



Monitoring Plan

Bi-County Landfill Gas Destruction Project

Version 18 – June 2024

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1 INTRODUCTION

1.1 Project Introduction

The Bi-County Landfill Gas Destruction project was listed on the Climate Action Reserve as of December 16, 2010 (CAR790). The baseline & monitoring methodology for this project is the Climate Action Reserve (CAR) Landfill Project Protocol Version 5.0, dated April 24, 2019, for the compliance year commencing January 2020. The reporting period for the first verification was October 7, 2010 to December 31, 2011. The current, verification period is January 1, 2023 to December 31, 2023.

The first crediting period for this project was October 7, 2010 to October 6, 2020. A second crediting period request was filed and approved in October 2020. The project is now in its second 10 year crediting period October 7, 2020 to October 6, 2030.

The project transitioned from Project Protocol Version 3.0 to Version 5.0 beginning with the 2020 year.

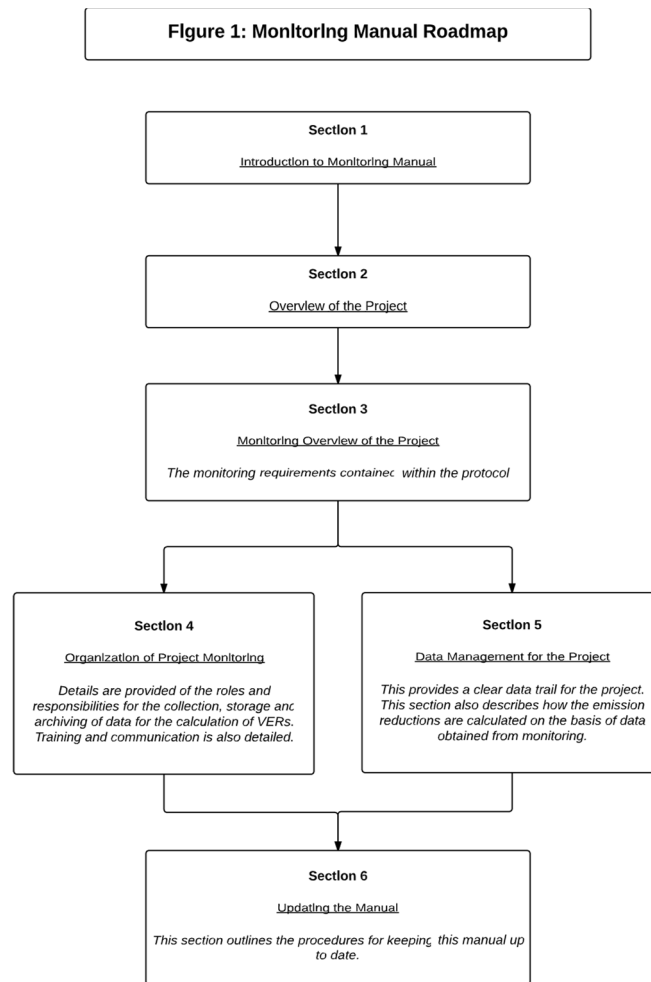
1.2 Purpose and status of this document

The aim of this manual is to document the monitoring procedures for practical, on-site use. Application of the monitoring manual gives assurance to the project participants and the Verifier that proper monitoring is implemented.

1.3 Structure of the Monitoring Manual

A roadmap for this Monitoring Manual is shown in Figure 1. This structure reflects the main components of any monitoring system:

1. **Equipment:** what is measured, how, maintenance and calibration procedures.
2. **Organization:** who does what and when.
3. **Data management:** how are the generated data processed, checked and archived.



2 OVERVIEW

2.1 Site Overview

The Bi-County Landfill Gas Destruction Project is a landfill gas collection and utilization project in the town of Woodlawn, TN at the Bi-County Landfill in Montgomery County. The project includes a flare component and an electricity component with an installed capacity of 2.95MW. The Bi-County Landfill began accepting waste in 1992 and continues to accept MSW and C&D. The landfill is currently permitted for 7.7m tons of waste and has approximately 5.8m tons of waste in place.

The Gas Collection and Control System (GCCS) was originally installed to support this project in 2010 and has been maintained and expanded since that date. The last major expansion was 13 wells added in August 2019. Today the GCCS comprises 57 wells and 13 pumps.

2.2 Project Contact Details

Site address:

Bi-County Gas Producers, LLC
3214 Dover Rd, Woodlawn, TN 37191

Contact person on site:

Site Operator Kevin Weaver
Bi-County Gas Producers, LLC
931-614-5994
Kevin.weaver@cubedistrictenergy.com

Postal address:

Bi-County Gas Producers, LLC
c/o Cube District Energy
1000 Windward Concourse, Suite 150
Alpharetta, GA 33131

Contact person - Operations

Ed Lewis
Director of Operations & Maintenance
Bi-County Gas Producers, LLC
724-462-1639
Ed.Lewis@cubedistrictenergy.com

Contact person – Carbon Credits:

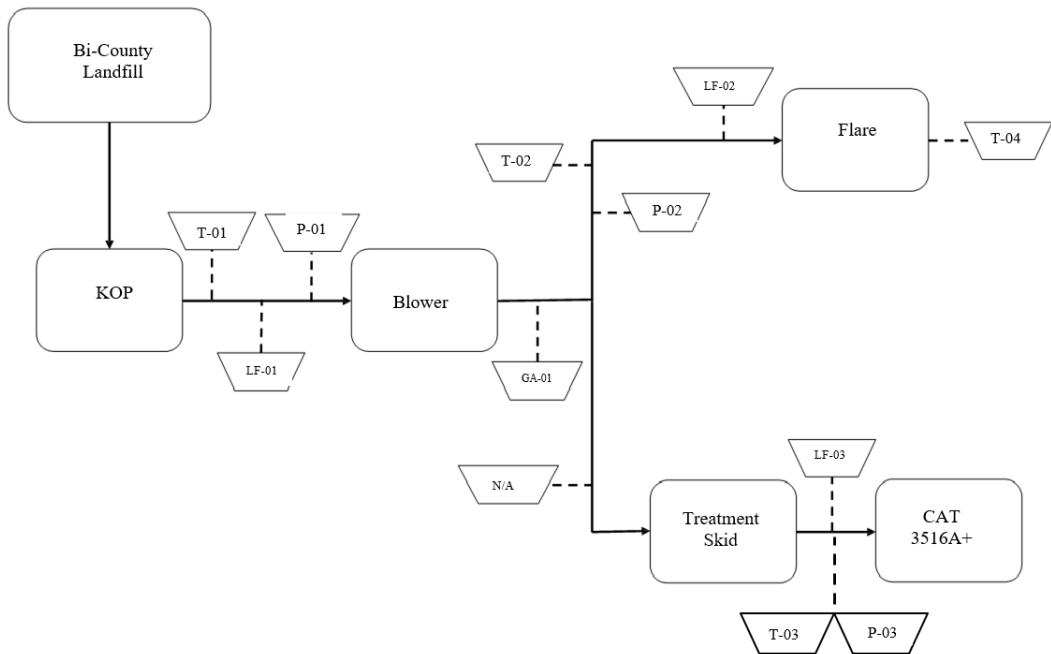
Chris Eastgate
CEO
Bi-County Gas Producers, LLC
713-297-1681
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3 MONITORING OVERVIEW OF THE PROJECT

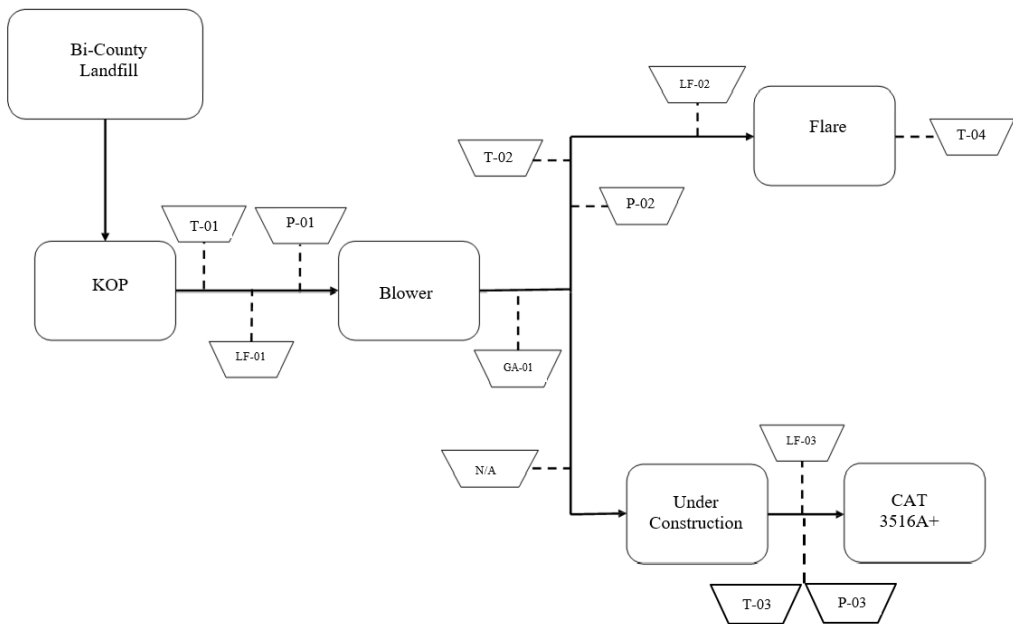
3.1 Site Overview – Power Station

This section provides a detailed overview of the monitoring requirements for the Bi-County Landfill Gas Destruction Project from inception to the most recent completed compliance year. Further detail on monitoring organization and data are provided in the following sections.

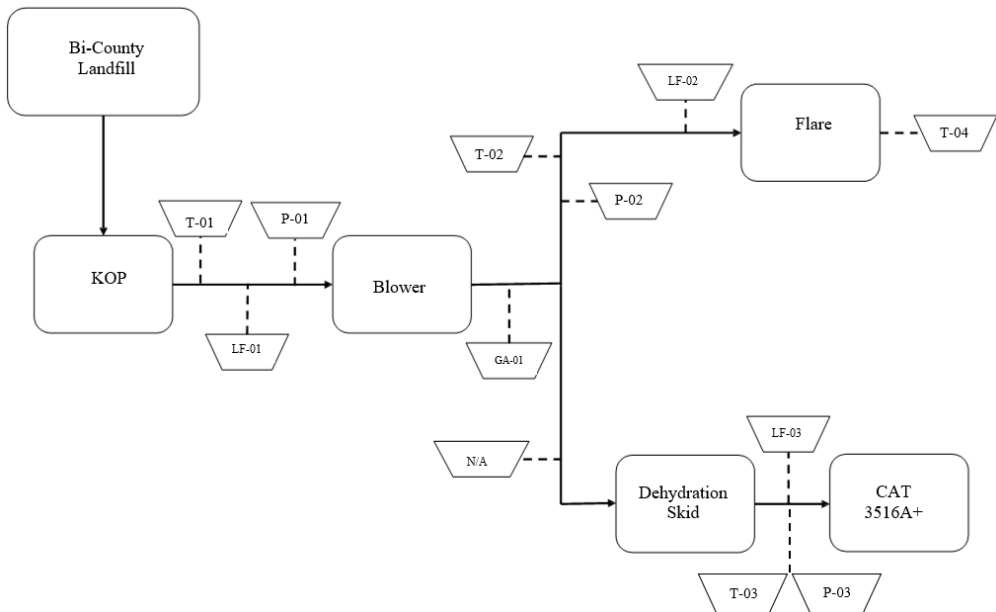
Site Diagram for CAR790: August 2011 to September 3, 2013



