002, Version 09, the Project Proponent is only required to monitor the electricity supplied to the grid. Later versions of the methodology were updated to include the electricity back-fed into the Project via the parameter termed as "net electricity supplied to the grid". The monitoring of TEG_y in accordance with the approved methodology is applicable only to hydro power plants in order to measure internal loads. However; as the precedent was set at the time of validation in addition to the first verification, WFEC has applied the consumption emissions in order to obtain net electricity generated. It is the CRA Project Team's determination that this inclusion provides a conservative estimate of the total emission reductions. No REC's were sold in 2013 and all emission reductions are being claimed as VCU's.

4.2.2 Methods for Recording Monitoring Parameters

Emission reductions regarding this Project are entirely dependent upon the direct measurement of the electricity both supplied and taken from the SPP grid which combines to form the net electricity generated. The net electricity generated is measured directly at the point of interconnection to the SPP grid at the WFEC substation. Located within this substation are two separate electricity meters; the revenue (main) meter (SN#82093242) and the check meter (SN# LT-0808A309-01). The revenue meter is owned by WFEC and the check meter is owned by the Project Proponent. Each of the meters is classified as a bi-directional meter in that they record electricity supplied to, and taken from, the grid. Invoices tracking these electricity records were made available by the Project Proponent and WFEC as will be discussed in Section 3.3. Net electricity generated is recorded in the units of MWh.

WFEC records the net electricity generation of the Project through the use of the revenue meter as stated above. The Project Proponent reviews the provided WFEC revenue meter values against their check meter values on a monthly basis. Invoices are provided from the Project Proponent to WFEC on a monthly basis stating the quantity of electricity supplied to the SPP grid. The Project Proponent utilizes the data from the check meter in comparison to the revenue meter data supplied by WFEC to confirm the invoice quantities. Once the invoices are confirmed and any reconciliation is made, the appropriate payments are made. The CRA Project Team notes

that the revenue and check meters were in perfect agreement during the Monitoring Period and, therefore, no reconciliations were required.

All data parameters recorded by the revenue meter are accessed only by the WFEC personnel. The Project Proponent personnel are able to access the check meter data via wireless interface. Additionally, the Project Proponents utilize a Supervisory Control and Data Acquisition (SCADA) System to record only electricity output from the project substation. The Project Proponent accesses this information through the System Operations Centre, located in Chicago, Illinois. The Project Proponent then correlates the data on a monthly basis and invoices WFEC for the electricity input into the grid. The total amount of electricity back fed in to the Project is invoiced separately to the Project Proponent from Northfork Electric Cooperative Inc. on a monthly basis.

It is the CRA Project Team's opinion that methods employed by the Project Proponent and WFEC meet the requirements of the registered VCS PD and the associated approved methodology and additionally provide a level of redundancy with the monitoring of net electricity generated with two separate meters.

4.2.3 Calculation of Emission Reductions

The value of net electricity supplied to the grid once obtained, is then multiplied by the grid emission factor that was established as an ex-ante parameter during the validation stage, and is therefore only required to be updated upon renewal of the crediting period. The grid emission factor established for this initial crediting period is 0.67 tCO₂/MWh. As the Project is displacing only CO₂ emissions from electricity production, the resulting number value is then multiplied by the global warming potential of CO₂ as follows:

- GWP CO₂ = 1 tCO₂e/1 tCO₂

The calculations used to determine the overall emission reductions as applied to the Microsoft Excel spreadsheet provided by WFEC are as follows:

Total Emission Reductions (ER) Calculation:

$$ER_y = BE_y - PE_y - L_y$$

Where:

- BE_y = Total baseline emissions (tCO₂e)
- PE_y = Total project emissions (tCO₂e)
- L_y = Total leakage emissions (tCO₂e)

Baseline Emissions (BE) Calculation:

$$BE_y = EG_y * EF_{grid,CM,y}$$

Where:

EG_y = Net electricity supplied to the SPP grid by the Project (MWh)

$EF_{grid,CM,y}$ = Ex-ante grid emission factor (0.67 tCO₂/MWh)

The net electricity generated (EG_y) is calculated through the subtraction of the total electricity produced by the Project (TEG_y) from the electricity consumed from the grid. As mentioned previously this measurement is completed through the use of bi-directional electricity meters and is confirmed through the review of invoices.

Project Emissions Calculations:

Project emissions are not quantified or required to be quantified based on the registered VCS PD and the approved methodology. Therefore, $PE_y = 0$.

Leakage Emissions Calculations:

Leakage emissions are not quantified or required to be quantified based on the registered VCS PD and the approved methodology. Therefore, $L_y = 0$.

4.3 Quality of Evidence to Determine GHG Emission Reductions and Removals

Through the verification process, the CRA Project Team raised several corrective action and clarification requests to WFEC in order to request evidence to support the emission reductions claims made in the Monitoring Report. These requests were provided to WFEC in order to ensure the relevance, consistency, transparency, completeness, accuracy, and conservativeness of the statements and calculations made.

In accordance with Article 7, Section 7.4 of the Southwest Power Pool Interconnection Agreement for Gen-20002-005, Red Hills Wind Project, the Transmission Provider (SPP) is required to:

Inspect and test all Transmission Provider-owned Metering Equipment upon installation and at least once every two (2) years thereafter.

If Metering Equipment fails to register, or if the measurement made by Metering Equipment during a test varies by more than two percent from the measurement made by the standard meter used in the test, Transmission Provider shall adjust the measurements by correcting all measurements for the period during which Metering Equipment was in error by using Interconnection Customer's check meters, if installed. If no such check meters are installed or if the period cannot be reasonably ascertained, the adjustment shall be for the period immediately preceding the test of the Metering Equipment equal to one-half the time from the date of the last previous test of the Metering Equipment.

As previously discussed in Section 4.1.2, the CRA Project Team and WFEC discussed the tolerable error allowed under Interconnection Agreement and the technical specifications for the meters. WFEC informed the CRA Project Team that, should a meter's error be greater than the 0.1 percent value listed in the Interconnection Agreement, the meter will be replaced. WFEC would notify the Project Proponent should any meter replacements be required.

The following summarizes the testing of Metering Equipment:

<i>Meter</i>	<i>Serial #</i>	<i>Manufacturer Calibration Frequency</i>	<i>Interconnection Agreement Acceptance Test Frequency</i>	<i>Initial Factory Calibration Date</i>	<i>Accuracy Testing Date</i>
Revenue Meter Manufacturer: Transdata Model: EMS-60 Error Class: +/- 0.2 percent	82093242	Calibration not required (digital device). Manufacturer does not specify frequency of accuracy checks.	Typically done annually but required once every 2 years at minimum	15 October 2008	20 November 2013, 24 October 2012, 28 December 2011 and 14 July 2010
Check Meter Manufacturer: Power Logic Model: ION8600 Error Class: +/- 0.2 percent	LT-0808A309-01	Calibration not required (digital device). Manufacturer does not specify frequency of accuracy checks.	In accordance with Good Utility Practice	11 May 2009	N/A

Overall, the CRA Project Team has determined that the Project Proponent/WFEC has provided sufficient documentation as requested though the findings stated above. While not required for this Project, the use of the check meter in relation to the revenue meter provides a further level of redundancy in the calculation of emission reductions and electricity sales.

4.4 Non-Permanence Risk Analysis

CRA has assigned the Fully Implemented risk ranking to the Project during the fifth consecutive monitoring period, confirming that all best practice expectations were implemented, resulting in a low risk for reporting. This ranking has been assigned based on the results of the verification process. No material discrepancies were observed by CRA in the verification of the Project, and no material errors were noted by the CRA Project Team, resulting in a low risk for reporting and a Fully Implemented ranking.

5 VERIFICATION CONCLUSION

CRA was contracted by Western Farmers Electric Cooperative (Client) on behalf of Red Hills Wind Project, LLC (Project Proponent) to perform the second verification of the Red Hills 123 MW Wind Power Project in the State of Oklahoma, U.S.A.

