



RUBY CANYON ENGINEERING

Verification Report for the Mahoning Landfill
January 1, 2008 - December 31, 2010 Reporting Period

Prepared for:
Mahoning Landfill, Inc.

November 29, 2011

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1.0 Introduction

Ruby Canyon Engineering (RCE) was contracted by Waste Management, Inc. (Waste Management) to perform the first verification of the Mahoning Landfill (CAR566) project ("Project") for the reporting period January 1, 2008 through December 31, 2010 to the Climate Action Reserve (CAR) Landfill Project Protocol Version 2.0 (Protocol 2.0). The Project involves GHG emission reductions from the capture and destruction of methane from the active Municipal Solid Waste (MSW) Mahoning Landfill (Landfill) located in New Springfield, Ohio.

1.1 Project Background & Site Description

The Landfill opened in 1996 and is owned and operated by Mahoning Landfill, Inc. The Landfill is located at 3510 Garfield Road, New Springfield, OH 44443 with a design capacity of 7.83 million megagrams and the current waste in place is approximately 4,989,480 tons. The landfill consists of four cells that do not have a synthetic cover.

The Project is owned and operated by Mahoning Landfill, Inc. (Mahoning), a wholly owned subsidiary of Waste Management. The Project was voluntarily implemented and began operating on January 20, 2003 and consists of one landfill gas collection (LFG) system and one open candlestick flare that combusts the collected gas. Personnel with the Mahoning Landfill conducted the Project maintenance and data gathering, personnel with Waste Management provided the Project oversight and First Environment was hired by Waste Management as a technical consultant.

1.2 Responsible Parties

Mahoning Landfill, Inc.

3510 Garfield Road
New Springfield, OH 44443

Waste Management, Inc.

First City Tower
1001 Fannin, Suite 4000
Houston, Texas 77002

1.3 Verification Team

The RCE verification team consisted of the following individuals who were selected based upon verification experience and knowledge of the landfill methane sector.

Lead Verifier: Sally Phipps

Team Member: Nina Pinette

Senior Reviewer: Bonny Crews

1.4 Objectives

The goal of the verification activities was to ensure that the claimed GHG emission reductions were complete, consistent, accurate, transparent and permanent and that the Project was in compliance with CAR project additionality, monitoring and reporting requirements.

Furthermore, the verification activities ensure that the data provided to RCE are well documented and free of any material errors or omissions.

1.5 Scope

The scope of the periodic verification consists of the following independent and objective activities:

- Review the reporting period's Monitoring Plan
- Review the Project Data Acquisition & Quality Control Procedures
- Conduct a site visit to the Mahoning Landfill project
- Review the Project's baseline scenario and project boundaries
- Review the Project's evidence of environmental and regulatory requirements
- Review evidence that the Project passes the legal requirements test and ensure the Project is additional
- Review the Project's emission reduction calculations
- Review the Project documents and data against the requirements of the verification criteria listed in Table 1.
- Issue requests for clarifications and corrective actions as necessary
- Issue a verification report, list of findings and verification statement to Mahoning, Waste Management and CAR

1.6 Verification Criteria

Table 1 – Summary of Verification Criteria

Standard of Verification	• Landfill Project Protocol Version 2.0 • Landfill Project Verification Protocol Version 2.0 • Errata and Clarifications (October 26, 2011) • Verification Program Manual (December 20, 2010) • Program Manual (October 26, 2011) and the • International Standards Organization (ISO) 14064-3 Specification with guidance for the validation and verification of greenhouse gas assertions
Verification Process	CAR and ISO 14064-3 Guidelines
Level of Assurance	Reasonable assurance
Materiality	2008: A +/-3 percent materiality threshold 2009: A +/-1 percent materiality threshold 2010: A +/-1 percent materiality threshold

2.0 Verification Activities Summary

The Project had not previously been verified; verification of the first reporting period January 1, 2008 through December 31, 2010 began when Waste Management selected RCE as the verification body. RCE received information from Waste Management, Mahoning and First Environment throughout the verification.

Prior to starting the verification, RCE developed a verification plan that was followed during the verification. The verification plan consisted of the following activities:

- Completion of a Project Conflict of Interest/Notification of Verification Activities (COI/NOVA) form by RCE to identify any potential conflict of interest with Mahoning or Waste Management.

The COI/NOVA form was submitted to CAR's online website and the COI assessment revealed no conflicts of interest and was approved by CAR on April 22, 2011.