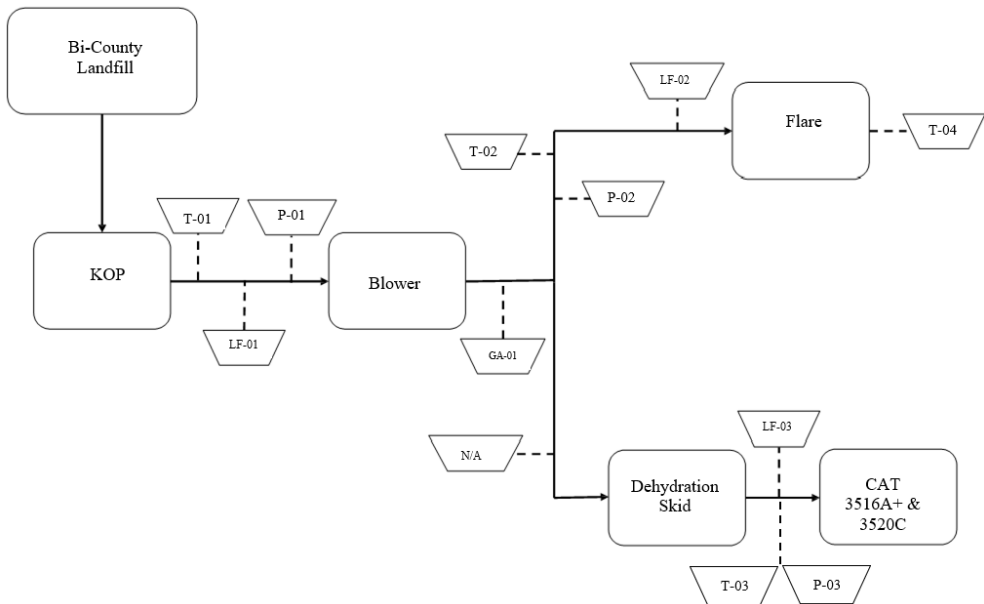
Site Diagram for CAR790: September 4, 2013 to September 7, 2013



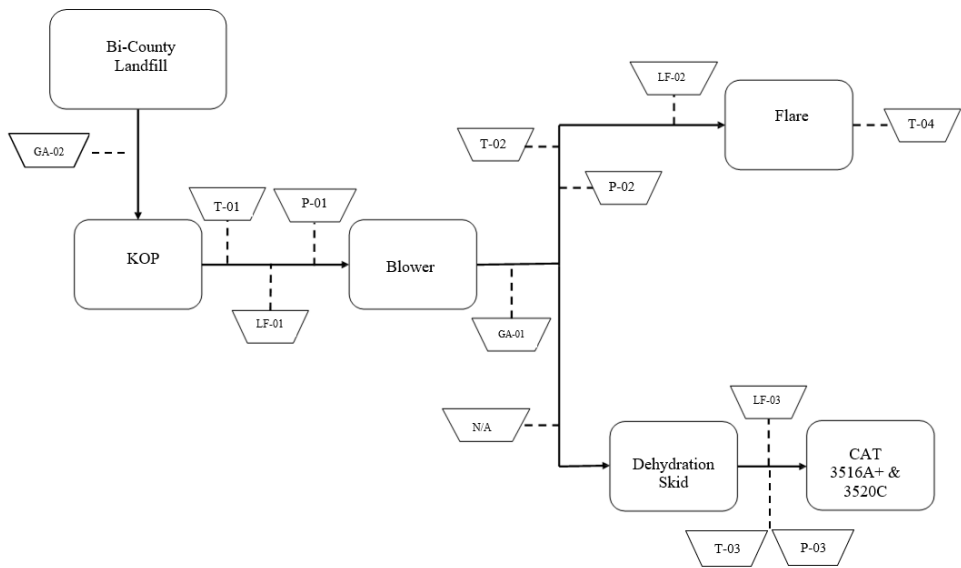
Site Diagram for CAR790: September 7, 2013 to December 18, 2013



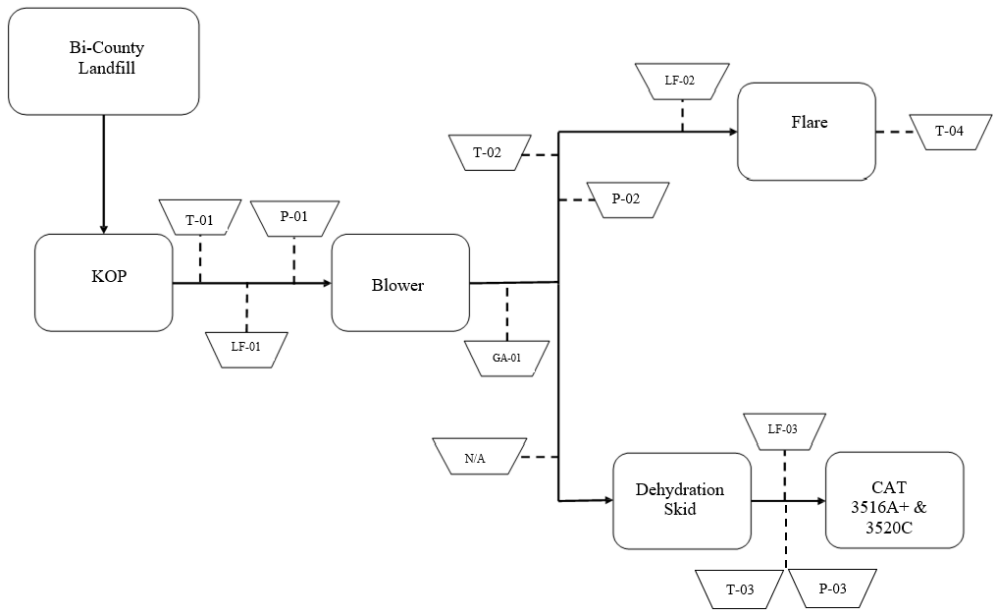
Site Diagram for CAR790: September 8, 2013 to December 27, 2017