As stated in Section 1.1, CRA, as verifier is responsible for reviewing the VCS Monitoring Report and any supporting documentation to ensure that the principles of VCS Program Guide, Version 3.5, and VCS Standard, Version 3.4 are met, specifically that the registered Project has resulted in emission reductions that are:

- Relevant
- Complete
- Consistent
- Accurate
- Transparent
- Conservative

Verification Opinion

The verification was performed in accordance with the VCS Program Guide, Version 3.5, and VCS Standard, Version 3.4 in addition to the UNFCCC CDM methodology and associated methodological tools.

Through the construction of an 82 turbine wind power project with a total nameplate capacity of 123 MW, the registered Project has resulted in a reduction of GHG emissions that are relevant, complete, consistent, accurate, transparent and conservative. Furthermore, the emission reductions generated by the registered Project have served to contribute to sustainable development, and resulted in long-term benefits to the mitigation of climate change.

Upon completion of the verification process it is the CRA Project Team's opinion that that all relevant VCS verification criteria have been satisfied. The registered Project properly applies the criteria of ACM0002, Version 09. Within the VCS Monitoring Report it was demonstrated and confirmed by CRA that the Project Proponent/WFEC has applied the Monitoring Plan as per the requirements of the registered VCS PD. Therefore, it is CRA's opinion that the emission reductions attributable to the registered Project during the fifth monitoring period are stated in a manner that is materially correct and is a fair representation of implemented Project as per the VCS PD.

All CARs and CLs raised by CRA have been satisfactorily closed by the Client/Project Proponent. The claimed emission reductions have been reviewed by CRA for completeness, accuracy, and consistency. No cumulative errors were noted by the CRA Project Team and therefore no material errors were noted.

Based on the verification assessment performed, CRA is issuing a Positive Verification Opinion in regards to this Project and will therefore recommend/certify that the registered Project has obtained the reported emission reductions as follows:

Reporting period: From 01 January 2013 to 31 December 2013

GHG Emission Reductions or Removals	tCO ₂ e
Baseline Emissions	284,485
Project Emissions	0
Leakage	0

GHG Emission Reductions or Removals	tCO ₂ e
Net GHG emission reductions or removals	284,485

Respectfully Submitted,

CONESTOGA-ROVERS & ASSOCIATES LIMITED



Adam Loney, P. Eng.



Brent Boss, P. Eng.

ANNEX A

ABBREVIATIONS

ACM	Approved Consolidated Methodology
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CL	Clarification Request
CO ₂ e	Carbon Dioxide Equivalent
CRA	Conestoga-Rovers & Associates Limited
DOE	Designated Operational Entity
FAR	Forward Action Request
GHG	Greenhouse Gas
kV	Kilovolt
MW	Megawatt
SCADA	Supervisory Control and Data Acquisition
SPP	Southwest Power Pool
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Verified Carbon Standard
VCS PD	Verified Carbon Standard Project Document
WFEC	Western Farmers Electric Cooperative

ANNEX B

VERIFICATION CHECKLIST

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

Project No.: 077717 **Project Title:** Red Hills Wind 123 MW Project
Project Team: Brent Boss, Zachary Zehr, Adam Loney **Date:** 13 March 2014

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
Determine whether the project activity complies with the requirements of paragraph 62 of the CDM modalities and procedures.	☒	Not Applicable.	Yes ☒ No ☐
Ensure that only verification activities undertaken after the publication of the monitoring report on the VCS website shall be used as a basis for the DOE to conclude their verification and submit a request for issuance of VCUs to VCS.	☒	Only verification activities undertaken after the publication of the monitoring report on the VCS website were used as the basis for CRA to conclude its verification and submit the request for issuance of VCUs to the VCSA.	Yes ☒ No ☐
Make publicly available the monitoring report received from the project participants in accordance with the Project cycle procedure. Unless the CDM Board has agreed to grant an exception, a DOE shall not perform verification functions on a project activity for which it has performed the function of validation/registration.	☒	Not Applicable.	Yes ☒ No ☐
Assess both quantitative and qualitative information on emission reductions provided in the project documentation.	☒	During the verification process, CRA considered both quantitative and qualitative information on emission reductions. Quantitative data was comprised of the monitoring report submitted by the Project Participant. Qualitative data was comprised of information on internal management controls, calculation procedures, procedures for transfer, frequency of emissions reports, and review and internal audit of calculations/data transfers.	Yes ☒ No ☐

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
Assess and determine whether the implementation and operation of the project activity, and the steps taken to report emission reductions comply with the CDM criteria and relevant guidance provided by the VCSA. This assessment shall involve a review of relevant documentation as well as an on-site visit(s).	☒	CRA's assessment of the project activity implementation and operation are detailed in Section 4 of the Verification Report. The relevant decision, clarifications and guidance from the CMP and the CDM EB were checked and there is no issue in this regard.	Yes ☒ No ☐
Assess whether the data collection system meets the requirements of the monitoring plan as per the applied methodology including applicable tool(s).	☒	CRA's assessment of the data collection system is detailed in Section 4 of the Verification Report. The formulae and methods used to calculate the baseline emissions, project emissions, and leakage are appropriate and in line with the approved methodology.	Yes ☒ No ☐
DOCUMENT (DESK) REVIEW			
In addition to the monitoring documentation, review:			
(1) The registered VCS PD, monitoring plan, including any approved revised monitoring plan and/or changes from the registered VCS PD, and the corresponding validation opinion;	☒	Not Applicable	Yes ☒ No ☐
(2) The validation report and previous verification reports, if any;	☒	CRA project team checked from the validation report and previous verification report and confirmed that there are no pending issues from the previous verification or validation process.	Yes ☒ No ☐
(3) The applied monitoring methodology;	☒	The monitoring report is consistent with the version of the methodology against which the VCS PD was registered. The methodology applied for the project activity was ACM0002 Version 9.0.0.	Yes ☒ No ☐
(4) The monitoring report to verify that it is as per the standardized format;	☒	CRA reviewed the Monitoring Report against VCS Monitoring Report Template Version 3.3. CRA confirmed that the Monitoring Report is as per the standardized format.	Yes ☒ No ☐

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
(5) Relevant decisions, clarifications and guidance from the VCSA;	☒	None found.	Yes ☒ No ☐
(6) Assess the quality control system that is responsible for safeguarding data;	☒	Provided in VCS PD and further assessed during Site Visit.	Yes ☒ No ☐
(7) Monitoring records that sustain claimed emission reductions;	☒	Calculations and backup was provided by Project Proponent.	Yes ☒ No ☐
(8) Any other information and relevant references on the project activity and project operator; and	☒	No additional information was observed.	Yes ☒ No ☐
(9) Ensure all FARs referenced in the Validation Report have been properly addressed during the monitoring period.	☒	Not applicable. No FARs were raised in the course of the validation or the verification.	Yes ☒ No ☐
QUALITY OF EVIDENCE			
(1) Determine that there is a clear audit trail that demonstrates:			
Whether sufficient evidence is available, both in terms of frequency (time period between evidence) and coverage (in covering the full monitoring period);	☒	The complete set of data has been checked and there has been no discrepancies observed. See Section 2.3 of the Verification Report for details.	Yes ☒ No ☐
The source and nature of the evidence (external or internal, oral or documented, etc.); and	☒	See Section 2.3 of the Verification Report for details.	Yes ☒ No ☐
Cross-check the monitoring report against other sources such as comparable information, where available, from sources other than those used in the monitoring report to determine whether the stated figures are correct.	☒	Data are crosschecked with electricity bills /invoices and there has been no discrepancies observed. See Section 2.3 of the Verification Report for details.	Yes ☒ No ☐
(2) The DOE shall assess that the data collection system meets the requirements of the monitoring plan as per the applied methodology including applicable tools.	☒	See Section 4.2.2 of the Verification Report for details.	Yes ☒ No ☐
(3) The DOE shall only certify emission reductions that are based upon verifiable evidence.	☒	See Section 5.0 of the Verification Report for details.	Yes ☒ No ☐
(4) Apply standard auditing techniques to assess the quality of the information, including, but not limited to:			

