



VERIFICATION REPORT FOR THE CLINTON LANDFILL GAS COLLECTION AND COMBUSTION PROJECT



Document Prepared by First Environment, Inc.

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Prepared By	First Environment, Inc
Contact	10 Park Place Building 1A, Suite 504 Butler, NJ 07405
Approved By	Jay Wintergreen
Work Carried Out By	Jeff Daley Logan Simpson

Summary:

The Clinton Landfill Gas Collection and Combustion Project (The Project) consists of the expansion of an active landfill gas collection system that captures methane and destroys it in two open flares and in two Caterpillar engine generator sets located on -site, resulting in a net reduction of CO2 emissions.

The verification process and scope consist of the independent third-party assessment of the implementation of the project and emission reduction assertion against the criteria stated in the Verified Carbon Standard (VCS) Standard, 20 January 2022, v4.2; the approved Clean Development Mechanism (CDM) Methodology ACM0001 (Version 19); and the validated Project Description (PD). The purpose of the verification is to ensure the project was implemented and monitored in accordance with the validated Project Description and underlying CDM Methodology.

During the verification process, First Environment, Inc. (First Environment) issued five corrective action requests and three clarification requests, all of which were addressed sufficiently by 3Degrees, Inc. No uncertainties were identified during the verification process. The Project claims emission reductions of 225,312 metric tonnes CO2e for the period of July 1, 2019 through June 30, 2021. First Environment is reasonably assured that the Project meets all relevant VCS program requirements and correctly applies the CDM Methodology ACM0001 (Version 19) and the validated PD (VCS PD).

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1. INTRODUCTION

1.1 Objective

This report is provided to 3Degrees, Inc. as a deliverable of the Verified Carbon Standard (VCS) project verification process for the Clinton Landfill Gas Collection and Combustion Project (The Project) located in Clinton, Illinois. This report covers the verification of greenhouse gas (GHG) emission reductions from the destruction of landfill gas that otherwise would be vented to the atmosphere during the period from July 1, 2019 through June 30, 2021. First Environment, Inc. (First Environment) conducted the verification from the date of the kick-off meeting through October 5, 2021.

1.2 Scope and Criteria

The specific scope metrics for the verification are outlined in the table below:

Reporting Period	July 1, 2019 – June 30, 2021
Emission Sources Verified	<i>Baseline Sources</i> - CH₄ emission reductions resulting from the destruction of landfill gas. - CH₄ emission reductions resulting from the pre-project destruction of landfill gas. <i>Project Sources</i> - CO₂ emissions from electricity consumption by the project activity - CH₄ emissions from uncombusted methane
Definition of Materiality	- Misstatements of greater than five percent of the Project's GHG assertion - Qualitative non-conformities with Standards of Verification described below

The following table outlines the guidance and protocols used to conduct this verification:

Standards of Verification	- Verified Carbon Standard (VCS) Standard, 20 February 2022, v4.2 - Validated VCS PD (VCS PD), Version 5.1, January 18, 2022 - Approved CDM methodology ACM0001, "Flaring or use of landfill gas", Version 19 (ACM0001)
Verification Process	- VCS Standard - VCS Program Guide, Version 4.1, 20 February 2022 - ISO 14064-3: Specification with guidance for the validation and verification of greenhouse gas assertions, 2006

The Monitoring Report dated 17 February 2022; Version 3.1 titled "Clinton Landfill Gas Collection and Combustion Project" was also reviewed to inform the verification assessment.

1.3 Level of Assurance

First Environment and 3Degrees have agreed that a reasonable level of assurance be applied for the Project.

1.4 Summary Description of the Project

The Project is located at the Clinton Landfill, 9560 Heritage Road in Clinton, Illinois, Wabash Valley Power Associations, Inc. County (latitude and longitude are 40° 6' 51.411" and -88° 57' 28.7994," respectively). The project activity consists of the voluntary capture of landfill gas (LFG) through an expanded active collection system and destruction of this LFG in two 1.6-megawatt (MW) Caterpillar 3520C engine generator sets and two open flares. The Project achieves emission reductions through the destruction of methane that would have otherwise been released directly to the atmosphere.