- A teleconference verification kick-off meeting was held with the Project developer on June 30, 2011. During the kick-off meeting RCE was introduced to the key personnel, reviewed the verification objectives and process, reviewed the verification schedule and requested the verification background documents.
- RCE began receiving background verification documents via email and an ftp site data room June 30, 2011.
- RCE performed a strategic review and risk assessment of the received data and support documents in order to understand the scope and areas of potential risk in the GHG emissions reductions.
- A risk-based site visit sampling plan and desktop sampling plan were developed based upon the strategic review and risk assessment. The verification plan, sampling plan and desktop sampling plan were used throughout the verification and were revised as needed based upon additional risk assessments.
- A site visit was conducted on August 8, 2011. During the site visit RCE interviewed key personnel, inspected the Project equipment, reviewed source documents, Project data and calculations, and observed the onsite GHG management systems, and data gathering, monitoring and handling practices.
- A risk-based desktop review of submitted verification documents was performed. The desktop review included an assessment of the GHG calculation methods and inputs, source data completeness, GHG management and monitoring systems, evidence of regulatory and legal compliance and record retention practices.
- Requests for Clarifications, Additional Documentation & Corrective Actions were submitted to Waste Management throughout the verification.
- A senior review of the verification sampling, report and statement was conducted.
- A final verification report, verification statement and list of findings were developed.
- An exit meeting was held with the client on November 29, 2011.

3.0 Verification Findings

3.1 Assessment of the GHG Reduction Project Operations

The Project currently collects LFG and destroys it via combustion in an open utility flare. Prior to combustion, the LFG passes through a condensate knockout tank and is measured for flow, temperature, pressure and methane content. The LFG is pulled through a LFG collection system by an electrically-driven centrifugal blower located at the flare skid.

The construction of the GCCS began in October 2002; LFG was first combusted on January 20, 2003 with a temporary flare used for testing purposes, and the permanent flare became operational on April 22, 2003. The LFG collection system was installed in the unlined cells and consisted of 50 LFG extraction wells. The individual LFG wells are joined by lateral piping connected to a common header pipe that is routed to the blower and flare skid.

3.2 GHG Project Boundary (sources, sinks and/or reservoirs)

According to the Protocol 2.0 only CO₂ and CH₄ GHG are included from the baseline and Project activities. The GHG emission sources resulting from the Project baseline and the Project activity must be deducted from the Project GHG emission reductions. These GHGs include CO₂ emitted from methane oxidized in the soil, methane vented to the atmosphere, methane destroyed in

any pre-Project and Project destruction devices, fossil fuel use and electricity use. The sources of GHG emissions reviewed during the verification of the Project are listed in **Table 2**.

Table 2 – Summary of the Project GHG Sources, Sinks and Reservoirs

Activity	GHG Sources, Sinks & Reservoirs
Baseline	• CH₄ vented to the atmosphere. • Methane oxidized by soil bacteria. As the landfill is not covered with a synthetic liner, a 10 percent oxidation factor resulting from natural oxidation by soil bacteria was applied to the baseline emissions.
Project	• CH₄ from the incomplete combustion of LFG in the utility flare. • CO₂ from the combustion of fossil fuels used during operation and maintenance activities for the Project activity. • CO₂ resulting from the consumption of imported electricity.

3.3 Project Eligibility Criteria & Credit Ownership

The Protocol 2.0 specifies three eligibility rules that a GHG Project developer must meet in order to register reductions with CAR. The three eligibility rules are Location, Project Start Date, and Additionality. The Additionality rule requires the project to pass the Performance Standard and Regulatory Compliance. Per the Errata and Clarifications to the Protocol 2.0 (October 26, 2011) the Regulatory Test also requires Project developers to pass the Legal Requirements test and sign an Attestation of Voluntary Implementation. Lastly Project developers must demonstrate exclusive ownership of the generated emission reductions. RCE performed a complete eligibility assessment and review of evidence supporting Mahoning's ownership of the emission reduction credits.

Below is a summary of the Project's compliance to each eligibility rule and credit ownership requirement.

- **Eligibility Rule 1: Location:**
The Project is a US-based landfill located in New Springfield, OH and therefore meets this eligibility requirement.
- **Eligibility Rule 2: Project Start Date:**
The Landfill Project Reporting Protocol 2.0 states that pre-existing projects must have a start date on or after January 1, 2001 and must be listed with the Reserve twelve months from the effective date of the protocol. The start date is defined as the date on which a qualifying destruction device becomes operational. According to the Project Monitoring Plan the Project became operational on January 20, 2003.