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
A review of the data and information presented to verify their completeness;	☒	CRA reviewed the data and information provided and confirmed the Project Participant provided a complete set of data for the specified monitoring period. CRA project team verified and confirm that the monitoring report and the supporting documents are complete in accordance with the latest applicable version of the information and reporting checklist for request for issuance of VCUs, verifiable in accordance with VCS requirements.	Yes ☒ No ☐
A review of the monitoring plan and monitoring methodology, including applicable tools, paying particular attention to the frequency of measurements, the quality of metering equipment, including calibration requirements, and the quality assurance and quality control procedures; and	☒	Section 4.2 of the Verification Report details frequency of measurements, metering equipment quality and calibrations, and quality assurance and quality control procedures.	Yes ☒ No ☐
An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.	☒	Section 4.0 of the Verification Report addresses this verification requirement.	Yes ☒ No ☐
ON-SITE ASSESSMENT			
On-site assessment will consist of the following:			
An introduction meeting and explanation of objectives of the verification;	☒	Completed at Site Visit on drive to Site with the Project Proponent	Yes ☒ No ☐
An assessment of the implementation and operation of the registered VCS project activity as per the registered VCS PD or any approved revised VCS PD;	☒	The project activity and its operation are in accordance with the registered VCS PD. This has been confirmed during Site Visit and interview with the personal responsible for operation and maintenance of project activity. See Section 2.4 of the Verification Report for details.	Yes ☒ No ☐
A review of information flows for generating, aggregating, and reporting the monitoring parameters;	☒	See Section 4.2.1 of the Verification Report for details.	Yes ☒ No ☐

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
Interviews with relevant personnel at the site to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the VCS PD;	☒	Site visit was conducted on 13 March 2014. See Section 2.4 of the Verification Report for details.	Yes ☒ No ☐
A cross-check between information provided in the monitoring report and data from other sources such as plant log books, inventories, purchase records, or similar data sources;	☒	See Section 2.1 of the Verification Report for details.	Yes ☒ No ☐
A check of the monitoring equipment including calibration certificates and performance and observations of monitoring practices against the requirements of the VCS PD and the selected methodology and the corresponding tool(s);	☒	See Section 2.1 of the Verification Report for details.	Yes ☒ No ☐
A review of calculations and assumptions made in determining the GHG data and emission reductions;	☒	Working paper recalculation was completed by CRA. See Section 4.2.3 of the Verification Report for details.	Yes ☒ No ☐
An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters;	☒	CRA confirmed that quality control and quality assurance procedures are sufficient and in place. See Section 2.1 of the Verification Report for details.	Yes ☒ No ☐
Interviews with local project stakeholders, as applicable;	☒	See Section 2.3 of the Verification Report for details.	Yes ☒ No ☐
Specific testing and calculation checks (done on high risk, material data sources, and data management issues);	☒	Most calculations were completed in CRA offices due to the nature of the monitoring parameters.	Yes ☒ No ☐
Close-out meeting presenting the results and findings; and	☒	Conducted at the end of Site Visit.	Yes ☒ No ☐
Development of an agreement on next steps to close out CARs and FARs.	☒	CRA completed this during the Site Visit and re-issued findings and Draft Verification Reports in conjunction with this timeline	Yes ☒ No ☐
CAR/FAR/CL			
(1) Raise a CAR if any of the following occur:			

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
Non-compliance with the monitoring plan or methodology are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient;	☒	In total eight (8) CARs were raised for various issues. See Section 2.5 of the Verification Report for details.	Yes ☒ No ☐
Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants;	☒	There was no discrepancy found with respect to implementation, operation and monitoring of the registered project activity.	Yes ☒ No ☐
Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impair the estimate of emission reductions; and	☒	There was no discrepancy found with respect to assumptions, data or calculations of emission reductions.	Yes ☒ No ☐
Issues identified in a FAR during validation to be verified during verification have not been resolved by the project participants.	☒	There are no pending issues from the previous verification or validation process. No FAR was raised previous verification and validation process.	Yes ☒ No ☐
(2) Raise a CL if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.	☒	In total 1 CL was raised regarding obtaining the Acciona daily report of electricity production. The requested documentation was provided and the CL was closed out.	Yes ☒ No ☐
(3) All CARs and CLs raised during verification shall be resolved prior to submitting a request for issuance.	☒	All closed out. See Section 2.5 of the Verification Report for details.	Yes ☒ No ☐
(4) Raise a FAR during verification for actions if the monitoring and reporting require attention and/or adjustment for the next verification period.	☒	There was no discrepancy found with respect to monitoring and reporting requires attention, hence no FAR was raised.	Yes ☒ No ☐
VERIFICATION OF COMPLIANCE			
The following requirements should be assessed by the DOE:	☒	The project activity meets all requirements.	Yes ☒ No ☐
Determine whether the project activity has been implemented and operated as per the registered VCS PD or any approved revised VCS PD, and that all physical features (technology, project equipment, and monitoring and metering equipment) of the project are in place;	☒	The project activity has been implemented and operated as per the registered VCS PD. See Sections 4.1 of the Verification Report for details.	Yes ☒ No ☐

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
Determine whether the monitoring report and other supporting documents provided are complete in accordance with the latest applicable version of the completeness checklist for requests for issuance of VCUs, verifiable, and in accordance with applicable VCS requirements;	☒	Yes, the monitoring report and other supporting documents provided are complete in accordance with the latest applicable version of the completeness checklist for requests for issuance of VCUs, verifiable, and in accordance with applicable VCS requirements.	Yes ☒ No ☐
Determine whether actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan or any revised approved monitoring plan, and the approved methodology including applicable tool(s); and	☒	Yes, the actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan and the approved methodology including applicable tool(s).	Yes ☒ No ☐
Evaluate the data recorded and stored as per the monitoring methodology including applicable tool(s).	☒	The data was recorded at the WFEC substation. The accumulated monthly reading was considered for invoicing purposes. The meter readings are reflected in the monthly electricity bills. The invoices record provided by the project proponent was checked and found acceptable. The complete set of data has been checked and there has been no discrepancies observed. See Section 4.2.2 of the Verification Report for details.	Yes ☒ No ☐
PROJECT IMPLEMENTATION			
(1) Identify any concerns related to the conformity of the actual project activity and operation with the registered project design document and determine whether: (a) The implementation and operation of the project activity has been conducted in accordance with the description contained in the registered VCS PD; or (b) Any deviation or the proposed or actual changes in the implementation or operation of the project activity comply with the requirements of the Project Standard.	☒	There is no discrepancy found with respect to implementation and operation of the project activity. The Project was implemented exactly as per VCS PD. See Sections 4.1, of the Verification Report for details.	Yes ☒ No ☐

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
(2) By means of an on-site visit, assess that all physical features of the proposed VCS project activity proposed in the registered VCS PD are in place and that the project participants have operated the proposed CDM project activity as per the registered VCS PD. If an on-site visit is not conducted, the DOE shall justify the rationale of the decision.	☒	The project activity and its operation are in accordance with the registered VCS PD. This has been confirmed during the Site Visit and interview with the personal responsible for operation and maintenance of project activity. The Project was implemented exactly as per VCS PD. See Sections 4.1 of the Verification Report for details.	Yes ☒ No ☐
MONITORING PLAN AND MONITORING COMPLIANCE			
For each monitoring period, the DOE shall report:			
The implementation status of the project. For project activities that consist of more than one site, the DOE shall describe the status of implementation and starting date of operation for each site. For project activities with phased implementation, the DOE shall state the progress of the proposed project activity achieved in each phase under verification. If the phased implementation is delayed, the DOE shall describe the reasons and present the expected implementation dates;	☒	Section 4.1 of the Verification Report addresses this Verification Requirement	Yes ☒ No ☐
The actual operation of the project activity; and	☒	Section 4.1 of the Verification Report addresses this Verification Requirement	Yes ☒ No ☐
Information (data and variables) provided in the monitoring report that is different from that stated in the registered VCS PD or any approved revised VCS PD, and has caused an increase in estimates of the emission reductions in the current monitoring period or is highly likely to increase the estimates of emission reductions in the future monitoring periods.	☒	Not Applicable.	Yes ☒ No ☐
COMPLIANCE OF MONITORING PLAN WITH MONITORING METHODOLOGY			
(1) Check the following regarding the monitoring plan:			
The monitoring plan is in accordance with the approved methodology applied by the registered CDM project or an approved revised VCS PD;	☒	The monitoring implemented in compliance with the monitoring plan and monitoring plan is in accordance with the approved methodology applied by the VCS project.	Yes ☒ No ☐