2. VERIFICATION PROCESS

The verification process consisted of an assessment of the Project's implementation, as described in the Monitoring Report, against the verification criteria described below, as well as an assessment of the GHG emission reduction assertion. Discrepancies between project documentation and the verification criteria were considered material and identified for corrective action.

2.1 Method and Criteria

To review the Project's GHG information, the following verification process was used:

- conflict of interest review;
- selection of Audit Team;
- kick-off meeting with 3Degrees;
- review of the validated VCS PD;
- development of the verification plan and sampling plan;
- site visit;
- desktop review and evaluation of raw data, calculations, and supporting documentation for the period under review;
- follow-up interaction with 3Degrees for corrective action or supplemental data as needed; and final statement and report development.

The verification process was utilized to gain an understanding of the Project's GHG emission sources and reductions and to evaluate and verify the collection and handling of data, the calculations that lead to the results, and the means for reporting the associated data and results.

2.1.1 Conflict of Interest Review

Prior to beginning any verification project, First Environment conducts an evaluation to identify any potential conflicts of interest associated with the project. No potential conflicts were found for this Project.

2.1.2 Audit Team

First Environment's Audit Team consisted of the following individuals who were selected based on their verification experience, as well as familiarity with landfill gas operations:

Jeff Daley – Lead Verifier
Logan Simpson – Verifier
Jay Wintergreen – Internal Reviewer

2.1.3 Audit Kick-off

The verification audit was initiated with a kick-off conference call on October 5, 2021 between First Environment and 3Degrees. The communication focused on confirming the verification scope, objectives, criteria, schedule, and the data required for the verification.

2.1.4 Project Description Review

The Audit Team reviewed the VCS PD as a basis for developing the verification plan.

2.1.5 Development of the Verification Plan

The Audit Team formally documented its verification plan as well as determined the data-sampling plan. The verification plan was developed based on discussion of key elements of the verification process during the

kick-off meeting. 3Degrees was given the opportunity to comment on key elements of the plan for verification. Based on items discussed and agreed upon with 3Degrees, the plan identified the First Environment team members, project level of assurance, materiality threshold, and standards of evaluation and reporting for the verification. It also provided an outline of the verification process and established project deliverables. A separate sampling plan was designed to review all project elements in areas of high risk of inaccuracy or non-conformance.

2.1.6 Site Visit

Mr. Jeff Daley performed a site visit on December 8, 2021 as part of the verification process. The site visit included interviews with relevant site personnel and project stakeholders; review of the Project's operations; data collection procedures and information management systems; as well as assessments of the Project's controls for sources of potential errors and omissions. The site inspection included a tour of the landfill, all destruction devices, and all associated ancillary equipment (i.e., metering and data recording systems).

2.1.7 Desktop Review

The Audit Team performed a desktop review of the Monitoring Report, GHG emission reduction assertion, and supporting documentation, as further described in Section 2.2 below.

2.1.8 Corrective Actions and Supplemental Information

The Audit Team issued requests for supplemental information, corrective action and clarification during the verification process. The corrective action and clarification requests and the responses provided by 3Degrees are summarized in Appendix A.

2.1.9 Verification Reporting

Verification reporting documents the verification process and identifies its findings and results. Verification reporting consists of this report and a separate Deed of Representation to be submitted to Verra.

2.2 Document Review

During the verification process, First Environment reviewed the Project's Monitoring Report, GHG emission reduction assertion, and supporting documentation for the current verification period to ensure consistency with the VCS PD and ACM0001. Discrepancies between project documentation and the verification criteria were considered material and identified for corrective action. Deviations required appropriate justification from 3Degrees. Additionally, First Environment assessed the GHG emission reduction assertion and underlying monitoring data to determine if either contained material or immaterial misstatements. The results of these reviews are discussed in greater detail below.