To confirm the January 20, 2003 Project start date RCE examined the Blower/Flare Station Data sheet, Wellfield Monitoring Data sheet, and Daily Operations & Maintenance Activity Report as support documentation of the testing flare start-up. The Daily Operations & Maintenance Activity Report contains notes about LFG Specialties starting the landfill gas blower and flare.

To confirm the date when the permanent utility flare began operation, RCE examined the Shaw LFG Specialties, LLC Equipment and Start-up Checklist dated April 22, 2003. The reviewed documentation in combination with personnel interviews was sufficient evidence to affirm that the January 20, 2003 start date met the Protocol 2.0 Project Start Date rule.

- **Eligibility 3: Additionality**

According to CAR additionality requirements Project developers must pass a Performance Standard Test and a Legal Requirement Test in order to show that the Project reductions are above and beyond business as usual.

Performance Standard Test

RCE reviewed evidence of the pre-project conditions at the landfill and confirmed that prior to the Project activity no LFG collection and destruction system was installed. Evidence reviewed included several letters from 2002 between the Ohio Environmental Protection Agency (OhioEPA) to SCS Engineers concerning the voluntary installation of a LFG collection system and flare at the Mahoning Landfill. The letters indicated that there were no other LFG collection and destructions systems at the landfill and that the Mahoning Landfill was not required to install the proposed LFG collection system and flare. In addition, while onsite RCE did not observe any evidence of a pre-project LFG collection system or other destruction devices.

Therefore, the Project meets the performance standard threshold under option 1 of the Performance Standard Test in the Landfill Project Reporting Protocol 2.0 that states the following:

- 1 “If the landfill is not currently collecting and destroying any landfill gas, the project is considered additional.”

Regulatory Compliance Test

For evidence of regulatory compliance RCE reviewed the environmental compliance procedures described in the Monitoring Plan and the following support documents: the 2008, 2009 and 2010 Ohio Solid Waste Facility Licenses, the final Title V, the Ohio EPA Permit to Install (PTI), the Quarterly and Semi-annual Title V and PTI Reporting documents, the Attestation of Regulatory Compliance signed by the Senior Director of Air Programs at Waste Management on behalf of Mahoning on June 14, 2011, and other solid waste and waste water permits.

RCE reviewed one letter from the Mahoning County District of Environmental Health (DEH) that described a minor odor and erosion of a recently constructed cell. The findings were not considered violations by the DEH. RCE was also provided a US EPA Enforcement and Compliance Online History query that demonstrated that the Landfill was in environmental compliance during the reporting period. RCE found no evidence of non-compliance, and the Monitoring Plan procedures for ensuring the Project regulatory compliance were followed during the reporting period.

Legal Requirement Test

To meet the Legal Requirement Test, Project proponents must ensure that emission reductions achieved by the Project would not have occurred in the baseline case due to

federal, state, or local regulations. During the site visit and desktop review RCE interviewed Mahoning Landfill personnel and Waste Management personnel about the environmental compliance and legal requirements procedures. Responsible personnel regularly review federal, state and local regulations and permitting requirements to ensure the Landfill is not mandated to collect and combust the LFG. In particular, Mahoning Landfill personnel closely monitor the New Source Performance Standard (NSPS) Tier II report testing requirements.

The Landfill has a design capacity above 2.5 million cubic meters of municipal solid waste. Consequently, the facility is required by the NSPS regulation to conduct Non-Methane Organic Compound (NMOC) emission rate testing. A Tier II NMOC test was performed by SCS Engineers in November 2003 that indicated that the estimated 2008 NMOC emissions were 10.39 Mg/yr. The most recent Tier II NMOC test performed by SCS Engineers in October of 2008 indicated that the estimated emissions rate for 2009 was 11.18 Mg/year and in 2010 was 11.94 Mg/year. The results from the NMOC tests demonstrate that the Landfill is below the 50 Mg/year regulatory threshold.

RCE reviewed the Legal Requirements procedures detailed in the Monitoring Plan and confirmed that the document contains a clear, consistent and rigorous method to ensure the Project passes the Legal Requirements Test. An Attestation of Voluntary Implementation was signed by the Senior Director of Air Programs at Waste Management on behalf of Mahoning on June 14, 2011.

Based upon the personnel interviews and the documentation reviewed RCE did not find any indication that the Landfill was mandated to collect and combust its LFG or control their NMOC emissions. Additionally, there are no local, state or Federal requirements mandating the installation of a LFG collection and conveyance system at the Mahoning Landfill. Therefore the Project developer followed their Monitoring Plan procedures to assure they pass the Legal Requirements Test, and the Project was in compliance with all Federal, State and local regulations during the reporting period.