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
Determine whether the project implementation is in accordance with the provisions of the registered VCS PD and/or an approved revised VCS PD; and	☒	Section 4.1 of the Verification Report addresses this Verification Requirement	Yes ☒ No ☐
For monitoring aspects that are not specified in the methodology, particularly in the case of small scale methodologies (e.g. additional monitoring parameters, monitoring frequency and calibration frequency), the DOE should bring to the attention of the Board issues which may contribute in enhancing the level of accuracy and completeness of the monitoring plan.	☒	There is no such issue found.	Yes ☒ No ☐
(2) Assess monitoring activities to verify:	☒		
The monitoring plan is properly implemented and followed by the project participants;	☒	The monitoring plan is implemented as per registered VCS PD	Yes ☒ No ☐
- All parameters stated in the monitoring plan and relevant Board decisions have been sufficiently monitored and updated as applicable, including: - Project emission indicators - Baseline emission indicators - Leakage indicators - Management and operational system: the responsibilities and authorities for monitoring and reporting are in accordance with the responsibilities and authorities stated in the monitoring plan;	☒	Only Baseline Emissions exist in the Project. Management systems are reviewed in Section 4.2.3 of the Verification Report. All parameters are monitored as per monitoring plan contained in registered VCS PD.	Yes ☒ No ☐
The accuracy of equipment used for monitoring is sufficient and regularly controlled and calibrated in accordance with the monitoring plan, the applied methodology, the VCSA guidance, local/national standards, or as per the manufacturer's specifications;	☒	The accuracy of electrical meters was confirmed. See Section 4.3 the Verification Report for details.	Yes ☒ No ☐
Monitoring results are consistently recorded as per approved frequency; and	☒	The monitoring results are found to be consistent with records and approved frequency. This was confirmed by CRA during the Site Visit.	Yes ☒ No ☐
Quality assurance and quality control procedures have been applied in accordance with the monitoring plan.	☒	Yes, quality assurance and quality control procedures as per registered VCS PD. See Section 2.1 of the Verification Report.	Yes ☒ No ☐
COMPLIANCE WITH CALIBRATION FREQUENCY REQUIREMENTS			

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
(1) Determine whether the calibration of those measuring equipments that have an impact on the claimed emission reductions is conducted by the project participants at a frequency specified in the applied monitoring methodology and/or the monitoring plan.	☒	The nature of electrical meters is digital and as such they are only required to be "meter tested". No actual calibrations performed. See Section 4.3 of the Verification Report for details.	Yes ☒ No ☐
(2) If it is identified that the calibration has been delayed and the calibration has been implemented after the monitoring period in consideration (i.e. the results of delayed calibration are available), the DOE may conclude its verification, provided the following conservative approach is adopted in the calculation of emission reductions: (a) Applying the maximum permissible error of the instrument to the measured values taken during the period between the scheduled date of calibration and the actual date of calibration, if the results of the delayed calibration do not show any errors in the measuring equipment, or if the error is smaller than the maximum permissible error; or (b) Applying the error identified in the delayed calibration test, if the error is beyond the maximum permissible error of the measuring equipment.	☒	No calibration delay observed during the monitoring period.	Yes ☒ No ☐
(3) Confirm that the error has been applied:			
In a conservative manner, such that the adjusted measured values of the delayed calibration shall result in fewer claimed emission reductions; and	☒	No calibration delay observed during the monitoring period. Meter Test Report shows that meter is reading within the tolerable error of 2 percent.	Yes ☒ No ☐
For all measured values taken during the period between the scheduled date of calibration and the actual date of calibration.	☒	Not Applicable.	Yes ☒ No ☐
(4) In cases where the results of the delayed calibration are not available, or the calibration has not been conducted at the time of verification, request, prior to finalizing verification, the project participants to conduct the required calibration and shall determine whether the project participants have calculated the emission reductions conservatively.	☒	No calibration delay observed during monitoring period.	Yes ☒ No ☐

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
(5) In cases where it is determined that it is not possible for the project participants to conduct the calibration at a frequency specified by either the applied methodology, guidance provided by the Board, and/or the registered monitoring plan due to reasons beyond the control of project participants, follow the requirements for post registration changes.	☒	No calibration delay observed during monitoring period.	Yes ☒ No ☐
(6) In cases where neither the monitoring methodology nor the monitoring plan specify any requirements for calibration frequency for measuring equipments, determine whether the equipments are calibrated either in accordance with the specifications of the local/national standards, or as per the manufacturer's specification. If neither local/national standards nor the manufacturer's specification are available, international standards may be used.	☒	All the meters are calibrated as per the frequency described under registered VCS PD.	Yes ☒ No ☐
ASSESSMENT OF DATA AND CALCULATIONS OF GHG DATA			
(1) Assess the data and calculations of GHG emission reductions achieved by/resulting from the project activity by the application of the selected approved methodology.	☒	Working paper re-calculation was completed by CRA. See Section 4.2.1 of the Verification Report for details.	Yes ☒ No ☐
(2) Determine during verification that:			
A complete set of data for the specified monitoring period is available. If only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, opt to either raise a CAR for the project participants to comply with the requirements of appendix 1 of the Project standard or submit a request for deviation prior to submitting request for issuance, if applicable ;	☒	The complete set of data has been checked and there has been no discrepancies observed. Annual data of net electricity generated was supplied as per the findings assessments.	Yes ☒ No ☐
Information provided in the monitoring report has been cross-checked with other sources such as plant log books, inventories, purchase records, laboratory analysis;	☒	Confirmed during Site Visit check of the SCADA system.	Yes ☒ No ☐

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
Calculations of baseline emissions and proposed project activity emissions and leakage, as appropriate, have been carried out in accordance with the formulae and methods described in the monitoring plan and the applied methodology document;	☒	Working paper re-calculation was completed by CRA. See Section 4.2.3 of the Verification Report for details.	Yes ☒ No ☐
Any assumptions used in emission calculations have been justified; and	☒	No assumptions made.	Yes ☒ No ☐
Appropriate emission factors, IPCC default values and other reference values have been correctly applied.	☒	The appropriate use of the approved emission factor was confirmed.	Yes ☒ No ☐
ACCURACY			
(1) Checking for accuracy involves:			
For quantitative data and information: minimizing bias and uncertainty in the measurement process and the processing of data; and	☒	Only electricity meters used. Accuracy confirmed as per comment above.	Yes ☒ No ☐
For non-quantitative information: minimizing bias in favour of a particular result.	☒	Only quantitative data was assessed.	Yes ☒ No ☐
(2) Ensure that the level of accuracy and completeness in the monitoring and verification process will not be reduced as a result of the proposed revision. Using objective evidence, assess the accuracy and completeness of each proposed revision to the monitoring plan including the frequency of measurements, the quality of monitoring equipment (e.g. calibration requirements, and the quality assurance and quality control procedures).	☒	The revision to the methodology affected only non-wind power project types. Thus, no update was required.	Yes ☒ No ☐
POST-REGISTRATION CHANGES			
(1) Determine whether the changes do not require prior approval by the VCSA in accordance with Appendix 1 of Project Standard.	☒	Not Applicable.	Yes ☒ No ☐