Site Diagram for CAR790: December 28,2017 to December 20, 2018



Site Diagram for CAR790: December 21, 2018 to December 31, 2023



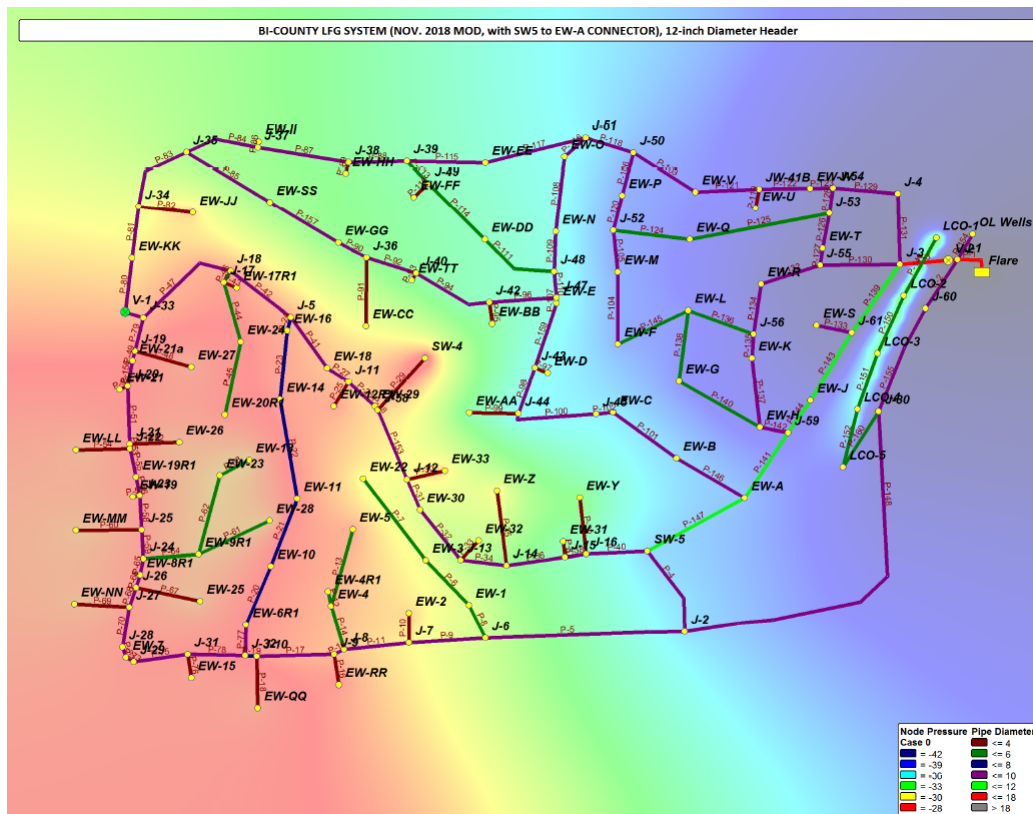
3.2 Site Overview – Gas Collection and Control System (GCCS)

The GCCS is an active collection system constructed in phases commencing in 2010. LFG is extracted from the landfill through a system of extraction wells, as well as additional horizontal collectors. The collected LFG is conveyed through transmission piping for either destruction in the on-site flare or utilization in the on-site Landfill Gas to Electricity (LFGTE) facility.

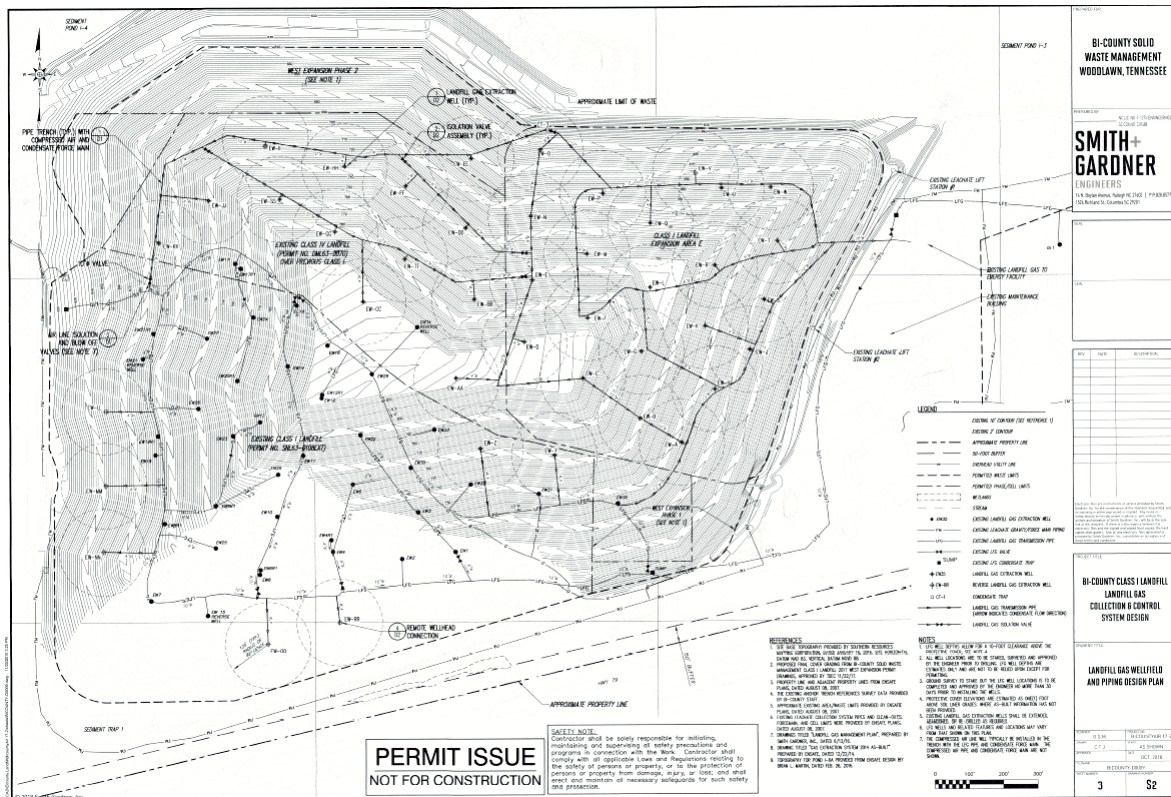
The LFG is collected through a series of extraction wells and collectors and comprises the following components:

- Vertical extraction wells
- Downslope and toe drain collectors
- Leachate cleanout riser collectors
- Wellheads
- Lateral piping and looped headers
- Transmission piping
- Valves and metering points
- Condensate management traps and pumping stations
- LFG destruction flare
- The LFGTE facility

Below is a representation of the Bi-County GCCS using the EPA approved LandGEM model:



And below is recently updated GCCS drawings for the Bi-County Landfill:



A more scalable PDF has been attached as an Appendix to this Monitoring Plan.

