



**CAR 400 - Granger South Jordan
Landfill Gas Destruction Project,
Greenhouse Gas Emissions Reduction
Verification Report**

**Credit Reporting Period
1/1/2011 to 12/31/2011**

Presented to:

Blue Source, LLC
3165 East Millrock Drive, Suite 340
Holliday, Utah 84121

Presented by:

SCS ENGINEERS
3900 Kilroy Airport Way, Suite 100
Long Beach, CA 90806
(562) 426-9544

May 2012
File No. 01207128.42, Task 3

Offices Nationwide
www.scsengineers.com

**CAR 400 - Granger South Jordan Landfill Gas Destruction Project,
Greenhouse Gas Emissions Reductions Verification Report**

**Credit Reporting Period:
1/1/2011 to 12/31/2011**

Presented to:

Blue Source, LLC
3165 East Millrock Drive, Suite 340
Holliday, Utah 84121

Presented by:

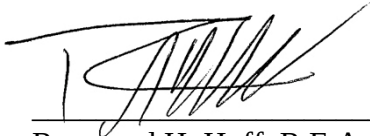
SCS ENGINEERS
3900 Kilroy Airport Way, Suite 100
Long Beach, CA 90806
(562) 426-9544

May 2012
File No. 01207128.42, Task 3

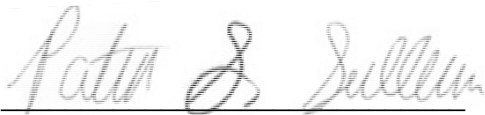
This Greenhouse Gas Emissions Reductions Verification Report for January 1, 2011 through December 31, 2011 was prepared in accordance with the Climate Action Reserve Landfill Project Verification Protocol, Version 3.0, December 2, 2009. This report, developed for Blue Source, Granger South Jordan Landfill Gas Destruction Project located in Utah in the United States, dated May 2012, was prepared and reviewed by the following:



Cassandra B. Drotman
Project Professional
Lead Verifier



Raymond H. Huff, R.E.A.
Vice President
Senior Internal Reviewer



Patrick S. Sullivan, R.E.A., C.P.P.
Senior Vice President
Principle In Charge

Table of Contents

Section	Page
1.0 Introduction.....	1
1.1 Project Overview	1
1.2 Level of Assurance	1
1.3 Objectives	2
1.4 Scope of Verification Process.....	2
1.4.1 Project Start Date	3
1.5 Verification Criteria.....	3
1.5.1 Materiality.....	3
1.6 Verification Cycle	3
2.0 Pre-Verification Activities.....	4
2.1 Conflict of Interest Determination	4
2.2 Notification of Planned Verification Activities.....	4
2.3 Project Definition.....	4
2.4 Gas Rights Determination.....	4
3.0 Core Verification Activities.....	5
3.1 Determination of Project Eligibility	5
3.1.1 Eligibility Rule I - Location	6
3.1.2 Eligibility Rule II - Project Start Date.....	6
3.1.3 Eligibility Rule III - Additionality.....	6
3.2 Regulatory Compliance	7
3.3 Identification of Project and Pre-Project Emission Sources.....	7
3.3.1 Pre-Project Destruction Devices	7
3.3.2 GHG Assessment Boundary.....	8
3.3.3 Project Emission Sources.....	8
3.3.4 GHG Project Emissions	9
3.4 Review of GHG Management Systems and Estimation Methodologies.....	9
3.5 Variance Review	11
3.6 Verification of Emissions Estimates.....	11
3.6.1 Initial Verification Review	11
3.6.2 Initial Verification Findings	12
3.6.3 Final Verification	12
3.7 Identification of Material/Immaterial Misstatements.....	12
4.0 Findings.....	13
4.1 2011 Emission Reductions.....	13

List of Tables

No.	Page
Table 1. 2011 Emissions Sources.....	8
Table 2. Monitoring Equipment QA/QC.....	9
Table 3. 2011 Verified GHG Emission Reductions.....	13

1.0 INTRODUCTION

Blue Source, LLC. (Blue Source) has retained SCS Engineers (SCS) to perform verification activities associated with the “Granger South Jordan Landfill Gas Destruction Project” (Project) being submitted to the Climate Action Reserve (Reserve or CAR). The verification period for the Project was from January 1, 2011 through December 31, 2011. The Project’s Reserve identification number is 400 (CAR 400). The Project is located at the Trans-Jordan Landfill, in South Jordan, Utah (Trans-Jordan Landfill). This verification report (Report) was produced in accordance with the Reserve’s Landfill Project Protocol, Version 3.0, December 2, 2009 (LPP). SCS is a Reserve-approved verifier and is fully qualified to perform greenhouse gas (GHG) verification activities for the Blue Source.

Under the Reserve’s LPP, the Project resulted in a carbon dioxide (CO₂) reduction equivalent of **138,699** metric tons during the 2011 reporting period from January 1, 2011 to December 31, 2011.