- **Ownership of Generated Reductions**

RCE reviewed a Warranty Deed and Proof of Property Ownership submitted by Mahoning Landfill, Inc., and the Attestation of Title signed by the Senior Director of Air Programs at Waste Management on behalf of Mahoning on June 14, 2011 for evidence of ownership of the generated emission reductions. RCE reviewed an attestation from Waste Management that describes the relationship between Waste Management and Mahoning Landfill, Inc. and asserts that Mahoning Landfill, Inc. retains the rights to the generated emission reductions. RCE also reviewed an attestation from First Environment asserting that First Environment has no claim to the generated emission reductions. The reviewed evidence demonstrated Mahoning Landfill, Inc. as the sole owner of the emission reductions associated with the Project.

3.4 Assessment of Information System Controls

The GHG management systems were reviewed during the site visit and the desktop review. During the site visit the majority of the GHG management systems review took place and was achieved through observing the onsite procedures and interviewing the Mahoning Landfill Gas

Operations Manager, Gas Technician and the Site Manager. The onsite review included an assessment of the Project data collection, processing and handling procedures, recordkeeping and data storage, the quality control and assurance procedures, Project maintenance procedures, and a field tour of the Project.

Project Monitoring & Data Collection

The primary Project data included the LFG flow, methane content, pressure and temperature of the LFG. The LFG was continuously monitored via a Thermal Instruments 9500 Flow Meter model number 62-9/9500 (serial number 2006334). The flow meter location was adequate to ensure laminar flow. The flow meter automatically adjusted the temperature and pressure to 70° F and one atmosphere during 2008 and 2009 and to 60° F and one atmosphere starting on February 24, 2010. RCE reviewed a letter from Thermal Instrument CO. stating that all Thermal Instruments flow meters will be calibrated to 60° F and one atmosphere starting January 1, 2010.

The gas quality was monitored weekly by the Gas Technician using a handheld GEM2000 Gas Analyzer (Serial# 7702 and 5940). The flare operation was monitored continuously by a thermocouple located in the utility flare shroud. The temperature, operating hours and LFG flow were recorded continuously by a Honeywell Truline (Honeywell) circle chart recorder until December 30, 2009 when a Yokogawa Model # FX-106 (Yokogawa) digital chart recorder was installed. The Project electricity consumption was recorded by a dedicated electricity meter located next to the flare skid.

The paper charts from the Honeywell were collected and replaced by the Gas Technician every week. The Yokogawa recorded the landfill gas flow, gas quality analysis and temperature readings every 2 minutes. The data was saved every day onto a compact flash card as a *.DAD file; each month the Gas Technician collected and transferred the stored data to the Waste Management online Landfill Gas Monitoring System (LGMS) site.

The LFG methane content was measured weekly by the Gas Technician and recorded onto a Blower/Flare Station Data form during 2008 and 2009 and a LFG Monitoring Weekly Control Device Data Form in 2010. The Gas Technician periodically uploaded the LFG methane content to the LGMS.

Calibrations and Quality Assurance and Quality Control (QA/QC)

The monitoring equipment was cleaned and inspected as necessary and no calibrations or quarterly field calibration checks were performed during 2008 and 2009. Mahoning requested and was granted a variance from CAR for the missing quarterly cleaning, inspections, and field calibrations checks during 2008 and 2009. The variance required the verification body to confirm that no calibrations occurred between January 1, 2008 and March 10, 2010; that the “as found” conditions from the flow meter calibration on March 10, 2010 indicated under-reporting; and that all calibration and inspection requirements of the Protocol 2.0 were followed after the Project was listed with CAR on January 05, 2010.

RCE verified to a reasonable level of assurance that Mahoning met the granted variance specifications. No calibrations occurred between January 1, 2008 and March 10, 2010; the March 10, 2010 factory calibration results showed the flow meter was under-reporting; and

after the Project listing date the monitoring equipment was cleaned, inspected and field checked for calibration accuracy per the Protocol 2.0 requirements.

The Project developer performed quarterly cleanings, inspections and field calibration checks for the flow meter during 2010. RCE reviewed the submitted quarterly field calibration check records and confirmed the field checks were performed according to the Protocol 2.0 requirements. The second and third quarter calibration check results indicated that the flow meter was out of calibration and reading above the 5% threshold. The emission reductions were adjusted from the factory calibration on March 10, 2010 through December 31, 2010, as the next successful factory calibration of the flow meter (SN 200634) occurred on January 5, 2011.