2.3 Interviews

Through the course of verification activities and the site visit, First Environment interviewed the following project personnel to inform the verification process:

- Louise Brunning – 3Degrees Group, Inc;
- Eden Harris – 3Degrees Group, Inc;
- Andrew Whelpley – PDC Technical Services, Inc.;
- Maxwell Cekander – Clinton, Inc.
- Bob Shoots – Clinton, Inc.
- Nathan Lippert – Altorfer Power Systems

2.4 Site Inspections

As described above, a site visit was performed on December 8, 2021 as part of the verification process.

2.5 Resolution of Findings

The Audit Team issued five requests for corrective action and three requests for clarification during the verification process. No forward action requests were identified. 3Degree's responses were sufficient to resolve all requests. The corrective action and clarification requests and the responses provided are summarized in the tables found in Appendix A.

2.5.1 Forward Action Requests

There were no Forward Action Requests issued during the current verification

2.6 Eligibility for Validation Activities

First Environment is accredited to perform validation activities as described in Section 3 below for activities in Sectoral Scope 13 (waste handling and disposal), which is the applicable scope for the approved methodology ACM0001.

3. VALIDATION FINDINGS

As described in Section 3.2 below, one new methodology deviation and one new project description deviation were validated during the current reporting period. First Environment reviewed justification for the deviations, including supporting documentation, in order to confirm that they were consistent with the underlying methodology and did not negatively impact the conservativeness or accuracy of the emission reductions. The validation process for the deviations consisted of an assessment of the Project's implementation, as described in the Monitoring Report and from discussions with 3Degrees, against the validation criteria. The validation criteria considered in the assessment of any deviations included the approved CDM methodology ACM0001, v19 and the VCS Standard.

3.1 Participation Under Other GHG Programs

Not Applicable – The project is not seeking registration with any other GHG programs.

3.2 Methodology Deviations

Section 4.1 identifies methodology deviations previously validated for the Project.

The following new methodology deviation was identified in the Monitoring Report and approved for the Project during the current verification:

For the duration of June 30 to July 31, 2020, the continuous methane analyzer at Flare 2 was reporting faulty readings. Data substitution was applied during this period by calculating the 95 percent lower confidence interval using all valid data throughout the reporting period. The methane analyzer was field checked for calibration accuracy on a quarterly basis throughout the reporting period which ensured that the data used for substitution is accurate.

First Environment approved this deviation because it meets the criteria for permitted methodology deviations. Specifically, this deviation is related to the criteria and procedures pertaining to monitoring and measurement set out in the methodology. The deviation results in a more accurate representation of methane concentration by ensuring that the gaps in methane concentration data are addressed and not overlooked. Additionally, by applying a 95 percent confidence interval to obtain the substitute methane value ensures that the deviation does not negatively impact the conservativeness of the emission reduction assertion.

3.3 Project Description Deviations

The following project description deviation was identified in the Monitoring Report and approved for the Project during the current verification:

Methane readings taken at Flare 2 (via the continuous gas analyzer) are applied to both flares and engines for the duration of the reporting period. All destruction devices are adjacent to each other and therefore the gas concentration measured by the Flare 2 analyzer is representative of the gas concentration to each destruction device. Additionally, it was demonstrated that the gas concentration readings measured by the continuous analyzer were on average lower when compared to portable readings taken at the engine skid. Therefore, applying the continuous analyzer readings to engine flow results in a more conservative quantification of emission reductions. First Environment approved this deviation because the use of methane concentration readings measured by a continuous analyzer result in increased accuracy of the emission reduction calculations.

The project deviation described above did not impact the applicability of the methodology, additionality, or the appropriateness of the baseline scenario, and the Project remained in conformance with all other ACM0001 and VCS requirements. In addition, 3Degrees provided appropriate descriptions and justifications for the deviation. The project deviation was deemed to be valid.

3.4 Grouped Project

Not Applicable – the project is not a grouped project.

4. VERIFICATION FINDINGS

4.1 Project Implementation Status

The Project is implemented according to the description provided in the VCS PD, except where noted in Section 3 above, and relative to previously validated deviations identified below. The Project became operational on January 24, 2007. The Project is within its second 10-year crediting period which began on July 1, 2019 and ends on June 30, 2029. First Environment previously confirmed the Project's start date during the initial validation. Emission reductions are claimed for LFG destroyed on-site in two engine generator sets and in the two open flares. Additionally, collection and destruction of landfill gas occurred in a pre-existing open flare prior to the Project's start date. As a result, methane destroyed in the pre-existing gas collection system is accounted for in the emission reduction assertion consistent with the VCS PD.

