

LANDFILL GAS PROJECT VERIFICATION REPORT

Climate Action Reserve

CAR444: Erie County Landfill

Reporting Period:

01 August 2016 to 31 July 2017

Prepared for:

Renewable Energy Services of Ohio, LLC

06 June 2018



CLIMATE ACTION RESERVE



ISO 14065 Greenhouse Gas
Validation and Verification Body
#0821

Prepared By:

Tina Sentner | Lead Verifier

Greenhouse Gas Verification Program

+1.510.452.8000

tina@peleconsultingservices.com

SCSglobal
SERVICES

Setting the standard for sustainability™

2000 Powell Street, Ste. 600, Emeryville, CA 94608 USA

+1.510.452.8000 main | +1.510.452.8001 fax

www.SCSGlobalServices.com

Table of Contents

Summary.....	1
Introduction	2
Verification Team	2
Verification Details	2
Verification Objectives.....	2
Verification Criteria	3
Level of Assurance	3
Treatment of Materiality	3
Scope	Error! Bookmark not defined.
Verification Process.....	3
Verification Summary	3
Verification Findings.....	5
Project Description	5
Ownership.....	5
Project Eligibility	6
Location	6
Project Start Date.....	6
Crediting Period	6
Additionality.....	6
Regulatory Compliance	8
The GHG Assessment Boundary	8
Review of Project GHG Management Systems.....	9
Project Monitoring.....	9
Quantitative Review of Carbon Reductions and Removals.....	10
Verification Results	13
Recommendation	14
Appendix A: SCS Certification Mark	15

Summary

This report presents the findings of the verification assessment of the Erie County Landfill Project (“the Project”) developed by Renewable Energy Services of Ohio, LLC (“the Project Proponent” or “RESO”). This assessment covers the Erie County Landfill’s greenhouse gas emission reductions reported to the Climate Action Reserve (the Reserve or CAR) for the verification period 01 August 2016 to 31 July 2017. The verification was undertaken to evaluate the Project Design Document (“PDD”) and assess whether the compiled data conforms to the verification criteria.

The evaluation was undertaken using the Climate Action Reserve Landfill Project Protocol version 3.0, as well as the verification methodology developed by SCS for carbon offset projects submitted to the Reserve.

In the course of the verification assessment, the SCS verifiers developed findings which included New Information Requests (NIRs), Non-Conformity Reports (NCRs), and Observations (OBSs). All New Information Requests and Non-Conformity Reports have been adequately responded to, resulting in their closure.

On the basis of the information provided and the analyses completed, SCS was able to reach a decision on the emissions reduction reported by the Project Proponent to the Reserve. SCS verified the adequacy of the information provided in the PDD (which included the Project monitoring plan), confirming that this document meets the requirements of the CAR standards. Further, SCS was able to reach a positive opinion on the claimed emission reductions and removals presented in the PDD and on the Reserve website by RESO. Thus, SCS has verified 80,550 metric tonnes of CO₂e reductions and removals from the Erie County Landfill for the reporting period of 01 August 2016 to 31 July 2017.

Introduction

SCS Global Services (SCS) is a global leader in third-party certification, auditing, testing services, and standards. Established as an independent third-party certification firm in 1984, our goal is to recognize the highest levels of performance in environmental protection and social responsibility in the private and public sectors, and to stimulate continuous improvement in sustainable development. In 2012, Scientific Certification Systems, Inc. began doing business as SCS Global Services, communicating its global position with offices and representatives in over 20 countries. SCS is currently accredited to ISO 14065 for GHG Validation and Verification by the American National Standards Institute (ANSI) and offers carbon offset validation and verification under the Verified Carbon Standard (VCS) and the American Carbon Registry (ACR). SCS also offers carbon offset verification under the Climate Action Reserve (CAR) and the Climate, Community and Biodiversity (CCB) standards.

SCS was commissioned by RESO to undertake the annual project verification of the Erie County Landfill. The project consists of the collection of landfill gas (LFG) from the Erie County Sanitary Landfill at Milan, Ohio, and subsequent destruction through combustion in two Caterpillar lean burn engines for electricity generation. This report covers the verification period of 01 August 2016 to 31 July 2017 as a project deliverable into the Reserve.