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
(2) Determine whether the changes are solely of a type(s) listed in appendix 1 of the Project standard and: (a) In such cases, the DOE shall submit the changes as part of the request for issuance in accordance with the Project cycle procedure; and (b) In all other cases, the DOE shall submit the changes via the request for approval of post registration changes process of the Project cycle procedure.	☒	Not Applicable.	Yes ☒ No ☐
(3) Where the changes are submitted to a DOE prior to the commencement of verification, the DOE shall submit the changes via the request for approval of post registration changes process of the Project Cycle Procedure.	☒	Not Applicable.	Yes ☒ No ☐
TEMPORARY DEVIATIONS FROM THE REGISTERED MONITORING PLAN AND/OR MONITORING METHODOLOGY			
Determine whether there are deviations from the registered monitoring plan and/or methodology:			
If it is identified that the project participants have deviated from the registered monitoring plan and/or methodology, and where the provisions of appendix 1 of the Project standard do not apply, the DOE shall seek prior approval from the Board with respect to the acceptability of the deviations in accordance with the Project cycle procedure;	☒	Not Applicable.	Yes ☒ No ☐
Determine whether the deviation is likely to lead to a reduction in the accuracy of the calculation of emission reductions. In cases where the DOE considers that the deviation will lead to a reduction in the accuracy of the calculation of emission reductions, the DOE shall request the project participants to apply conservative assumptions or discount factors to the calculations to the extent required to ensure that emission reductions will not be over-estimated as a result of the deviation; and	☒	Not Applicable.	Yes ☒ No ☐
For cases where a deviation from the monitoring plan may be applicable to the monitoring period under verification, and part of the subsequent monitoring period, verify the exact period to which the deviation applies.	☒	Not Applicable.	Yes ☒ No ☐

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
CORRECTIONS			
Determine whether there are corrections to project information or parameters:			
Verify that any corrections to project information or parameters fixed at validation, as described in the registered VCS PD, made by project participants in a revised VCS PD comply with the requirements of the Project standard; and	☒	Not Applicable.	Yes ☒ No ☐
- If it is identified that the project participants have made corrections to project information or parameters determined at validation, determine whether: - The corrected information is an accurate reflection of actual project information; and/or - The corrected parameters are in accordance with the applied methodology and/or selected monitoring plan.	☒	Not Applicable.	Yes ☒ No ☐
CHANGES TO THE START DATE OF THE CREDITING PERIOD			
If the project participants wish to change the start date of the crediting period in accordance with section 12.8 of the Project standard, the DOE shall determine whether the proposed changes result in a less conservative baseline.	☒	Not Applicable. No changes to the start date of the crediting period were made.	Yes ☒ No ☐
Indicate if the requirements in the Project standard have been met and shall submit a request for post registration changes in accordance with the Project cycle procedure.	☒	Not Applicable.	Yes ☒ No ☐
PERMANENT CHANGES FROM THE REGISTERED MONITORING PLAN OR MONITORING METHODOLOGY			
Verify whether there are permanent changes from the registered monitoring plan and/or methodology.	☒	Not Applicable.	Yes ☒ No ☐
Determine whether the changes to the monitoring plan contained in the registered VCS PD proposed by the project participants are in compliance with the applied methodology and do not reduce the level of accuracy of the monitoring compared with the requirements contained in the registered monitoring plan.	☒	Not Applicable.	Yes ☒ No ☐

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
In cases where the proposed changes refer to a later version of the applied methodology in the registered VCS PD, determine whether the application of any later version of the applied methodology and tools does not impact the conservativeness of the monitoring and verification process, including the related emission reduction calculations.	☒	Not Applicable.	Yes ☒ No ☐
If it is identified that the project participants are unable to implement the monitoring plan contained in the registered VCS PD and it will not be possible to monitor the registered CDM project activity in accordance with a monitoring plan that would comply with the applied methodology and any applicable tools or the relevant provisions of appendix 1 of the Project standard, the DOE shall request guidance from the Board concerning the acceptability of the permanent changes in accordance with the section on post registration changes in the Project cycle procedure.	☒	Not Applicable.	Yes ☒ No ☐
Determine whether the permanent changes are likely to lead to a reduction in the accuracy of the calculation of emission reductions. In cases where the DOE considers that the permanent changes will lead to a reduction in the accuracy of the calculation of emission reductions, the DOE shall request the project participants to apply conservative assumptions or discount factors to the calculations to the extent required to ensure that emission reductions will not be over-estimated as a result of the permanent change.	☒	Not Applicable.	Yes ☒ No ☐
CHANGES TO THE PROJECT DESIGN OF A REGISTERED PROJECT ACTIVITY			
Determine whether there are proposed or actual changes to the project design of a registered VCS project activity.			
If it is identified that the project design in the implementation or operation of the project activity does not conform with the description contained in the registered VCS PD or the relevant provisions of appendix 1 of the Project standard, the DOE shall request guidance from the Board concerning the acceptability of the proposed or actual changes in accordance with the section on post registration changes in the Project cycle procedure.	☒	Not Applicable.	Yes ☒ No ☐

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
In case of actual changes, the DOE shall, by means of an on-site visit and review of the submitted revised VCS PD by the project participants, which describes the nature and extent of the actual changes, determine whether this description accurately reflects the implementation, operation and monitoring of the modified project activity.	☒	Not Applicable.	Yes ☒ No ☐
Conduct an on-site inspection to assess the impacts of the actual changes on the compliance of the monitoring plan, the applied monitoring methodology and tools and/or the level of accuracy of the monitoring activity.	☒	Not Applicable.	Yes ☒ No ☐
Determine, by means of reviewing the revised VCS PD against applicable additionality and methodological requirements, whether the proposed or actual changes would adversely affect the conclusions of the validation report of the registered VCS PD with regard to: (a) Additionality of the project activity; (b) Scale of the project activity; (c) Applicability and application of approved baseline methodology under which the project activity has been registered; or (d) The compliance of the monitoring plan with the applied monitoring methodology.	☒	Not Applicable.	Yes ☒ No ☐
If the proposed or actual changes affect the additionality of the project activity then confirm that: (a) In the case of investment analysis, project participants have only modified the key parameters in the original spreadsheet calculations affected by the proposed or actual changes to the project activity; or (b) In the case where only barriers have been claimed to demonstrate additionality, project participants have demonstrated that the barriers are still valid under the new circumstances.	☒	Not Applicable.	Yes ☒ No ☐
In cases where the proposed or actual changes impact the implementation of the project activity and where the original methodology would no longer be applicable, and where the project participant applies a later version of the methodology or another methodology that is applicable to the project activity, the DOE shall confirm that the applied methodology and tools do not impact the conservativeness of the monitoring and verification process and the related emission reduction calculations.	☒	Not Applicable.	Yes ☒ No ☐

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
Assess whether the revised VCS PD complies with the applied monitoring methodology and tools or any later version of the methodology or the requirements of another methodology that is applicable to the project activity.	☒	Not Applicable.	Yes ☒ No ☐
VERIFICATION REPORT			
(1) The final verification report will include:			
A summary of the verification process and the scope of verification;	☒	Yes, summary of the verification process and the scope of verification covered in final Verification Report. See Section 2.0 of the Verification Report.	Yes ☒ No ☐
Details of the verification team, technical experts, internal reviewers involved, together with their roles in the verification activity and details of who conducted the on-site visit;	☒	Yes, details of the team are included in Section 2.2 of the Verification Report.	Yes ☒ No ☐
Findings of the desk review and site visit;	☒	All findings raised during the verification were appropriately addressed. See Section 3 of the Verification Report.	Yes ☒ No ☐
- Project Team's findings and conclusions as to whether: a) The project activity has been implemented in accordance with the registered VCS PD or any approved revised VCS PD; b) The monitoring plan complies with the monitoring methodology and the actual monitoring complies with the monitoring plan, including compliance with any guidance provided by the Board regarding deviations from the provisions of a registered plan and/or methodology; and c) The data and calculation of GHG emission reductions have been assessed to correctly support the emission reductions being claimed.	☒	See Sections 2.5 of the Verification Report.	Yes ☒ No ☐
A list of each parameter specified by the monitoring plan and a statement on how the values in the monitoring report have been verified;	☒	All parameters are discussed in the Verification Report (Section 4.2.1).	Yes ☒ No ☐