No data and/or variables presented in the Monitoring Report differ from those stated in the VCS PD, except where noted in Sections 3.2 and 3.3 above or as described below. Similarly, the data collection and recordkeeping procedures were found to be consistent with those outlined in the monitoring plan described by the VCS PD and meet the requirements of ACM0001. The Project has adequate management and operational systems in place with respect to monitoring and reporting, as determined through observation during the site visit and the desktop review of project documentation.

During the verification process, First Environment reviewed written confirmation from 3Degrees confirming that GHG emission reduction credits for the current reporting period have not been registered under another GHG program.

The Project activity does not claim emission reduction credits for the displacement of fossil generated electricity. Therefore, no double counting of environmental attributes associated with electricity production and carbon credits has occurred.

The following topics were discussed with project personnel during the site visit:

- the data collection process used to generate reports, and
- internal documents and protocols that set guidelines for the data collection process.

The information gathered during these discussions and review was used to assess the Project's data management systems and its controls for sources of potential errors and omissions. The primary aspects of the Project's monitoring plan are described below.

The quantity of LFG sent to each flare is continuously measured using two Rosemount Transmitters (one at each flare). The quantity of LFG sent to the engines is continuously measured using a Rosemount Transmitter on the gas header line leading to the engines. All flow data are recorded by the Project's Yokogawa data loggers every two minutes.

The methane concentration of the landfill gas is continuously measured by a Siemens Ultramat (located at the Flare #2 skid). Methane concentration data are recorded by the Project's Yokogawa data logger every two minutes.

The flow meters and continuous methane analyzer were calibrated in accordance with the requirements of the VCS PD. Table 1 below identifies the dates each meter was calibrated:

TABLE 1: Meter QAQC

Meter	Location	Dates of Use	Calibration Date(s)	VCS PD calibration frequency
Rosemount (s/n: 514151)	Engines	Entire reporting period	7/20/2016; 2/23/2021	5 Years
Rosemount (s/n: 41863)	Flare #1	Entire reporting period	5/31/2019; 5/20/2021	5 Years
Rosemount (s/n: 514152)	Flare #2	Entire reporting period	5/31/2019; 5/20/2021	5 Years
Siemens Ultramat 23 (s/n: N1A1-699)	Flare #2	Entire reporting period	9/25/2019; 12/24/2019; 3/23/2020; 6/30/2020; 9/29/2020; 12/9/2020; 3/31/2021; 6/23/2021	Quarterly field calibrations

First Environment reviewed the calibration records for all meters identified in Table 1 to confirm that each meter was operating within the five percent accuracy threshold established by the Standard Project emissions from the consumption of grid electricity is determined using utility invoices from the electricity supplier. The quantity of propane combusted is also determined based on supplier's invoices. All propane is accounted for at the time of purchase. There were no propane purchases during the current reporting period.

The operation hours and electricity production data for the engines are monitored and reviewed to ensure that methane is only flowing to the engines when they are operating. The operation of both flares was monitored through the flare's thermocouple temperature readings.

The following methodology deviations were previously validated for the Project during the Project's validation:

- The default flare efficiency of the open flares was assigned a value of 96 percent as opposed to the 50 percent default efficiency for open flare as found in the CDM Tool "Project emissions from flaring" Version 3.0. First Environment confirmed that this previously validated deviation was implemented during the verification period in accordance with the validated VCS PD.
- Grid emission factor: the Project utilizes a regional default value based on U.S. EPA's eGrid database for the SRMW subregion in lieu of the default value of 1.3 tCO₂/MWh indicated by the "Tool to calculation baseline, project, and/or leakage emissions from electricity consumption." First Environment confirmed that this previously validated deviation was implemented during the verification period in accordance with the validated VCS PD.
- Standard reference temperature: Rather than use the standard temperature of 32 °F as prescribed by the methodology and the Tool to determine the mass flow of a greenhouse gas in a gaseous stream, the Project elects to use 68 °F as a standard reference temperature as this is more common for U.S.-based landfill Project types and is consistent with industry standards. First Environment confirmed that this previously validated deviation was implemented during the verification period in accordance with the validated VCS PD.