1.1 PROJECT OVERVIEW

The Trans-Jordan Landfill is an active landfill located southwest of South Jordan, Utah. The Trans-Jordan Landfill encompasses an area of approximately 200 acres and accepts municipal solid waste (MSW). The landfill started accepting waste in 1958 and reportedly had 8,123,148 tons of refuse in-place at the end of 2011.

In 2004, Granger Electric of South Jordan, LLC (Granger) designed a gas collection and control system (GCCS) for the Trans-Jordan Landfill, and Trans-Jordan Cities installed the system. The current GCCS consists of 86 vertical landfill gas (LFG) extraction wells, which are connected via a common header line. From the header line, the captured LFG is either sent to an LFG to energy (LFGTE) plant for combustion, or combusted on-site in an emergency backup candlestick flare. Prior to the flare, the gas passes through a Yokogawa Model EJX910 differential pressure flow meter. The flare has been operational since June 2005; however, due to limited use and monitoring of the flare, Blue Source is not claiming emission reductions associated with the flare during this reporting period.

Prior to the LFGTE engines, the gas passes through a process skid, including a gas compressor, condensate trap, heat exchanger, chiller, a moisture separator and coalescing filter. Collected LFG is routed through the processing skid station, past a Yokogawa Model DY150-EB Serial No. 8343B051 flow meter. The gas is then routed through a Siemens Ultramat 23 gas analyzer. The LFG is delivered to the LFGTE plant’s electricity generating engines, where LFG is destroyed in three identical 3520 Caterpillar lean-burn LFG-fired generators (1.6 MW each), all of which are owned and operated by Granger.

1.2 LEVEL OF ASSURANCE

SCS adheres to the ISO 14064-3:2006 concept of two levels of assurance that a GHG verification process can provide; “reasonable” and “limited.” A “reasonable” level of assurance provides a reasonable, but not absolute, level of assurance that the Project’s GHG assertions are:

1. Materially¹ correct and a fair representation of the GHG data and information, and
2. Prepared in accordance with the Reserve's LPP.

A "limited" level of assurance provides a more limited/"qualified" level of assurance as compared to a reasonable level of assurance due to less emphasis on detailed GHG data testing and supporting information.

Blue Source is seeking a level of assurance in the verification process that is consistent with the requirements of the Reserve. In accordance with these requirements, in order for SCS to verify Blue Source's GHG emission reductions assertions, a sample of the report data must be free of material misstatement. This constitutes a "reasonable level of assurance."

1.3 OBJECTIVES

The objective of this verification report is to establish the Project's conformance with applicable verification criteria, including principles and requirements of relevant standards and the GHG program within the scope of the verification as outlined below.

1.4 SCOPE OF VERIFICATION PROCESS

The scope of this project encompasses the verification of Blue Source's January 1, 2011 through December 31, 2011 Reserve-reported GHG emission reductions, which include the following components:

- Geographic boundary – U.S. emission reductions only
 - South Jordan, Utah
- Project Start Date – June 29, 2005
- Additionality
 - Performance Standard Test
 - Legal Requirement Test
- Materiality Threshold² – 1%
- Level of Assurance – Reasonable
- Emissions Reductions
 - LFG combustion from the Trans-Jordan Landfill
 - Open Flare
 - LFGTE plant with three engines
- GHG Sources
 - Indirect emissions
 - Purchased/consumed electricity
 - Direct emissions
 - Mobile emissions from diesel vehicles
 - Stationary emissions from flare propane start up and propane miscellaneous uses

¹ Under the Reserve, materiality is defined as a discrepancy of overall reported emissions (both direct and indirect) that differs from the verifier's estimated emissions by more than 1%.

² Projects shall meet a minimum materiality threshold to ensure accuracy. The materiality threshold shall be defined as 5% of stated reductions or removals for smaller projects, 3% for medium projects and 1% for larger projects.

- Natural gas emission from building heating
- Time period –
 - 2011 calendar year (January 1, 2011 - December 31, 2011)

1.4.1 Project Start Date

SCS reviewed the following documents to confirm the reported project start-up date of June 29, 2005:

- Invoice of Flare Startup Achievement by MRW Technologies, Inc.
- South Jordan Flare Start-Up Log Book, start dated June 29, 2005
- Emails between MRW Technologies, Inc. and Trans-Jordan Cities confirming the candlestick flare installation date as June 20, 2005 and the startup date as June 29, 2005

Review of the aforementioned forms document and cross-reference the project startup date as June 29, 2005.

1.5 VERIFICATION CRITERIA

Criteria against which the verification assessments were undertaken are:

- International Standards Organization (ISO) 14064:2006.
- Reserve LPP Version 3.0, December 2, 2009.³
- Reserve Program Manual, October 26, 2011.
- Reserve Verification Program Manual, December 20, 2010.
- SCS *Greenhouse Gas Validation and Verification Program Manual* (V/V Manual), version 1.8, dated October 2011.