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

VERIFICATION REQUIREMENTS		Comments	Peer Reviewer
A statement that identifies any changes to the registered VCS PD, and their date of approval by the VCSA;	☒	None such statements made.	Yes ☒ No ☐
Assessment and close out of any CARs, CLs, or FARs issued to the project participants;	☒	See Sections 2.5 of the Verification Report.	Yes ☒ No ☐
Assessment of remaining issues from the previous verification period, if appropriate;	☒	There are no pending issues from the previous verification period. See Section 4.1 of the Verification Report.	Yes ☒ No ☐
Conclusion on the verified amount of emission reductions achieved; and	☒	The emission reductions as verified by CRA (01 January 2013 - 31 December 2013) is 284,485 tCO ₂ e.	Yes ☒ No ☐
Describe all documentation supporting verification and make it available on request.	☒	Section 2.2 of the Verification Report addresses this Verification Requirement	Yes ☒ No ☐

Additionally, as per Section 10 of the VVS, the DOE may be contracted to perform additional verification activities:

If such services are requested the following will be assessed in addition:

		Comments	Peer Reviewer
PROGRAMME OF ACTIVITIES			
If, subsequent to the registration of the programme of activities (PoA), a new coordinating/managing entity is added then the DOE that is undertaking the next inclusion of a CPA shall submit: a) New letter(s) of authorization from each respective host Party stating the change in coordinating/managing entity; b) A confirmation from the new coordinating/managing entity that the PoA will be developed and implemented with the same set framework as originally described in the CDM-PoA-DD; and c) A validation opinion regarding the compliance of the new coordinating/managing entity.	☒	Not Applicable.	Yes ☒ No ☐
POST-REGISTRATION CHANGE TO BOUNDARY OF PROGRAMME OF ACTIVITIES			

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

		Comments	Peer Reviewer
Determine whether the CDM PoA has been amended post-registration: a) To expand the geographic coverage or to include an additional host Parties; or b) To update the eligibility criteria for the inclusion of CPAs; or c) To remove methodologies from the registered PoA	☒	Not Applicable.	Yes ☒ No ☐
If the boundary of the PoA is amended post-registration to expand the geographic coverage or to include an additional host Party, assess and confirm that: a) The existing registered PoA design document (CDM-PoA-DD) is revised to reflect the changes, in particular the eligibility criteria for inclusion of CPAs; b) The baseline established in the CDM-PoA-DD is applicable to the extended PoA boundary; and c) In the case of inclusion of additional host Parties, the DNA of the new host Party issues a letter of approval for the PoA and a letter of authorization for the coordinating/managing entity where the amended PoA boundary includes additional host Parties.	☒	Not Applicable.	Yes ☒ No ☐
If the PoA has been amended to update the eligibility criteria for the inclusion of CPAs, assess and confirm that: a) the update of the eligibility criteria complies with provisions and conditions set out in the "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities"; b) the updated eligibility criteria meet the requirements of the methodologies applied in the PoA; and c) the existing registered PoA design document (CDM-PoA-DD) is revised appropriately to reflect the updated eligibility criteria for inclusion of CPAs.	☒	Not Applicable.	Yes ☒ No ☐

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

		Comments	Peer Reviewer
If the PoA has been amended to remove approved baseline and monitoring methodologies, assess and confirm that: a) the change only involves the removal and no addition of methodologies; and b) the removal of the methodologies does not affect the physical design of and the end-use service provided by the CPAs that apply the approved methodologies that remain (i.e. the methodologies that were not removed).	☒	Not Applicable.	Yes ☒ No ☐
Determine whether the CDM PoA has been amended post-registration to add specific-case CPA-DDs. Where specific-case CPA-DDs were added, assess and confirm that the specific-case CPA-DDs that were added correspond to generic CPA-DDs for which specific-case CPA-DDs had not been submitted at the time of request for registration of the PoA.	☒	Not Applicable.	Yes ☒ No ☐
Determine whether the generic CPA and specific CPA have been amended post-registration to change the project design due to modification to or addition of technologies/measures. Where the project design has been changed, assess and confirm that: a) The applicability conditions of the approved baseline and monitoring methodologies and tools that are applied cover the modified or added technologies/measures (i.e. the modified or added technologies/measure are applicable under the approved baseline and monitoring methodologies; b) The modified or added technologies/measures were already included in the originally registered PoA-DD and the eligibility criteria for these technologies/measures had been specified in the originally registered PoA-DD; and c) The amendments comply with all the applicable requirements, including those set out in the "Clean development mechanism project standard", the "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities" and the applicable baseline and monitoring methodologies.	☒	Not Applicable.	Yes ☒ No ☐
REQUEST FOR ISSUANCE OF CERTIFIED EMISSION REDUCTIONS OF A PoA			

CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES

		Comments	Peer Reviewer
A DOE that has not performed validation activities for a PoA (validation of the PoA, inclusion of CPAs, renewal of the PoA, or renewal of crediting period of CPAs) shall:	☒	Not Applicable.	Yes ☒ No ☐
Identify those CPAs that it shall consider for verification in accordance with the method/procedure to be used for verification of the amount of reductions of anthropogenic emissions by sources or removals by sinks of greenhouse gases achieved by the CPAs under the PoA and determined in the PoA-DD;	☒	Not Applicable.	Yes ☒ No ☐
Take into account the possible existence of CPAs complying with different versions of the PoA and the need to account for this in its sampling approach, to ensure that a statistically sound sample of CPAs from each version of the PoA are being verified;	☒	Not Applicable.	Yes ☒ No ☐
Make the monitoring report publicly available immediately in accordance with the Project cycle procedure; and	☒	Not Applicable.	Yes ☒ No ☐
Systematically verify and certify the correct implementation and operation of the record-keeping system.	☒	Not Applicable.	Yes ☒ No ☐
Include in the verification report a description of how it applied the methods/procedures for the purpose of verification stipulated in the registered CDM-PoA-DD. The DOE shall include in its verification report a description/justification of the site visits undertaken.	☒	Not Applicable.	Yes ☒ No ☐
Request issuance of CERs for a PoA in accordance with the Project cycle procedure. The request shall relate to all CPAs included in the PoA during the specified monitoring period. The monitoring periods shall be consecutive.	☒	Not Applicable.	Yes ☒ No ☐
A request for issuance shall relate to the certified emission reductions verified as per the above.			

**CDM VERIFICATION CHECKLIST
CONESTOGA-ROVERS & ASSOCIATES**

<i>Peer Reviewer Final Checks</i>	<i>Comments</i>	<i>Peer Reviewer</i>

Team Leader Signature

Technical Reviewer Signature

Technical Expert Signature

Technical Review Technical Expert Signature

ANNEX C

CURRICULATIVE VITAE

EDUCATION

B.Eng. Environmental Engineering (Co-op), University of Guelph, 2008
Other
Courses: 40-Hour OSHA Health and Safety Training (as per OSHA 29 CFR 1910.120), 2006

EMPLOYMENT

2008- Project Engineer
Present Conestoga-Rovers & Associates
2007 Student Engineering Assistant, Conestoga-Rovers & Associates (8 months)
2006 Student Engineering Assistant, Conestoga-Rovers & Associates (8 months)
2005 Student Biomonitoring Technician, Ontario Ministry of the Environment (4 months)

AFFILIATIONS

Association of Professional Engineers of Ontario, Practicing Member (P.Eng.)