3.3 Monitoring Parameters Overview

- All data is archived electronically
- The proportion of data to be monitored is 100%;
- All data to be kept 10 years after it is generated or 7 years after the last verification.

3.4 Gas Balance Monitoring

- Continuous gas analysers are used at the LFGTE facility to monitor the fraction of methane within the landfill gas. The details of which manufacturer and model of continuous analyser are used are outlined in the tables and figures in the following section.
- Handheld gas analysers are used as a backup for the continuous gas analysers. The GEM serves as the primary handheld gas analyser. See table below for technical details.

Measured Parameter	Line Diagram ID	Equipment Manufacturer & Model	Data Unit & Recording Frequency	Source of Data	Calibration & Maintenance Procedures	Procedure & Default Value in case of Failure	Relevant documents
LFG_{total} Amount of Project landfill gas collected	LF – 01	Lambda Square Venturi 2350 (Serial No. 2350-08-4.800) Differential Pressure Flow Meter E+H Deltabar PMD70 (Serial No. D601491509D)) Pressure Transmitter	ft ³ /min Continuous (every 15 minutes or less)	On-site measurements	Bi-annual field check and calibration (if necessary) by certified technician. Site operator removes condensate from pipe to keep sensors clean. Contact manufacturer/supplier for technical advice. Maintenance records will be kept onsite.	Manufacturer/supplier will be contacted to conduct repairs. In the event that the meter cannot be fixed it is replaced. Major cases of equipment failure will be recorded in the daily report. CAR protocol data substitution method.	Calibration certificates; meter maintenance records to be kept electronically and onsite as applicable.
LFG_{flare} Amount of landfill gas flared	LF – 02	Lambda Square Venturi 2350 (Serial No. 2350-04-2.400) Differential Pressure Flow Meter E+H Deltabar PMD70 (Serial No. D601481509D)) Pressure Transmitter	ft ³ /min Continuous (every 15 minutes or less)	On-site measurements	Bi-annual field check and calibration (if necessary) by certified technician. Site operator removes condensate from pipe to keep sensors clean. Contact manufacturer/supplier for technical advice. Maintenance records will be kept onsite.	Manufacturer/supplier will be contacted to conduct repairs. In the event that the meter cannot be fixed it is replaced. Major cases of equipment failure will be recorded in the daily report. CAR protocol data substitution method.	Calibration certificates; meter maintenance records to be kept electronically and onsite as applicable.
LFG_{electricity} Amount of landfill gas destroyed in power plant	LF – 03	Lambda Square Venturi 2350 (Serial No. 2350-08-4.800) Differential Pressure Flow Meter E+H Deltabar PMD70 (Serial No. D6014A1509D)) Pressure Transmitter	ft ³ /min Continuous (every 15 minutes or less)	On-site measurements	Bi-annual field check and calibration (if necessary) by certified technician. Site operator removes condensate from pipe to keep sensors clean. Contact manufacturer/supplier for technical advice. Maintenance records will be kept onsite.	Manufacturer/supplier will be contacted to conduct repairs. In the event that the meter cannot be fixed it is replaced. Major cases of equipment failure will be recorded in the daily report. CAR protocol data substitution method.	Calibration certificates; meter maintenance records to be kept electronically and onsite as applicable.

Measured Parameter	Line Diagram ID	Equipment Manufacturer & Model	Data Unit & Recording Frequency	Source of Data	Calibration & Maintenance Procedures	Procedure & Default Value in case of Failure	Relevant documents
PR_{CH4} Methane fraction in the landfill gas	GA-001	Siemens Ultramat 23 (Serial No. F-Nr. N1-A2-839) Fixed Non-Dispersion Infrared (NDIR Gas Analyzer)	% Continuous (every 15 minutes or less)	On-site measurements	Bi-annual field check and calibration (if necessary) by certified technician. Field accuracy checks with calibration gases as needed (approx. monthly). Site operator will contact manufacturer/supplier for technical advice. Maintenance records will be kept onsite.	Manufacturer is responsible for repair and replacement of device in the event of failure. CAR protocol data substitution method.	Calibration certificates; analyzer maintenance records to be kept electronically and onsite as applicable.
PR_{CH4} Methane fraction in the landfill gas	-	Landtec GEM2000 (S/N: GM12622)	% Intermittent (Manual recording)	On-site measurements	Manufacturer calibrations are performed every six months	Device to be sent to manufacturer for service and calibration if equipment failure occurs.	Calibration certificates, manufacturer QA/QC requirements. Records to be kept on electronically and onsite as applicable.
PR_{CH4} Methane fraction in the landfill gas	-	Envision ENV100 (S/N: 1101005)	% (Manual recording)	On-site measurements	Manufacturer calibrations are performed annually	Device to be sent to manufacturer for service and calibration if equipment failure occurs.	Calibration certificates, manufacturer QA/QC requirements. Records to be kept electronically and onsite as applicable.
P Pressure of the landfill gas flared and destroyed in engine	P-01	E+H Deltabar PMP41 (Serial No.: D6003115001) Pressure Transmitter	Not separately recorded; used within PLC to standardize flow from measurements (LF-003)	On-site measurements	Bi-annual field check and calibration (if necessary) by certified technician. Contact manufacturer/supplier for technical advice. Maintenance records will be kept onsite.	Manufacturer/supplier will be contacted to conduct repairs. In the event that the unit cannot be fixed it is replaced. Major cases of equipment failure will be recorded in the daily report. CAR protocol data substitution method.	Calibration certificates; meter maintenance records to be kept electronically and onsite as applicable.
P Pressure of the landfill gas flared and destroyed in engine	P-02	E+H Deltabar PMP41 (Serial No.: D6002E15022) Pressure Transmitter	Not separately recorded; used within PLC to standardize flow from measurements (LF-003)	On-site measurements	Bi-annual field check and calibration (if necessary) by certified technician. Contact manufacturer/supplier for technical advice. Maintenance records will be kept onsite.	Manufacturer/supplier will be contacted to conduct repairs. In the event that the unit cannot be fixed it is replaced. Major cases of equipment failure will be recorded in the daily report. CAR protocol data substitution method.	Calibration certificates; meter maintenance records to be kept electronically and onsite as applicable.