Verification Team

Lead Verifier: Tina Sentner

Verifier: Tiffany Mayville

Senior Internal Reviewer: Mark Lutz

Verification Scope

SCS conducted the verification of greenhouse gas emission reductions from the Erie County Landfill Project for Element Markets according to the scope below.

Verification Objectives

The objective of the verification is to:

- Evaluate conformance with the Landfill project as defined in the criteria stated below.
- Determine with a reasonable level of assurance whether the Project has resulted in the GHG emissions reductions and/or removals as stated in the project documents.
- Evaluate the project planning information and documentation including the determination of project eligibility, project design, baseline and project emissions determination, management systems supporting the project, and methodologies employed for the calculation of GHG emission reductions.

Verification Criteria

SCS conducted the verification of the project and project documentation against the following criteria:

- CAR Landfill Project Protocol, Version 3.0 (December 2, 2009)
- Errata and Clarification LPP, Version 3.0 (June 18, 2015)
- CAR Program Manual (September 1, 2015)

As an ANSI-accredited verification body, SCS conducted the verification to the requirements of:

- CAR Verification Program Manual (February 8, 2017)
- ISO 14064-3: 2006, Greenhouse Gases – Part 3: Specification with guidance for the validation and verification of GHG assertions

Level of Assurance

The level of assurance applied to this verification assessment is Reasonable Assurance as required by the Climate Action Reserve.

Treatment of Materiality

In consideration of the required level of assurance, the needs of the intended user and the requirements of the CAR Program, SCS applied a materiality threshold of **3%** because the total annual emission reductions are between 25,000 and 100,000 tCO₂e. The data reviewed was considered to meet the principles of accuracy, completeness, and transparency and is free of material error or omission.

Verification Process

Verification Summary

The verification process consisted of the following:

1. Project listed with the Climate Action Reserve:

The Erie County Landfill Project is listed on the Reserve website. RESO selected SCS as their verification body.

2. Conflict of Interest Review.

A Notification of Verification Activities/Conflict of Interest (NOVA/COI) form was submitted to CAR. The COI assessment was conducted to identify any potential conflicts interests with the verification/project. No conflicts were identified and a determination of low potential for conflict of interest was received from the Reserve prior to the commencement of verification activities in a determination letter dated 29 January 2018.

3. Introductory Meeting:

A kick-off meeting was conducted between the verification team, RESO and Element Markets on 02 February 2018. The purpose of the kick-off meeting was to review the timeline of audit; confirm verification criteria; determine any changes in the site, sources, GHG management systems or personnel; and to begin gathering information.

4. Desk Review

SCS received and reviewed the Project Design Document, CAR submittals, and supporting documentation to assess initial conformance with the data requirements of the CAR Landfill Project Protocol, Version 3.0 (December 2009) (“LPP”). A risk assessment was conducted to identify key factors that impact the reported emission reductions and removals. A Verification Plan was created to focus on the critical elements presenting potential risk for errors with the project.

5. Site Visit

An on-site audit of the project area was conducted by the lead verifier on 21 February 2018. The purpose of the site visit is to verify the project equipment, location and eligibility; to review and evaluate the project GHG management systems, data collection and handling, and emission reduction calculations and procedures in place; and to finalize the risk assessment and sampling plan.

6. Quantitative Review

An assessment of the emission reduction calculation inputs and procedures was performed to review the quantitative analyses undertaken by the Project Proponent to convert the raw inventory data into emission reduction estimates.

7. Findings

Throughout the verification, there is an iterative exchange between SCS and the Project Proponent to gather additional information for review and examination. This exchange includes Findings—New Information Requests (NIR), Non-Conformity Reports (NCR), and Observations (OBS)—that are issued by SCS to the Project Proponent. The Project Proponent must respond to NIRs and NCRs in order for SCS to render a verification opinion. At this time all Findings have been appropriately addressed by RESO and subsequently closed by SCS.

8. Draft Report and Statement

This step in the verification process includes a final review of the submitted data, completion of the Verification Report, and drafting of the Verification Statement. A draft Verification Report and Statement are completed based on the results of the verification assessment.