RCE confirmed that the emission reductions were adjusted according to the failed calibration procedure outlined in the October 26, 2011 Protocol 2.0 Errata and Clarifications. A factory calibrated “loaner” flow meter (SN L14006) of the same make and model was installed on December 16, 2010 while the other flow meter (SN 200634) was factory calibrated. RCE confirmed that both flow meters were factory calibrated by reviewing the Thermal instruments factory calibrations dated March 10, 2010 and January 5, 2011 (SN 200634) and December 6, 2010 (SN L14006).

The LFG methane content was monitored using two factory calibrated GEM2000 gas analyzer units. The Gas Technician calibrated the GEM2000 units prior to use in the field against reference gases of known concentrations. The Project QA/QC procedures required the GEM2000 gas analyzer to be field calibrated prior to use and factory calibrated as needed or bi-annually. RCE observed the field calibration procedures during the site visit. Copies of the Landtec factory calibration certificates were provided and RCE confirmed that each GEM2000 unit was factory calibrated at least once during 2008, 2009 and 2010. During the site visit RCE also observed the quarterly well field and flare skid inspection and maintenance activities. The Gas Technician used a GEM2000 unit to take the LFG flow and gas quality readings and entered the results into field logs.

Records Storage and Retention

RCE confirmed that Mahoning and Waste Management’s data storage and records retention procedures were sufficient and all were retained according to the Monitoring Plan procedures. Mahoning will keep all Project records for a minimum of ten years from when the information is first generated or seven years after the last verification.

3.5 Assessment of GHG Emissions Reductions Calculations

The emission reduction calculation assessment included a review of Project assumptions, raw data inputs, and accuracy of calculations. RCE first assessed the completeness of the raw data and how the data was transferred to the emission reduction spreadsheets. Next the formulas and raw data inputs were reviewed for accuracy and compliance to the Protocol 2.0. Lastly, RCE recalculated the GHG emissions and reductions and compared the results with Mahoning’s calculations to determine if the GHG emissions were materially correct.

The Project technical consultant First Environment manually transferred the 2008 and 2009 flow and temperature data from the circle charts into the yearly GHG emission reduction

spreadsheets. The 2010 Yokogawa *.DAD files were downloaded by the Gas Technician files from LGMS that contained the minimum, maximum and total daily flow readings and the minimum and maximum flare temperature readings. First Environment was provided the *.DAD files and used a software to convert the *.DAD files into an Excel spreadsheet titled “Formatted Flow Data”. The weekly methane data were transcribed into the yearly emission reduction spreadsheets.

All data in the 2008 and 2009 emission reduction spreadsheets and Formatted Flow Data Spreadsheet were examined for downtime, erroneous flow, and flare temperature readings below 500°F. The corrected 2010 data from the Formatted Flow Data Spreadsheet was transferred into the 2010 emission reduction spreadsheet. The flow data was adjusted from 70°F and one atmosphere until February 24, 2010 when the flow meter was reconfigured to 60°F and one atmosphere. Erroneous readings were not included in the data set and no LFG flow data substitutions were applied during the reporting period. Data substitutions were applied to instances of missing weekly LFG methane readings per the latest Errata and Clarifications (October 26, 2011) guidance.

During the desktop review RCE examined each yearly emission reduction spreadsheet and the Formatted Flow Data Spreadsheet. Months were selected from each year to check the raw data transfer from the circles charts, Yokogawa *.DAD files and the methane analysis field logs. Risk based samples of the total LFG flow, average methane and flare temperatures were compared to the values in the yearly emission reduction spreadsheets. RCE found no material errors in the data transfers between the raw data and emission reduction spreadsheets.

The yearly emission reduction spreadsheets were also reviewed for compliance to the Protocol 2.0 calculation methodologies. The applicable Protocol 2.0 equations included 5.1, 5.2 and 5.4. Equation 5.3 was not applicable because no pre-project LFG collection and destruction system was installed before the Project.

RCE’s assessment included checks for data accuracy, flare temperature range (i.e. >500°F), standard conditions adjustments, data substitutions, missing data, completeness, consistency and transposing errors. RCE examined 100% of the Project calculations and verified that the Protocol 2.0 equations were correctly applied. The total CH₄ destroyed was recalculated for each week of the reporting period. The standard conditions of the flow meters when at 70°F and one atmosphere were appropriately adjusted to the standard temperature and pressure of 60° F and one atmosphere per the Protocol’s requirement.