The data collection and recordkeeping procedures were found to be consistent with those outlined in the monitoring plan described by the VCS PD and meet the requirements of the ACM0001. There were no remaining issues or material discrepancies from the previous validation or verification processes.

The Project has not received or sought another form of environmental credit, nor has it become eligible to do so since the validation. Additionally, the Project boundary has been drawn to exclude environmental attributes from renewable energy generation. First Environment confirmed through an attestation provided by 3Degrees that the Project has not participated in any other GHG program.

The Project contributes to sustainable development contributions, specifically the Monitoring Report identifies and discusses the following SDGs that the project has contributed to during the current reporting period:

SDG3 /3.9.1 – Good Health and Well-Being / Mortality rate attributed to household and ambient air pollution.

SDG7 / 7.2.1- Affordable and Clean Energy / Renewable energy share in total final energy consumption.

SDG8 / 8.5.2 - Decent Work and Economic Growth / Unemployment rate.

Overall, the Project is implemented according to the description provided in the VCS PD and the monitoring system implemented was found appropriate to the task of obtaining, recording, compiling, and analyzing the monitored data and parameters.

4.2 Safeguards

4.2.1 No Net Harm

There are no negative environmental or socio-economic impacts associated with the project.

4.2.2 Local Stakeholder Consultation

The Project operates in accordance with several permits to ensure protection of the environment. No concerns from local stakeholder have been brought forth during this reporting period, or since the Project's validation.

4.3 AFOLU-Specific Safeguards

Not applicable – This is not an AFOLU Project.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

Emission reductions are calculated ex-post using the approach indicated in ACM0001 and the VCS PD. First Environment reviewed the emission reduction calculations for the verification period to ensure accuracy in the formulas applied and the raw data and default factors used as inputs. First Environment's review assessed whether emission reductions were free of material misstatement. The formulas were tested and found to be consistent with the calculations described in ACM0001 and the VCS PD.

Landfill gas flow sent to the flares and engines ($V_{t,wb}$) are measured continuously, and the methane fraction of the landfill gas ($V_{CH_4,t,wb}$) is measured by a continuous gas analyzer and are used to calculate the total amount of methane destroyed by the Project ($F_{CH_4,PJ,y}$).

Landfill gas combusted by the flares is measured continuously, and the methane fraction of the landfill gas is measured by the continuous gas analyzer are used to calculate the total amount of methane destroyed by the flares ($F_{CH_4,flare,y}$). The total monthly quantities of landfill gas are determined by taking the continuous flow readings and summing them over the reporting period. The flare flow meters automatically correct flow data to standard conditions of 60°F and 14.70 psi. Flow data was then converted to standard temperature conditions of 68°F for consistency with the methane density of 0.04162 Lb. CH_4 /ft³ CH_4 and is multiplied by total methane flow to convert the methane destroyed from a volumetric flow to a mass flow. A thermocouple measures flare temperature to ensure methane destruction. Any flow data with associated flare temperatures below 500°F are excluded from emission reduction calculations.

Landfill gas combusted by the engines is measured continuously, and the methane fraction of the landfill gas is measured by the continuous gas analyzer are used to calculate the total amount of methane destroyed by the engine ($F_{CH_4,EL,y}$). The total monthly quantities of landfill gas are determined by taking the continuous flow readings and summing them over the reporting period. The engine flow meter automatically correct flow data to standard conditions of 60°F and 14.70 psi.

Flow data was then converted to standard temperature conditions of 68°F for consistency with the methane density of 0.04162 Lb. CH₄/ft³ CH₄ and is multiplied by total methane flow to convert the methane destroyed from a volumetric flow to a mass flow.