9. Technical Review

The draft report was presented to an SCS lead verifier, independent of the verification, who determined the Verification Statement to be justified given the evidence presented. The Verification Report and Verification Statement were then presented to RESO for review and comment.

10. Final Report and Statement

Once the RESO reviewed these documents, SCS uploaded them to the Reserve website for administrative review by CAR. Given a positive review, CAR will register the emissions reductions for the landfill gas project and issue carbon tonnes for a reporting period of 01 August 2016 to 31 July 2017.

11. Exit meeting with client:

The exit meeting entails a review of the verification process, summary of the verification findings and to initiate scheduling for the next verification period.

Verification Findings

SCS verified the Erie County Landfill against the requirements of the LPP, Version 3.0. The following sections detail the most essential aspects of the verification of the Erie County Landfill.

Project Description

The landfill facility operates under a solid waste disposal permit from the Ohio Environmental Protection Agency, Core ID: 13359. The site includes a permitted disposal area of 60.63 acres on a parcel of 116 acres of property. The total permitted airspace for waste disposal is 5.23 million cubic yards and consists of eight contiguous landfill cells.

The Erie County Landfill is approved to recirculate leachate, however it was confirmed during the site visit that the landfill is not a bioreactor.

On 09 June 2008, the Landfill began operation of a voluntary active landfill gas collection and control system to facilitate the destruction of methane, a Greenhouse Gas (GHG) contained in the landfill gas, by combustion at a flare. In April 2010, two Caterpillar Engines with Caterpillar SR4B Generators were installed at the site to generate electricity for delivery into the local power grid. The engines effectively took the place of the flare as the new destruction device and the flare did not operate. As such, no emission reductions are accounted for this period for the flare.

Ownership

Renewable Energy Services of Ohio, LLC (RESO) owns and operates the energy plant and associated destruction devices. Erie County Landfill (ECL) is the owner and operator of the Landfill and gas collection system. RESO and ECL entered into an agreement whereby RESO contracted for the rights to any landfill gas generated at the landfill, including all carbon and other environmental attributes. SCS confirmed RESO was the Project Developer of the Project through a review of regulatory permits issued from the Ohio EPA, as well as a review of the agreements between ECL and RESO. Though the landfills and gas collection wells are owned and operated by ECL, SCS confirmed that RESO retains full, legal, and beneficial title to the carbon offset credits being issued as a result of the collection and combustion of methane at the landfill facility. Element Markets has an agreement with RESO to sell the carbon credits.

Lastly, SCS reviewed the Attestation of Title signed by the Managing Director of RESO, dated 17 March 2018 concerning ownership of landfill gas emission reduction credits for the reporting period. This document asserts that the project applicant has legal rights to any emission reduction credits to be issued by the Climate Action Reserve. From this evidence, SCS has concluded that the project developer, Renewable Energy Services of Ohio is entitled to receive the emission reduction credits that may be issued by the Climate Action Reserve for methane destroyed during this project period.

Project Eligibility

There are eligibility rules the Project must meet in order to register reductions with the Reserve.

Location

The project is a U.S. based landfill located at 10102 Hoover Rd., Milan, OH 44846, located in Erie County, Ohio, USA, and therefore meets this eligibility requirement. SCS confirmed the location through a site visit on 21 February 2018.

Project Start Date

As stated in the Landfill Gas Reporting Protocol, 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 (Landfill Project Protocol, Version 3.0, December 2009). The start date is defined as the date at which a qualifying destruction device becomes operational.

The Project was listed on the Climate Action Reserve website on 30 April 2009. The Project's listing indicated the Project Proponent began installation of the landfill gas collection and conveyance system (GCCS) in 2007 and began flaring gas on 09 June 2008. RESO provided various documents to support the evidence of construction of the landfill gas project such as the Flare Commissioning Report provided by Shaw LFG Specialties, LLC. dated 28 June 2008. Review of these documents confirmed the project start date of 09 June 2008.

Crediting Period

The crediting period for landfill projects is 10 years from the project start date. The crediting period for the Erie County Landfill Project extends to 08 June 2018. SCS has concluded that the reporting period verified in this report is within the first crediting period of the Project.