The flow meter was found to be out of calibration and over-reporting during a field calibration check performed on May 27, 2010. The flow meter was factory calibrated on January 5, 2011 and found to be over-reporting by 6.3%. RCE verified that the emission reductions were adjusted from the last successful calibration on March 10, 2010 to the end of the reporting period on December 31, 2010 by the greatest calibration drift of 6.3%.

The total quantity of methane destroyed was accurately calculated and the 96% destruction efficiency was assigned to the Project’s combustion device. Because the Mahoning Landfill does not have a synthetic liner in the cover system, a 10% discount was applied to the baseline scenario for bacterial oxidation of methane under the cap. Since a continuous gas analyzer was not used a 10% discount factor to account for uncertainties was applied.

RCE confirmed that the propane and electricity consumption values tied out to invoices and receipts and that the project CO₂e equivalents (CO₂e) emissions were accurately calculated and deducted from the total CO₂e emission reductions.

The net amount of methane destroyed per week was summed and converted into CO₂e. The total Project GHG reductions in CO₂e were calculated by subtracting the Project emissions from the net amount of methane destroyed. RCE found no material misstatements in the final 2008, 2009 and 2010 Project GHG reductions calculations and results.

4.0 Verification Results

Mahoning and Waste Management provided sufficient evidence and good documentation of its emission estimates, data collection procedures, monitoring, quality assurance and quality control procedures. The verification process focused on verifying the emission reductions estimates and ensuring the Project complied with the Protocol 2.0 requirements. The following is a summary of the verification results.

The Project developer reported 95,491 metric tons CO₂e in 2008, 115,368 metric tons CO₂e in 2009, and 117,740 metric tons of CO₂e in 2010 as per the information provided in the final 2008, 2009 and 2010 emission reductions spreadsheets.

During the verification, RCE identified some material and non-material misstatements. The Project developer corrected all the identified material and non-material misstatements and RCE's review of the final GHG assertion revealed no material misstatements. The verified emission reductions are listed in **Tables 4, 5, 6 and 7**.

Table 4 - Emission Reductions Verified for January 1, 2008 through December 31, 2008

Emissions Verified	CO₂e (metric tons)
Baseline Emissions	95,690
Project Emissions	199
Emission Reductions	95,491

Table 5 - Emission Reductions Verified for January 1, 2009 through December 31, 2009

Emissions Verified	CO₂e (metric tons)
Baseline Emissions	115,567
Project Emissions	199
Emission Reductions	115,368

Table 6 - Emission Reductions Verified for January 1, 2010 through December 31, 2010

Emissions Verified	CO₂e (metric tons)
Baseline Emissions	117,986
Project Emissions	246
Emission Reductions	117,740

Table 7 - Total Emission Reductions Verified for January 1, 2008 through December 31, 2010

Emissions Verified	CO₂e (metric tons)
Total Emission Reductions	328,599

4.1 Findings Overview

During the verification process, RCE made requests for Clarifications, Corrective Actions and supplemental documentation to complete the verification. According to RCE's verification procedures all material Corrective Actions were addressed by the Project developer before a positive verification statement was submitted. The details of the requests for corrective actions and clarifications are documented in the RCE List of Findings provided to CAR and the Project developer.

5.0 Verification Statement

RCE conducted a risk-based analysis of the Mahoning Landfill (CAR566) project ("Project") GHG assertion where RCE performed a strategic review of the Project data and evidence. Based upon the processes and procedures and the evidence collected, RCE concludes with a reasonable level of assurance that the Project emission reductions resulting from the capture and destruction of landfill gas during the reporting period January 1, 2008 through December 31, 2010 can be considered:

- in conformance with the CAR Landfill Project Protocol 2.0 standards
- without material discrepancy, and
- verified to the reasonable level of assurance.

The verified emission reduction CRTs are listed in the **Table 8, Table 9 and Table 10.**

Table 8 - Emission Reductions Verified for January 1, 2008 through December 31, 2008

Emissions Verified	CO ₂ e (metric tons)
Emission Reductions	95,491

Table 9 - Emission Reductions Verified for January 1, 2009 through December 31, 2009

Emissions Verified	CO ₂ e (metric tons)
Emission Reductions	115,368

Table 10 - Emission Reductions Verified for January 1, 2010 through December 31, 2010

Emissions Verified	CO ₂ e (metric tons)
Emission Reductions	117,740

Lead Verifier Signature



Sally Phipps

Independent Internal Reviewer Signature



Bonny Crews