Measured Parameter	Line Diagram ID	Equipment Manufacturer & Model	Data Unit & Recording Frequency	Source of Data	Calibration & Maintenance Procedures	Procedure & Default Value in case of Failure	Relevant documents
P Pressure of the landfill gas flared and destroyed in engine	P-03	E+H Deltabar PMP41 (Serial No.: D6002F15022) Pressure Transmitter	Not separately recorded; used within PLC to standardize flow from measurements (LF-003)	On-site measurements	Bi-annual field check and calibration (if necessary) by certified technician. Contact manufacturer/supplier for technical advice. Maintenance records will be kept onsite.	Manufacturer/supplier will be contacted to conduct repairs. In the event that the unit cannot be fixed it is replaced. Major cases of equipment failure will be recorded in the daily report. CAR protocol data substitution method.	Calibration certificates; meter maintenance records to be kept electronically and onsite as applicable.
PR_{CH4} Methane fraction in the landfill gas	GA-002	Loci Sentry-H Gas Analyzer (S/N: SH1017000592)	% Continuous (every 15 minutes or less)	On-site measurements	Manufacturer is responsible for all maintenance, repair, replacement, and calibration of the device. Calibrations are performed monthly by manufacturer. Site operator will contact manufacturer/supplier for technical advice. Maintenance records will be kept onsite.	Manufacturer is responsible for repair and replacement of device in the event of failure. CAR protocol data substitution method.	Calibration certificates; meter maintenance records to be kept electronically and onsite as applicable.
T Temperature of the landfill gas flared and destroyed in engine	T-02	Thermocouple	Not separately recorded; used within PLC to standardize flow from measurements (LF-002 and LF-003)	On-site measurements	Contact manufacturer/supplier for technical advice. Maintenance records will be kept onsite.	In the event that the thermocouple cannot be fixed it is replaced. Major cases of equipment failure will be recorded in the onsite logbook. 0°F	Maintenance records to be kept electronically and onsite as applicable.
T Temperature of the landfill gas flared and destroyed in engine	T-03	Thermocouple	Not separately recorded; used within PLC to standardize flow from measurements (LF-002 and LF-003)	On-site measurements	Contact manufacturer/supplier for technical advice. Maintenance records will be kept onsite.	In the event that the thermocouple cannot be fixed it is replaced. Major cases of equipment failure will be recorded in the onsite logbook. 0°F	Maintenance records to be kept electronically and onsite as applicable.

Measured Parameter	Line Diagram ID	Equipment Manufacturer & Model	Data Unit & Recording Frequency	Source of Data	Calibration & Maintenance Procedures	Procedure & Default Value in case of Failure	Relevant documents
T Temperature of the landfill gas flared and destroyed in engine	T-04	Thermocouple	Not separately recorded; used within PLC to standardize flow from measurements (LF-002 and LF-003)	On-site measurements	Contact manufacturer/supplier for technical advice. Maintenance records will be kept onsite.	In the event that the thermocouple cannot be fixed it is replaced. Major cases of equipment failure will be recorded in the onsite logbook. 0 ° F	Maintenance records to be kept electronically and onsite as applicable.
ELPR Electricity required to meet project demand	-	Cumberland Electric Membership Corporation Electricity Meter (SN# H108380)	kWh Monthly, continuous totalizer	Monthly invoices	Cumberland Electric Membership Corporation is responsible for calibration and maintenance of the meter.	Cumberland Electric Membership Corporation is responsible for failure procedures. Prior month's consumption.	Electricity service invoices for H108380 (Cumberland Electric Membership Corporation).
EF_{EL} Carbon emission factor of electricity	-	-	1,540.85 lb/MWh 0.699 tonnes/MWh	EPA eGRID2018 Subregion: SRTV	Updated when new data is available from eGRID	-	CAR Policy Memorandum, May 3, 2011, RE: Use of eGRID electricity emission factors for all project protocols
FFPR Fossil fuel required to meet project demand	-	-	Gallons As appropriate	Receipts/invoices	-	-	Invoices from fuel supplier (if filled during verification period).

Measured Parameter	Line Diagram ID	Equipment Manufacturer & Model	Data Unit & Recording Frequency	Source of Data	Calibration & Maintenance Procedures	Procedure & Default Value in case of Failure	Relevant documents
Regulation	-	-	-	-	Annual review of state, local, and federal LFG regulatory requirements; compliance will be maintained with all requirements. If review confirms that project continues being conducted voluntarily and in compliance with all regulation, BCGP to sign CAR Regulatory Attestation and Voluntary Implementation Attestation forms. Permits and other regulatory documents will be kept for at least 3 years prior to the project start date.	-	GCCS was voluntarily installed. All relevant solid waste, air, water, and land use permits, Notices of Violations (NOVs), and any administrative or legal consent orders.
Operation of the flare	-	LF-001 and log	Hrs Continuou s	On-site measuremen ts	Major system outages are recorded on daily basis when they occur. Continuous data serves as backup.	-	Weekly shutdown log and continuous data.
Operation of the energy plant	-	Caterpillar 3516A+ run hours meter	Hrs Continuou s	On-site measuremen ts	System outages are recorded in engine shutdown log when they occur. Continuous data serves as backup.	-	Month end report and continuous data.