Additionality

Project Proponents must indicate that reductions are above and beyond business as usual. In order to do so, the Project must pass a Performance Standard test and the Legal Requirement test.

Performance Standard

For the Performance Standard test, a project developer may meet eligibility under three possible performance threshold scenarios. The following scenario applies to the Erie County Landfill:

Scenario 2: Installation of a new qualifying destruction device at an eligible landfill where landfill gas is currently collected and vented, but has never been destroyed in any manner prior to the project start date.

The Landfill had passively vented LFG beginning in 2004, but no destruction device was utilized until the project start date, with the exception of two short pump tests using rental flares. These flares were conducted to determine the capability of the well field. The pump tests were conducted 4 February 2004 through 27 February 2004 and 25 October 2007 through 11 December 2007. As these flares were only used for testing purposes prior to the project and were not operational after the testing periods noted above, they are not considered in the Project eligibility.

The project startup documentation and Title V permit confirmed that no other destruction devices were permanently located at the Landfill until the candlestick flare was installed in 2007.

Legal Requirements

For the Legal Requirements 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.

A regulatory review of the Project and the landfill were conducted by the verification team. The results of the regulatory review indicated the landfill is in compliance with Federal, State, and Local regulations. There are no laws, statutes, regulations, court orders, environmental mitigation agreements, permitting conditions, or other legally binding mandates requiring the destruction of landfill gas. RESO has also developed a procedure in the monitoring plan to ascertain and demonstrate that the project at all times passes the legal requirements test at all times. The verification team reviewed the Plan, the Title V Air Permits for both the landfill and RESO, and the Municipal Solid Waste Permit and found no requirements to install a gas collection system.

In addition, Erie County Landfill has conducted a non-methane organic compound (NMOC) Threshold review. The Erie County Sanitary Landfill is subject to NSPS regulation requiring the facility to conduct Non-Methane Organic Compound (NMOC) emission rate testing. The most recent Tier II NMOC Emission Rate Report for the Landfill was conducted in June 2013 with a projected NMOC level of 4.53 Mg/yr in 2016 and 4.68 Mg/yr in 2017. Both years are less than the 40CFR60 applicability threshold of 50 Mg/yr. The next Tier II test is scheduled for 2018 and at that time, the NMOC threshold will be reviewed again to determine if a gas collection and conveyance system is required, however the landfill expects that it will not reach or exceed the NMOC threshold limit of 50 Mg/yr for another 20 years.

Lastly, SCS reviewed the Attestation of Voluntary Implementation, signed on 17 March 2018 by an eligible signatory to attest for the Project. RESO has affirmed that the Project was established and

implemented voluntarily and continues to operate as such. Based on this evidence, SCS concludes the Project passes the legal requirements test.

Regulatory Compliance

During the site reconnaissance and desk review activities, SCS was able to confirm to a reasonable level of assurance that the Project is in compliance with local, state, and Federal regulations and had no material regulatory non-conformance events. SCS reviewed the EPA's Enforcement & Compliance History Online (ECHO) website, the solid waste inspection reports from the Ohio EPA, and the semi-annual Title V Compliance Certification Forms for 2016. The ECHO report noted two compliance issues for the landfill during the reporting period. SCS contacted the Ohio EPA and confirmed the issues were from outside the reporting period and not applicable to the Project activities. In addition, the RESO facility received an NOV in regards to stack testing on the engines. SCS contacted Ohio EPA and confirmed the issue was due to inconsistencies in the permit and were administrative in nature. A full review of the regulatory issues is available in the findings log.

SCS also confirmed the Project's monitoring plan contained procedures for maintaining and monitoring regulatory compliance and that the procedures were being properly followed. Lastly, SCS reviewed the Attestation of Regulatory Compliance submitted by RESO dated 17 March 2018 affirming the Project's compliance status throughout the project reporting period. Based on this review, SCS concludes the Project met the Regulatory Compliance requirements of the Protocol.