PROFILE OF PROFESSIONAL ACTIVITIES

Greenhouse Gas Validation/Verification Projects

- Listed as a Key Team Member and Project Manager in the Greenhouse Gas Assurances (GGAS) Group and assisted in the successfully obtaining CRA's Designated Operating Entity (DOE) status with the UNFCCC effective as of May 28, 2010
- Lead the application and registration of CRA with the Verified Carbon Standard (VCS) as an accredited Validator/Verifier and is the primary contact and project resource for all VCS related project works and will be completing a validation of verification of a wind project located in Oklahoma as a Lead Auditing Team Member (2011)
- Currently in the process of completing a CDM validation as a Lead Auditor in Training for a carbon dioxide removal project activity at a hydrogen production facility in Argentina (2011). Work includes findings assessment preparation, site-visit, and validation report and validation opinion formation
- Conducted greenhouse gas verification assessments as a Lead Auditor in Training for three projects for Alberta Environment; a liquid natural gas plant in Boyle, Alberta (2011), a pulp mill (2011) in Fort Saskatchewan, Alberta, and a static-pile aerobic composting site (2009) in Edmonton, Alberta under the Alberta Offset System which included a site visit, review of the overall processes, record keeping practices and techniques, emission reduction calculations compliance, and a report on findings
- Currently in the process of completing two CDM validations as a Lead Auditor for landfill sites located in Los Angeles, Chile and in Tucumán, Argentina (2011). Work includes findings assessment preparation, site-visit, and validation report and validation opinion formation
- Currently in the process of completing a VCS validation and verification assignment as a Lead Auditor in Training for wind power project located in Dempsey Ridge, Oklahoma (2011). Work includes findings assessment preparation, site-visit, and validation report and validation opinion formation and subsequent verification reports.

- Currently in the process of completing a Swiss Charter verification as a Lead Auditor for a refrigerator recycling plant located in São Paulo, Brazil (2011). Work includes findings assessment preparation, site-visit, and verification report and verification opinion formation
- Experience with the validation process in preparation of Project Design Documents (PDD) for emission reduction projects related to landfill gas destruction under the Clean Development Mechanism (CDM) for the Manaus landfill (Manaus, Brasil)
- Performed greenhouse gas emission reductions calculations and prepared the Monitoring Report for the Aurà and CEAMSE landfill sites in Brasil and Argentina respectively. The reports were completed to UNFCCC standards and included a review of the overall process, record keeping practices and techniques and emission reduction calculation compliance
- Performed greenhouse gas emission reduction calculations using a modified first order kinetic landfill gas model for a municipal solid waste anaerobic digester under CDM requirements for various sites across the Canada and the USA as well as in Egypt. All of these Sites also included an assessment of emission reductions associated with cogeneration
- Completed assessment for emission reduction credits for a large-scale operation green-packaging project using sugar cane bagasse in Brasil under CDM biomass methodology AM0057 requirements. The project additionally generates electricity using the bagasse material
- Prepared detailed assessment of transferability of Alberta Offset System protocols to CDM protocols in relation to both cement and asphalt methodologies
- Conducted a greenhouse gas verification report for the Eastview Landfill Site in Guelph, Ontario. The report was compiled in accordance with the requirements of the PERRL Initiative
- Developed a Project Information Note (PIN) for the emissions avoided through aerobic composting at the Orgaworld London and Ottawa, Ontario composting facilities as well as the City of Guelph Wet/Dry composting facility. Preparation of this document includes the quantification of emission reduction using the Alberta Offset System Protocols
- Developed several project documents under various emissions reporting standards for landfill operations in British Columbia including the Nanaimo Landfill and the Salmon Arm Landfill Sites and in Ontario at the Eastview Landfill Site. These reports have been prepared in accordance with ISO-14064 Part 2 standards using various GHG methodologies to quantify the emissions such as those from the UNFCCC and CAR

Design and Operations

- Developed a detailed design and design and operations report for the landfill gas collection and control system for the Humberstone Landfill, Welland, Ontario, and the Stratford Landfill, Stratford, Ontario including the well field design, specification drawings including all relevant hydraulics, buried pipe and condensate trap sizing calculations
- Provides operational assistance for the Eastview Landfill including balancing of the well field, assessments of the leachate collection system and the operations of the utilization facility
- Provides operational support for organics processing facility's in London and Ottawa, Ontario including odour assessments involving the odour abatement equipment efficiencies and operations improvements to minimize fugitive odours
- Assisted in developing the model package (Design and Operations Report) for the Application for Amendment to Provisional Certificate of Approval for a Waste Disposal Site, for landfill sites which apply under amended Ontario Regulations 232/98 and 347 for the Ontario Ministry of the Environment

- Assisted in preparation of a study regarding applicable wastewater treatment technologies and disposal options for an organics processing facility in Ontario
- Assisted with the submission of applications for Amendments Certificate of Approval for Air, Waste Disposal Site and Section 53 (Industrial Sewage Works) under the Environmental Protection Act (including formulation of a Design and Operations Report for the site) for source-separated organics aerobic composting facilities in London, Ontario and Ottawa, Ontario

Computer Aided Design

- Performs day-to-day Auto-CAD drawings including process flow diagrams, general and civil scale drawings related to a variety of composting and landfill related projects

Solid Waste Management

- Prepared cost estimates for the installation of landfill gas collection and control systems using both flaring and utilization technologies for international and Canadian landfills: Manaus landfill (Manaus, Brasil), and the Eastview landfill (Guelph, Ontario)
- Assisted with the preparation of successful proposals for a five-year contract to haul and process source-separated organics for the City of Toronto and a twenty-year contract to process source-separated organics for the City of Ottawa.
- Assisted in the completion of a 2007 Baseline Study of Canadian Landfills based on waste filing practices and leachate management considering nearly 90 landfill sites for Environment Canada

Modelling and Assessment

- Experience with Scholl-Canyon and Rettenberger first-order landfill gas generation models for the prediction of landfill gas generation at several landfills in Canada, the United States of America (U.S.A.) and South America
- Experience with Scholl-Canyon and Rettenberger first-order landfill gas generation models as they apply to anaerobic municipal solid waste digesters for projects in the U.S.A.
- Performed landfill gas modelling and assessment for international landfills: González Catàn landfill and Ensenada landfill (Buenos Aires, Argentina), Aurà landfill (Belém, Brasil), Manaus landfill (Manaus, Brasil)
- Performed greenhouse gas emission reductions calculations and reporting for the Eastview landfill (Guelph, Ontario) and assisted with emission reductions calculations for the Merrick landfill (North Bay, Ontario) under the Pilot Emission Reductions, Removals, and Learnings (PERRL) initiative

Agricultural Engineering

- Developed and assisted in implementing a monitoring methodology under the Climate Action Reserve (CAR) for the collection and utilization of methane gas produced in anaerobic dairy manure digesters for various projects in California, U.S.A.
- Assisted in approvals process for Provincial certificates of approval for the utilization of leachate and ammonium sulphate as a non-agricultural source material (NASM) on agricultural lands for a composting facility's in both London and Ottawa, Ontario

Presentations

- Prepared and delivered a 1 hour presentation entitled "Understanding the Clean Development Mechanism (CDM) Project Development Process" to the CRA community through a recorded

webinar conference. The presentation covered all aspect of project validation and verification from the perspective of a project developer as well as an independent party conducting validations or verifications of project activities

- Prepared a presentation on the current and future odour management at a composting facility operation within Ontario. The presentation was presented to local stakeholders, members of the MOE and the local Municipality

EDUCATION

B.A.Sc. University of Guelph, Environmental Engineering, 2011

Other

Courses: 40-Hour HAZWOPER OSHA Training (per 29 CFR 1910.120)

EMPLOYMENT HISTORY

2011- Air Quality Engineering Assistant

Present Conestoga-Rovers & Associates

2009-11 Student Project Engineer, Water Services, Region of Waterloo, Waterloo, Ontario

2008 Student Environmental Science Assistant, University of Guelph, Guelph, Ontario

2007 Student Lab Technician, Engineering Department, University of Guelph, Guelph, Ontario

PROFILE OF PROFESSIONAL ACTIVITIES

Air Compliance and Assessment

- Preparation of air emissions inventories, assessments and permitting for a variety of industrial clients including Ontario Ministry of the Environment (MOE) Emissions Summary and Dispersion Modelling (ESDM) Reports, and Comprehensive Certificates of Approval (C of A) (Air)
- Experience with stationary air emission and dispersion modelling programs including Ontario Regulation 346, AERMOD, and USEPA SCREEN3
- Knowledge of various air quality legislation in Ontario, including ECA (Air) O. Reg. 419/05, Toxics Reduction O. Reg. 455/09, and Greenhouse Gas Emissions Reporting O. Reg. 452/09
- Annual Canadian NPRI and Ontario Toxics Reduction Act OWNERS internet based reporting for a variety of industrial clients