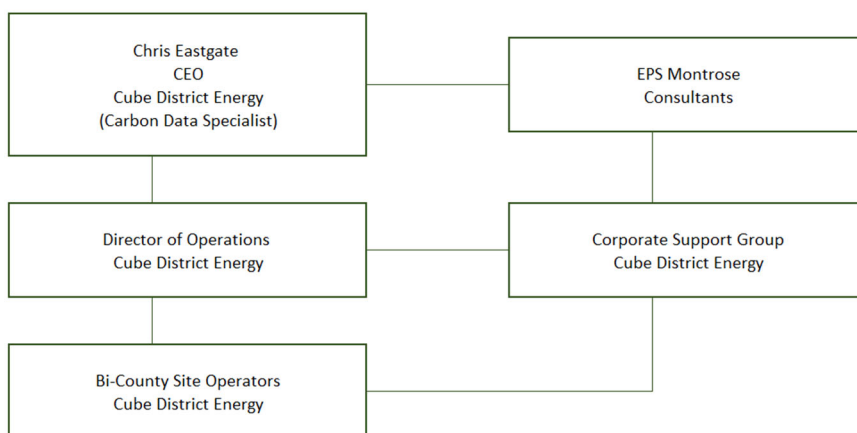
4 ORGANIZATION OF PROJECT MONITORING

The purpose of monitoring organization is that:

1. All staff involved in monitoring know what to do and how often;
2. Quality assurance and quality control measures are conducted. This ensures that the emission reduction calculations are reliable.

4.1 Project / Company Organization Chart

An organization chart for the staff involved in the monitoring process is presented below:



4.2 Operational Procedures and Policies

An organization chart for the staff

- E = Execute i.e. responsible for carrying out action
R = Responsible i.e. responsible for ensuring quality of action
I = Informed

	Site Operator	Project Controller	O&M Manager	Carbon Data Specialist
Collect data				
Landfill gas sent to flares	E	-	R	I
Landfill gas sent to energy plant	E	-	R	I
Methane concentration within the landfill gas	E	-	R	I
Power from the grid used by the project	-	E	R	I
Fossil fuels used by the project	-	E	R	I
Operational hours of the flare	E	-	R	I
Operational hours of the energy plant	E	-	R	I
Ensure calibrations and data quality	E	-	R	I
Process data²				
Input of raw data in spreadsheet	-	-	I	E/R
Cross check data and correct	-	-	I	E/R
Calculate emission reductions	-	-	I	E/R
Quality check calculated emission reductions	-	-	I	E/R
² Process data may be assigned to appropriate consultant(s) by Carbon Data Specialist				
Reporting and archiving				
Report data gaps and errors	E	-	R	I
Report emission reductions to date	-	-	I	E/R
Archiving of procedures and certificates	-	-	E/R	I
Archiving of data	-	-	E/R	-

5 DATA MANAGEMENT FOR THE PROJECT

5.1 Data Flows for Monitoring Data

Any third party involved must be able to trace back the calculated emission reductions to the source data (data trail). This means that:

1. The collected source data are complete; any data gaps are documented, and where possible replaced with default or substitute values.
2. Any corrections in the source data are marked, and the type of correction is documented in the spreadsheet.
3. The presentation of data and the calculations are transparent; any third party can reproduce the end results given the same source data.

5.2 Continuous Data

1. A Chart Recorder (CR) compiles continuous data into 5-minute intervals for: LFGtotal, LFGflare, LFGelectricity, Tflare, and PRCH4.

Chart Recorder:

Eurotherm Chessel 6100A

Serial#: US28605-1-1-2710-PL3 N1

2. Site Operator downloads CR data and stores onto site computer.
3. Site Operator sends CR data electronically to Director of Operations.
4. Director of Operations & Maintenance quality checks CR data and sends to Carbon Data Specialist.
5. Carbon Data Specialist also quality checks CR data and stores to company server.
6. Carbon Data Specialist compiles raw data from CR into monthly files.
7. Carbon Data Specialist incorporates monthly files into emission reduction workbooks.

5.3 Project / Company Organization Chart

1. Site Operator maintains monthly report of site operations, including engine run hours, electricity sent to the grid (KWh), electricity consumed by the project (KWh), methane content (measured by portable analyzer; readings not used in CRT calculations unless continuous data is unavailable), and other information relevant to maintaining project operations.
2. Equipment failures and outages are recorded in separate shutdown logs.
3. Monthly reports are sent to Director of Operations & Maintenance for quality checks.
4. Monthly reports are sent to Carbon Data Specialist on an as needed basis.

5.4 Regulatory Compliance

The project is operated such that compliance with all regulatory requirements is always maintained. Specifically, the following is ensured:

1. BCGP will sign the CAR Attestation of Title, Attestation of Voluntary Implementation and Attestation of Regulatory Compliance Forms annually. These Forms attest to the fact that the project is implemented voluntarily and is in compliance with all regulatory requirements.
2. The Director of Operations maintains all required permits for operation on site.
3. The Director of Operations will keep abreast of any changes in regulatory requirements and ensure regulatory compliance is always maintained.

5.5 Quality Assurance and Quality Control

The emission reductions achieved by the project have to be verified both internally and externally. The following steps are taken to ensure the high data quality:

1. Ensure that the data are complete and transparent [see 5.1 above]. Ensure that they are in a similar format.
2. Make sure that the data are checked for consistency and transposition errors [these can occur when data is transported from one system to another].
3. Systematically collect fuel and electricity invoices (Project Controller), and calibration certificates (Site Operator). Make sure that these records are kept up to date.
4. Make sure that a logbook is kept and cross check data against this logbook as needed.
5. Make sure that the data are not checked just by the person who entered them.
6. Archive and backup project data on server and external hard drive (once per month) in BCGP main office.
7. Quarterly inspection and cleaning vents for all metering equipment.