The GHG Assessment Boundary

The Project includes all emission sources from the operation of the landfill gas collection system to the ultimate destruction of the landfill gas. The sources of GHG emissions reviewed include:

The GHG sources, sinks, and reservoirs associated with the baseline scenario are:

- CH₄ vented to the atmosphere;
- CO₂ from the oxidation of CH₄ by soil bacteria. As the landfill is not covered with a synthetic liner, the LPP, Version 3.0 assumption that 10 percent of the methane produced would be naturally oxidized by soil bacteria has been applied.

The GHG sources, sinks, and reservoirs associated with the project are:

- Un-combusted CH₄ from Landfill gas in the internal combustion engines and open flare (not operating this period).
- 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.

The gases reviewed include CO₂ and CH₄. All gases are converted to CO₂ equivalents.

Review of Project GHG Management Systems

During the site visit, a review of the Project's greenhouse gas management systems was detailed with the Project Proponent. This review included a detailed look at the Project's data handling and processing procedures, recordkeeping and data storage, and the quality control and assurance procedures. The following is the result of this review:

Project Monitoring

The primary data gathered for the Project is landfill gas flow, pressure, temperature, and methane content of the landfill gas. A Sage Thermal Mass Flow Meter Model SRP-05-18-AC115-LFG continuously monitored landfill gas flow after the blower and a knockout prior to combustion in to the engines. The position of the flow meter was adequate to ensure laminar flow. This meter was factory calibrated on 14 January 2016 and 25 January 2017. The Manufacturer's specifications indicate the meter can be calibrated by a zero calibration self-check that is performed by onsite personnel on a quarterly basis at a minimum, otherwise there are no factory calibration requirements. The flow meter was inspected, cleaned and field checked for calibration accuracy on a quarterly basis within each reporting period with the as found/as left conditions of the flow meter documented. All calibrations show that the flow meter read within a +/- 5% margin of error during the reporting period and the last check was within 2 months of the end of the reporting period by a certified third party. The calibration results for the flow meter were as follows.

Table 1. Flow Meter Field Calibration Check Results

Cleaning , Inspection and field check Dates	Service Provider
08/25/2016 09/13/2016	RESO
11/09/16 12/18/2016	RESO
2/21/2017 03/31/2017	RESO
05/01/2017 06/30/2017	RESO SW Controls

During the reporting period, the flow meter to the engines was suspected of over-reporting flow when compared to the engines operational data while operating at higher capacities. The Project removed the flow meter to trouble shoot the issue and replaced it with a like-kind meter while it sent the original meter back to the manufacturer for review and calibration. The meter was removed on 14 December 2016 through 10 February 2017. The manufacturer provided a calibration record for the rental meter prior to installation. The original meter was found to be within calibration specification and the over-reporting issue was determined to be a result of needing to install a flow conditioner to accommodate the higher flow capacities. Flow data was adjusted to compensate for the over reporting during the

reporting period. The adjustment of the over-reporting was conducted in line with the CAR Landfill Project Protocol, Version 3.0 requirements.

The Landfill also employed a ABB Easyline continuous gas analyzer, Model # EL3040. The analyzer was cleaned and inspected on a monthly basis by Project personnel. The ABB analyzer was installed on July 15, 2010 and was factory calibrated prior to installation. The manufacturer recommends that the analyzer be calibrated with test gases on an annual basis. A third party calibrated the analyzer annually with the last calibration conducted on 30 June 2017 by a certified third party with the as left/as found conditions documented within two months of the end of the reporting period. The gas analyzer was field inspected and cleaned monthly by RESO personnel. All calibration field checks show that the methane analyzer read within +/-5% throughout the reporting period.

Table 2. Gas Analyzer Field Calibration Check Results

Quarterly Inspection and field check Date	Service Provider
Monthly	RESO
Monthly	RESO
Monthly	RESO
06/30/2017	SW Controls

Hours of operation are continuously monitored by Kw hour produced by the engines via a PLC and recorded on a SCADA system every one minute.

The ABB analyzer and the Sage flow meter are connected to a dataTaker data logger, Model # DT28e, which downloads data every 60 seconds at the RESO facility. The generator control system downloads a variety of data for electric generation, including the current load, the totalized load, voltage and frequency among other options. The data logger stores data for about 30 days, but is generally manually downloaded by both ECL and RESO staff weekly.