Project emissions from uncombusted methane during flaring, fossil fuel usage, and grid purchased electricity consumption are deducted from the overall emission reductions created by the Project. Project emissions from uncombusted methane are calculated in accordance with the VCS PD. Project emissions from fossil fuel usage are quantified by multiplying the activity data by the appropriate emission factor. Project emissions from electricity consumption are quantified by multiplying the activity data by the appropriate emission factor and transmission and distribution loss factor.

Because landfill gas was collected and destroyed prior to the project activity, this amount of methane destroyed is ($F_{CH_4,BL,y}$) subtracted from baseline emissions in accordance with the VCS PD.

The verification process focused on the evaluation of quantification spreadsheets to ensure that they were consistent with the formulas and equations described in ACM0001 and the VCS PD. Copies of the raw data used in the calculations, including flow and methane concentration data and utility and other fossil fuel invoices, were compared with the values used in the final calculations and tested for transcription or mathematical errors. The calculations for the entire period were reviewed as well to determine whether they were free of material misstatement. All calculation methods and emission factors used to determine emission reductions were consistent with those outlined in the validated PD.

The Audit Team performed an independent recalculation of the emission reductions from the verification period using the available raw data. Material misstatements were identified for correction by 3Degrees, Inc. as described in Section 2.5.

No material misstatements were observed in the final GHG assertion.

Overall, the GHG emission reductions were quantified correctly in accordance with the VCS PD and the ACM0001 methodology.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

3Degrees provided adequate documentation for the emission reduction calculations as well as its management systems around the data collection process. Specifically, First Environment was provided a Monitoring Report prepared in accordance with the VCS program template, transparent calculation spreadsheets, calibration records, and data records associated with landfill gas flow, methane concentration, and electricity consumption. Data was reviewed beginning from its original source of generation to confirm the accuracy of the information flow.

The evidence provided was consistent with the requirements of ACM0001 and the validated VCS PD and meets generally accepted evidentiary standards for best practice in GHG accounting.

4.6 Non-Permanence Risk Analysis

Not Applicable.

5. VERIFICATION CONCLUSION

First Environment was retained to provide verification services for the Project's GHG emission reductions assertion based on the following fundamentals:

- *Level of assurance:* Reasonable assurance.
- *Objectives of verification:* To assure project conformance with the VCS Standard, the CDM methodology ACM0001, and the VCS PD.
- *Verification criteria:* VCS Standard, the CDM methodology ACM0001, and the VCS PD.
- *Definition of materiality:* Misstatements of greater than five percent of the GHG assertion and qualitative non-conformities with the validated VCS PD are considered material.
- *Scope, including:*
 - *Boundaries of the assertion:* Clinton County landfill and Wabash Valley Power Associations, Inc. facility operations;
 - The physical infrastructure, facilities, and activities within the assertion: LFG collection and destruction operations;
 - *GHG sources, sinks, and reservoirs included within the assertion:* Methane emission reductions expressed as carbon dioxide-equivalents, carbon dioxide emissions from the operation of project equipment, methane emissions from pre-project destruction of landfill gas; methane emissions from flaring; and
 - *The time period for the assertion:* July 1, 2019 through June 30, 2021.

Based on the assessments performed and the historical evidence collected, First Environment concludes, with a reasonable level of assurance, that the emissions reductions of the Project resulting from the capture and combustion of methane gas are

- consistent with the VCS PD of January 18, 2022;
- in conformance with the VCS Standard, the CDM methodology ACM0001 (Version 19);
- without material discrepancy; and meeting the minimum level of accuracy of at least 95 percent.

Additionally, the deviations reviewed and approved during the current audit process are consistent with the VCS Standard and ACM0001 methodology, including all validation criteria therein.

Verification period: From 1-July-2019 to 30-June-2021.