Greenhouse Gas Assurance Services

- Verifier in CRA's Greenhouse Gas Assurances Services (GGAS) Group
- Performed annual Greenhouse Gas inventory reports for a variety of clients under Ontario Regulation 452/09
- Performed multiple annual inventory report verifications under Ontario Regulation 452/09, including site visits
- Performed verification for automobile manufacturing facilities under the Carbon Disclosure Project and the Greenhouse Gas Protocol
- Performed as Verifier for Batch Verifications for multiple organizations under The Climate Registry
- Performed as Auditing Team Member for verification of recycling of refrigerators, freezers, and metal containing foam insulation panels in South-East Brazil

Noise Assessment

- Field measurements using Type 1 precision Sound Level Meters to conduct short- and long-term noise measurements and monitoring programs
- Design of Noise Abatement Action Plans for a variety of clients including the specification of noise controls such as silencers, enclosures, barrier walls, equipment replacement and administrative/operator controls
- Experience using Computer Aided Noise Abatement (Cadna A) noise modeling software to determine noise impacts at selected points-of-reception

Field Activities

- Conducted Noise field work activities (in accordance to best practices and published MOE procedures and guidance)
- Performance of air related field activities including flow rate, VOC analysis and moisture sampling of stacks
- Conducted soil depth sampling for moisture and nitrite/nitrate measurements

EDUCATION

B.Sc. Eng. University of Guelph, Environmental Engineering, 1996

Other

Courses: 40-Hour OSHA HAZWOPER Training and 8-Hour Annual OSHA Refresher (1999 and 2000-2009, respectively)

Testing Industrial Air Emissions, 2000

Chemical Hydrogeology, University of Waterloo, 2002

Environmental Microbiology, 2002

Industrial Processes, 2004

Environmental Economics, 2006

Industrial Ecology, 2007

ISO 14064 Part 1 – Greenhouse Gas Inventories, 2008

ISO 14064 Part 2 – Greenhouse Gas Projects, 2008

ISO 14064 Part 3 – Greenhouse Gas Verification, 2010

EMPLOYMENT

2005- Associate – Sustainability, Compliance, and Air Groups

Present Conestoga-Rovers & Associates

1999-05 Project Manager, Conestoga-Rovers & Associates

1998-99 Project Engineer, Conestoga-Rovers & Associates

1998 Research Assistant, Agriculture and Agri-Food Canada

1996-97 Environmental and Quality Assurance Technician, Golden Town Apple Products

AFFILIATIONS

Professional Engineer, Association of Professional Engineers of Ontario

Michigan Board of Professional Engineers Fundamentals of Engineering Exam, April 1999

PROFILE OF PROFESSIONAL ACTIVITIES

Life Cycle Assessment, Greenhouse Gas Emissions Reporting, and Validation, and Verification

- Project Manager and technical advisor for the preparation and verification of applications for funding to Sustainable Development Technology Canada for various clients, including the preparation of life cycle assessments
- Project Manager for the preparation of a web-based, database-driven Environmental Footprint Calculator for a large cement, aggregate, and construction company in Canada

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- Lead verifier, verification team member, and independent peer reviewer for verifications and verification audits of greenhouse gas inventories and projects in Alberta and British Columbia
 - Lead validator for a greenhouse gas project being completed under the Clean Development Mechanism of the Kyoto Protocol at a hydrogen plant in Argentina
 - Project Manager for review and assessment of greenhouse gas emissions from the upstream oil and gas industry for Environment Canada
 - Peer Reviewer for the preparation of a Greenhouse Gas Inventory for a large North American potato chip producer
 - Lead technical advisor for the preparation of a Greenhouse Gas Inventory for a large North American waste company
 - Lead technical advisor for the preparation of Greenhouse Gas Emissions assessments for several clients
 - Senior Technical Advisor for the assessment of reporting requirements under the USEPA Mandatory Greenhouse Gas Reporting Rule for clients in the petroleum industry

Air Emissions Sampling, Permitting, and Reporting

- Project Manager for numerous air emissions (including Greenhouse Gas Emissions) assessments for clients in Canada reporting under the National Pollutant Release Inventory (NPRI) and the Greenhouse Gas Reporting Program
- Project Manager, Project Coordinator, and project engineer on numerous air permit applications and air emissions reports for numerous clients throughout Ontario
- Project Coordinator for the Ontario Ambient Air Monitoring Sites for Environment Canada's Canadian National Air Toxics Measurement Program in 2004/2005. Responsible for coordination of all aspects of the sampling and reporting activities for over 10 ambient air monitoring sites in Ontario
- Conducted sampling and reporting for numerous air emission source testing projects in Canada, the United States, and Puerto Rico, including specialized field gas chromatography sampling
- Lead technical advisor for ambient air monitoring programs at multiple sites in Ontario and New Brunswick
- Project Manager and Coordinator for air emissions activities associated with multiple facilities for an automotive parts manufacturer in Ontario, including preparation of Ontario Ministry of the Environment Director's Order appeal documents, Certificate of Approval (Air) Applications, Ontario Regulation 127 and National Pollutant Release Inventory reporting, and source sampling

Agriculture-Related Experience

- Primary researcher for preparation of a paper regarding the evaluation of swine manure treatment processes for Agriculture and Agri-Food Canada
- Researcher for the evaluation of a prototype cattle manure treatment technology for Agriculture and Agri-Food Canada
- Project Manager for assessment of environmental issues associated with an aerobic composting operation

Environmental Due Diligence and Remediation

- Project Manager for ongoing Remedial Investigation/Feasibility Study (RI/FS) activities at a Superfund Landfill Site in Ohio
- Project Manager for RCRA corrective action and Ohio Voluntary Action Program activities at a former refractory manufacturing facility in Ohio
- Conduct investigative and remedial activities for a chemical manufacturing facility in Ontario including:
 - Project management, technical and field support relating to the remediation of contaminated off-Site Municipal Aquifer
 - Project Manager for the design and construction of a \$4.2 million dollar ammonia treatment system for contaminated groundwater
 - Project Coordinator for annual ambient air monitoring program downwind of the Site
 - Project Coordinator for the 1998 through 2004 Annual Environmental Reports
 - Project Engineer for surface water monitoring programs, primary author of monthly Progress Reports, assessment and management of analytical data
 - Supervise and conduct field activities such as groundwater sampling, groundwater elevation monitoring, surface water sampling, surficial soil sampling, and waste water sampling air and odour sampling
- Project Manager for a large indoor contaminated soil excavation and groundwater collection trench installation at a former wallpaper manufacturing facility in Ontario
- Project Manager and Project Coordinator for a large site assessment, plant demolition, and contaminated soil and groundwater remediation project at a former airplane manufacturing facility in Ontario
- Project Manager and Phase I auditor for a large multi-site due diligence project at pulp and paper, mining, and port facilities in the Province of Newfoundland and Labrador
- Project Manager and Project Coordinator for several litigation support projects in the United States, including preparation of expert reports, expert witness support, and completion of potentially responsible party searches
- Project Manager and Assessor for numerous Phase I and II Environmental Site Assessments and Environmental Compliance Audits in the United States and Canada
- Project Manager for activities at a large chemical manufacturer in Ontario, including wastewater treatment system optimization, compliance audit, Certificate of Approval (Air) Application preparation, asbestos survey, and ongoing compliance assistance
- Project Manager for an AS/SVE and bioremediation project at an industrial site in New Jersey
- Project Manager/Coordinator for facility-wide environmental and health and safety compliance audits and environmental monitoring programs for two large automotive manufacturing sites in Ontario
- Managing and preparation of Phase I and Phase II Site Assessments for numerous property transfers in the United States and Canada
- Project engineer for an Engineering Evaluation and Cost Assessment (EE/CA) for the remediation of a lead-acid battery disposal area in Michigan