A project design document (PDD) has been created for the Project. The contents of the PDD were thoroughly reviewed and observed to include the monitoring plan which met the requirements of the Landfill Gas Project Protocol. SCS also confirmed the project was in conformance with the PDD. The monitoring plan records are kept for a minimum of ten years when the information is first generated or seven years after the last verification as stated in the current version of the project's PDD.

Quantitative Review of Carbon Reductions and Removals

SCS devoted a portion of the verification assessment to the review of the manner and propriety by which RESO quantified their net GHG reductions and removals. This assessment included a review of the baseline determination, review of project assumptions, raw data inputs and accuracy of calculations. The formulas and raw data inputs used to determine emission reduction calculations as described in the PDD and the calculation spread sheets were first reviewed for compliance with the LPP, Version 3.0. The main parameters of Equation #5.1 were verified as follows:

Total Annual Methane Emissions Destroyed By The Project Landfill Gas Collection And Destruction System (CH_4_{DestPR})

The amount of methane destroyed is calculated from the continuously metered landfill gas data. For the reporting period, data was electronically aggregated on intervals of eight minutes for the engines. The main monitored parameters needed to calculate the amount of methane destroyed are:

$$\begin{aligned} LFG_{i,t} &= \text{total quantity of landfill gas fed to the destruction device and} \\ PR_{CH_4\ i,t} &= \text{the average methane fraction of the landfill gas in time interval } t \text{ as measured} \end{aligned}$$

Flow was first adjusted for by voiding the flow for any period when there was no evidence of kW output. Daily flow was then calculated by summing the flow for each interval period to produce a daily total. The incremental methane destroyed flow is calculated based on daily average methane concentration by the daily total of landfill gas with temperature and pressure taken into consideration. Total daily destroyed methane is carried forward into further calculations for the flare to determine emission reductions for the project.

During the reporting period, flow was also adjusted for suspected over-reporting by the Sage flow meter supplying LFG to the engines. The Project developed a “flow meter error calculation” to correct for the over-reporting using operational data, engines manufacturer specification data and engineering calculations. The flow was adjusted to correct the over-reporting from the beginning of the reporting period to February 10, 2017 when the reporting issue was resolved as noted in the monitoring section above. The adjustment was determined to be reasonable and accurate.

Adjustment For Landfill Gas Flow Metering Equipment For Temperature And Pressure

The project flow meter automatically corrects for the temperature and pressure of the landfill gas to 60 degrees f and one atm and therefore no additional calculations were necessary.

Default Methane Destruction Efficiency For Device (De_i)

The value applied was 0.936 for a lean burn engines as prescribed by the LPP. The flare was not in use during the reporting period.

Factor For The Oxidation Of Methane By Soil Bacteria (OX)

The Project does not incorporate a synthetic liner in its cover system; therefore a 10% methane soil oxidation factor was applied to the baseline scenario and pre-project scenario.

Discount Factor To Account For Uncertainties Associated With The Project Monitoring Equipment (DF)

As per the methodology, DF equals to zero if using continuous methane monitor with no missing data. It was verified that measurement readings are continuous and therefore no discount is necessary (see section above: Review of Project GHG Management Systems).

Adjustment To Account For Pre-Project LFG Destruction Device ($PRE_{discount}$)

An adjustment to the project baseline was not necessary as there were no pre-project destruction devices

Total Annual Indirect Carbon Dioxide Emissions From The Consumption Of Electricity From The Grid (EL_{CO2}) and Total Annual Carbon Dioxide Emissions From The Destruction Of Fossil Fuel (FF_{CO2})

CO₂ emissions result from consumption of electricity to power project equipment and activity data for this source was tracked by reviewing utility invoices from the power supplier. The emission factors for electricity were verified and no material errors were found. Direct CO₂ emissions result from natural gas combusted by the lean burn engines and minor amounts of propane used onsite. This activity data is taken from invoices from Columbia Gas of Ohio, the local municipality and purchase invoices. The emission factors and associated calculations for project emissions were verified and no material errors were found. Project emissions consisting of indirect emissions from electricity, natural gas and Propane (for other than the flare) were subtracted from the total amount of methane destroyed. The values are presented in the final Calculation Spreadsheets for the verification period.