Year	Baseline Emissions or Removals (tCO ₂ e)	Project Emissions or Removals (tCO ₂ e)	Leakage Emissions (tCO ₂ e)	Net GHG Emission Reductions or Removals (tCO ₂ e)
2019	54,915	30	0	54,886
2020	115,263	35	0	115,228
2021	55,232	34	0	55,198
Total	225,410	98	0	225,312

APPENDIX A: DETAILED RESOLUTION OF FINDINGS

ID	Corrective Action Request	Participant Response	Verification Conclusion
1	The data substitution methodology deviation in Section 2.3.1 of the Monitoring Report does not adequately demonstrate that a more conservative result is achieved relative to the procedures set out in Paragraph 1 of the Appendix to the CDM Tool 08 "Tool to determine the mass flow of a greenhouse gas in a gaseous stream" v03.0.	The emission reduction calculations have been revised to apply a 95 percent confidence interval data substitution calculation for the methane data gap from June 30 - July 31, 2020. This data substitution approach has been identified and justified as a deviation in the Monitoring Report and yields a conservative substitution calculation in line with the intent of CDM Tool08.	Response is acceptable.
2	The following issues have been identified with the Monitoring Report: •Section 3.2 - Methodology Deviations; incorrectly identifies and lists methodology deviations that have been validated and are already included in the VCS PD. •Section 3.1 of the Monitoring Report does not identify/discuss the methane data substitution that is applied throughout the reporting period.	The Monitoring Report has been revised to address the identified issues.	Response is acceptable.
3	The May 20, 2021 calibration of both Flare #1 Flow Meter (Rosemount 3095; s/n: 41863), and Flare #2 Flow Meter (Rosemount 3051 Transmitter; s/n:514152) identifies failed conditions for the differential pressure as found checks.	Documentation and correspondence with the manufacturer were provided that explains the percent difference in differential pressure does not translate linearly to percent difference in flow. Evidence was provided to demonstrate how to obtain a flow percent drift from the calibration results. This evidence demonstrated that meter s/n 514152 had a less than 2% as found drift, and meter s/n41863 had an approximately 3% as found drift, both of which are within an acceptable range of accuracy.	Response is acceptable.
4	The Siemens Ultramat (Flare#2) was not calibrated during the Fourth Quarter of 2020 (Oct. - Dec. 2020).	The Siemens Ultramat was calibrated on December 9, 2020. The relevant calibration record has been provided for review.	Response is acceptable.
5	Section 4.2 Management of SWDS parameter does not identify in the comments row the results of the annual monitoring / review of the solid waste management practices.	The comments row of the Management of SWDS parameter box has been updated to identify the results of the annual review of solid waste management practices.	Response is acceptable.

ID	Clarification Request	Participant Response	Verification Conclusion
1	Please clarify why totalizer data is applied instead of the standard cubic feet per minute (scfm) data for each destruction device. Further, clarify why the totalizer data when compared to the scfm data over any given time interval is not equivalent.	There are inherent differences in how the standard cubic feet per minute (scfm) data and totalizer data are reported. The totalizer data is applied in the calculations instead of the scfm data because it is a more accurate reading of total summed flow. The scfm data is recorded every two minutes and is a snapshot/instantaneous reading of the average standard cubic feet per minute that occurred in those two minutes. Multiplying the scfm value by two does not give you the total consumption in that two minutes, as the scfm is an average. Taking the difference of two totalizer readings is a more accurate reading of consumption as there is no averaging involved.	Response is acceptable.
2	Please clarify what the calibration frequency is for the engine flow meter (Rosemount 3051 Transmitter; s/n: 514151).	Email clarification from the manufacturer was received which clarifies that a five-year calibration frequency is appropriate given the accuracy specifications required.	Response is acceptable.
3	Please clarify what the as found drift was for the Siemens Ultramat (Flare #2) for the June 23, 2021 field calibration.	The June 23, 2021 field calibration record identifies "pump fault" and was reading low methane concentration likely due to a dirty filter that caused insufficient sampling. When connected to 50 percent span gas the as found condition initially identified the analyzer was significantly under-reporting methane concentration. Under-reporting of methane concentration yield a conservative overall emission reduction calculation, therefore all recorded methane concentration was left "as is" with no adjustment. The filter was replaced and sample lines cleaned. The analyzer then successfully completed a calibration with an as left drift condition of 0.20 percent.	Response is acceptable.