5.6 Quality Assurance and Quality Control

The table below provides an overview of what relevant documents (files, manuals, reports etc.) are kept and where they are stored:

Document	Produced by	Storage location	Update frequency	Remarks
Project reports and logs	Bi-County Gas Producers, LLC	Project site, monthly copies will be sent to BCGP main office	As applicable	Done for cross-checking data and general operations
Quarterly Cleaning and Inspection logs	Bi-County Gas Producers, LLC	Project site, quarterly copies will be sent to BCGP main office	Quarterly	
Calibration certificates for differential pressure transmitters	Certified technician	BCGP main office, project site will keep copies	Bi annually	
Calibration certificates for pressure transmitters	Certified technician	BCGP main office, project site will keep copies	Bi-annually	
Calibration certificates for gas analyzers	Certified technician	BCGP main office, project site will keep copies	Bi-Annually	
Electricity bills for power consumed by the project	Cumberland Electric Membership Corporation	BCGP main office	Monthly	
Maintenance records of flow meter	Bi-County Gas Producers, LLC	Project site/office	As applicable	
Maintenance records of thermocouple	Bi-County Gas Producers, LLC	Project site/office	As applicable	
Maintenance records of methane analyzer	Bi-County Gas Producers, LLC	Project site/office	As applicable	
Record of shutdowns and follow up actions (logbook)	Bi-County Gas Producers, LLC	Project site/office	As applicable	
Monitoring Manual	Bi-County Gas Producers, LLC	Project site/office	As applicable	
Instruction manuals flow meter	Lambda Square	Project site/office	n/a	
Instruction manuals for pressure transmitters	Endress + Hauser	Project Site/office	n/a	
Instruction manuals for differential pressure transmitters	Endress + Hauser	Project Site/office	n/a	
Instruction manuals of gas analyzers	Siemens	Project site/office	n/a	
Permits, relevant regulatory documents, etc.	Bi-County Gas Producers, LLC	BCGP main office	As applicable	Reviewed annually
CAR Regulatory Attestation	Bi-County Gas Producers, LLC	BCGP main office	Annually	Signed annually if project meets requirements

Past data records	Bi-County Gas Producers, LLC	BCGP main office	As applicable	Archived monthly
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5.7 Quarterly Checking and Inspection

Site operator performs quarterly cleaning and inspection of all flow monitoring equipment. Operator consults relevant instrument manuals to ensure that the monitoring equipment is performing properly. If any instrument appears to be malfunctioning, the site operator will perform checks outlined in the appropriate manual.

If service beyond the operator's capabilities is required, the operator will inform the Director of Operations and Carbon Data Specialist of a need for service. A qualified technician will be brought into field service the malfunctioning equipment. In the case that equipment cannot be repaired, it will be replaced.

Quarterly Cleaning and Inspection reports will be filled out upon each inspection. These reports are kept on file at the site and in the home office on the company server. The reports are sent to a forwarding email that goes to all parties involved.

The Quarterly Cleaning and Inspection covers the following instruments:

1. Flow Meter for inlet flow of LFG
2. Flow Meter for flow of LFG to the flare
3. Flow Meter for flow of LFG to the engine

Note that for flow of LFG, the site uses a venture-style flow meter that has two pressure outlets. The differential pressure transmitter is hooked to the flow meter to read the pressure output. The DP transmitter is calibrated according to the size and style of flow meter to achieve accurate readings.

The flow meter itself has no moving or electrical components and therefore is not calibrated. The site operator inspects the flow meter for cracks and leaks of the meter body. Site operator also ensures that the outlet ports on the meter are not clogged with any debris or otherwise damaged which would lead to inaccurate readings.

These checks are part of the routine daily rounds and shall be attested to on a quarterly basis. Project is operated such that compliance with all regulatory requirements is always maintained. Specifically, the following is ensured:

6 UPDATING THIS MANUAL

6.1 Data Flows for Monitoring Data

The monitoring manual is a sole effort of BCGP. The document is owned and managed by BCGP. If any circumstances give rise to changes, additions or updates of the monitoring manual, the table below will reflect changes and updates:

Document Control

Version No.	Description	Date issued
1	Flare-only Project Draft	10/15/2010
2	Power plant and Flare Project Draft	10/18/2011
2.1	Corrections and added Section 5.5	2/7/2012
2.2	Corrections	2/7/2012
3.0	Issuance for 2 nd Verification	12/21/2012
3.1	Updated company orgizational chart	4/13/2013
3.2	Updated diagram of project site	9/22/2013
4.0	Issuance for 3 rd Verification	1/9/2014
5.0	Updated diagram of project site	3/1/16
6.0	Issuance and edits for 4 th Verification, changes to Org. chart, updates to data collection systems. Changes in Gas analyzer device and gas quality recording.	1/26/18
7.0	Updated section 3.0 to include portable gas analyzers and gas balance monitoring methods.	5/3/18
8.0	Issuance of edits for 8 th Verficaiton, changes to organization and updates to data collection systems.	5/14/2019
9.0	Issuance of edits for 9 th Verficaiton, changes to organization and updates to data collection systems.	07/02/2019
10.0	Issuance of edits for 10 th Verficaiton, changes to organization and updates to data collection systems.	03/17/2020
11.0	Updated references to eGRID2018.	05/04/2020
12.0	Attestation of Title correction page 20	05/11/2020

13.0	Updated for Cube District Energy organization changes and included information on the Gas Collection & Control System in the landfill as required by V 5.0.	05/16/2021
14.0	Updated landfill and wellfield information and made edit requests after the June 28, 2021 audit site visit	07/11/2021
15.0	Added crediting period and quarterly Q&A activities clarifications	09/09/2021
16.0	Updated for CY2021 monitoring period	07/11/2022
17.0	Updated for CY2022 monitoring period	06/13/2023
18.0	Updated for CY2023 monitoring period	07/12/2024

7 APPENDIX – GAS COLLECTION AND CONTROL SYSTEM DRAWINGS