Missing Data Procedures

Missing Data calculation procedures were reviewed for consistency with the LPP requirements as part of this verification. Missing Data procedures were not applied to the data in this verification period.

Zero Credit Periods

There were several zero credit periods to postpone verification for the Project prior to this reporting period. The project applied and received zero credit period acknowledgements from CAR for the following reporting periods:

- 01 January 2015 to 31 December 2015
- 01 January 2016 to 31 July 2016

SCS confirmed with reasonable assurance that project emissions were less than baseline emissions during the zero-credit reporting period by review of Project data during the noted zero credit period time frames.

Variances or Deviations

For this reporting period, there were no variances or deviations.

Verification Results

The verification of the Erie County Landfill Project focused on the accurate collection of data and quantification of emission reductions as implemented by RESO in accordance to with the verification criteria. A sample set of raw flow data (consisting of landfill gas flow and temperature) and methane concentration was selected and reviewed in order to identify material misstatements due to transcription mistakes, mathematical errors, or malfunction of instruments. The emission reduction calculations were independently recalculated by the verification team and found to be conformance with the LPP.

Based upon the verification process and the evidence collected, SCS concludes that the GHG assertion is a fair representation of the Project emission reductions resulting from the capture and destruction of landfill gas during the reporting 01 August 2016 to 31 July 2017 and can be considered:

- In conformance with the Reserve Landfill Project Protocol, Version 3.0
- Without material discrepancy, and
- Verified to a reasonable level of assurance.

The following provides a summary of the verification results:

Emissions Verified	Baseline Emissions CO ₂ e (metric tons)	Project Emissions CO ₂ e (metric tons)	Emission Reductions CO ₂ e (metric tons)
2016	33,734	1	33,733
2017	46,818	1	46,817
Total	80,552	2	80,550

Note: final numbers are rounded for simplicity.

Throughout the verification process, SCS made several supplemental documentation requests in the form of New Information requests, Non Conformances, and Observations. These requests provided clarification regarding the project. The Findings from the verification of RESO are compiled in a separate “List of Findings” and are available under separate cover. The List of Findings is only shared between the Project Proponent and verifier and is not publicly available.

Recommendation

The Lead Verifier recommends that SCS Global Services issue a positive verification opinion for the following:

Project Developer Name & Address	Renewable Energy Services of Ohio, LLC 2525 Old West Point Road Starkville, MS 39760 USA
Scope of Verification	Emission reductions arising from the capture and destruction of Landfill Gas Methane from: Erie County Landfill
Reporting Period	01 August 2016 to 31 July 2017
Total GHG Emission Reductions Verified	80,552 metric tonnes CO ₂ e
GHG Protocol(s) Used for Verification	■ CAR Landfill Project Protocol, Version 3.0 (December 2009) ■ Errata and Clarification LPP, Version 3.0 (June 2015) ■ CAR Verification Program Manual (February 2017) ■ CAR Program Manual (September 2015) ■ ISO 14064-3:2006, Greenhouse Gases – Part 3: Specification with guidance for the validation and verification of GHG assertions
Lead Verifier's Approval	 Tina Sentner, 06 June 2018
Senior Internal Reviewer's Approval	 Mark Lutz, 29 June 2018
Date of Verification	The Verification Statement is to be dated when the technical reviewer accepts the recommendation to issue the statement.

Appendix A: SCS Certification Mark

Congratulations on receiving a positive verification for Erie County Landfill. Your project is now eligible to use the SCS Kingfisher Certification Mark B for Carbon Offset Project Verification, as represented on the cover page of this verification report. The SCS Kingfisher Certification Mark increases the recognition of your achievements with your verification carbon offset project.

Please refer to the *SCS Kingfisher Certification Mark Labeling and Language Guide: Mark B* provided to you by the GHG Verification Program staff for more information about your Mark and usage. Should you have any additional questions regarding your Mark, use, messaging, or other marketing opportunities, please contact the GHG Verification Team or SCS Marketing Staff at NRmarcom@scsglobalservices.com.