1.5.1 Materiality

In accordance with the required level of assurance, the needs of Blue Source, and the Reserve's LPP, a materiality threshold of 1% will be applied to this verification. Any misstatement greater than 1% will be considered material.⁴

1.6 VERIFICATION CYCLE

Blue Source has requested verification of its calendar year 2011 emission reductions. 2011 marks the sixth year of the Project. Verification of the 2011 emissions reductions will put the Project into its third year of reporting with the Reserve, having completed its third year of reporting overall. The Reserve has a ten-year emission reductions reporting allowance for projects. The Reserve requires a full review of emission reductions, management systems, and verification of emission reductions annually.

³ The Reserve may issue Errata and Clarification to protocols after they are released, which become effective immediately for the version for the protocol to which they apply. At the time of this report, Errata and Clarifications had been issued by the Reserve on October 26, 2011 for LPP Version 3.0, and have been applied to the current reporting period.

⁴ Projects shall meet a minimum materiality threshold to ensure accuracy. The materiality threshold shall be defined as 5% of stated reductions or removals for smaller projects, 3% for medium projects, and 1% for larger projects.

2.0 PRE-VERIFICATION ACTIVITIES

2.1 CONFLICT OF INTEREST DETERMINATION

The Program Manual requires that the Reserve make a determination of whether or not a conflict of interest (COI) exists between the verifier and the participant. This is done in order to ensure an objective review of a participant's emissions reductions by the verifier. On March 5, 2012, SCS submitted the *Project Form: Notification of Planned Verification Activities and Request for Evaluation of Potential for Conflict of Interest between Verifier and Project Developer* (COI form) to the Reserve.

On April 6, 2012, SCS received a COI determination from the Reserve. The Reserve concurred with SCS's determination that there was a limited pre-existing relationship between SCS and Blue Source, other than prior verification work for this facility, and therefore the potential for COI is medium. SCS submitted a mitigation plan which insulated project verification from any SCS staff who previously has worked with Blue Source on non-GHG related activities at other facilities. A copy of the submitted COI form has been posted to the Reserve's web site as a private document.

2.2 NOTIFICATION OF PLANNED VERIFICATION ACTIVITIES

The project COI was submitted to the Reserve on March 5, 2012, which also provides the Reserve with a notification of planned verification activities at least ten business days prior to the beginning of verification activities. The notification includes scheduling and site selection information. The intent of this requirement is to allow the Reserve the opportunity to accompany the verifier on the site visit.

In accordance with the LPP, SCS provided the Reserve with notification of planned verification activities which stated an intended start date of verification activities prior to starting services. The Reserve typically requires a 10-day notification period.

2.3 PROJECT DEFINITION

In accordance with the LPP, only projects that meet the definition of a "GHG reduction project," as defined in the LPP can be considered for GHG reduction credits with the Reserve. A proposed "GHG reduction project" consists of the "installation of an LFG control system for capturing and destroying methane gas that commences operation on or after January 1, 2001."

As detailed in Section 1.1, the Project consists of a network of LFG collection wells installed in the Landfill. These wells are interconnected by a header line, which is in turn connected to an on-site LFG flare and LFGTE system. Therefore, the Project meets the definition of a "GHG reduction project," per Reserve guidelines.

2.4 GAS RIGHTS DETERMINATION

In order to register GHG reductions with the Reserve, the ownership of the reductions must be established by clear and explicit title. On May 9, 2012, Blue Source completed an "Attestation of Title" document clearly documenting Blue Source's ownership of the gas rights to the LFG

recovered from the Landfill. Blue Source uploaded the “Attestation of Title” document on to the Reserve Reporting Tool.

On May 7, 2012, SCS reviewed the LFG purchase agreement between Trans-Jordan Cities/Landfill Owner (the Seller), and Granger Electric of South Jordan, LLC/Electric Company (the Purchaser) and confirmed that no changes had been made to the LFG purchase agreement. Granger is in an agreement with Trans-Jordan Cites to operate the GCCS and the LFGTE plant. The contract specified that the Landfill Owner consents to the production, collection processing, transportation, and related purposes of the LFG to Granger Electric of South Jordan, LLC. The contract also states that all emission reductions, which become available from the Trans-Jordan Landfill, shall be controlled by the Granger Electric Company as well as any economic benefits and carbon credits associated with the LFG or project.

On May 7, 2012, SCS reviewed the “Agreement for the Development, Verification, Registration, and Marking of Greenhouse Gas Emission Reductions Benefits” relating to the Granger South Jordan LFGTE project between Blue Source/developer and Granger Electric of South Jordan, LLC. Blue Source is in agreement with Granger over the ownership of carbon credits. After reviewing the contract, SCS identified that Blue Source has full legal, title, and exclusive ‘Emission Reduction Benefit’ to all emission reduction credits, and ownership of carbon credits from the Project. SCS can substantiate that Blue Source has sole ownership of all GHG emissions reductions and carbon credits associated with the project.

The previous project developers contract stated that its “‘Commitment Period’ means the period starting on January 1st, 2005 up to and including 31st, December 2010” and review of Blue Sources agreement showed that their contract may only start to claim reduction after January 1st, 2011.

In addition to the "Attestation of Title" document, SCS also reviewed the solid waste facility permit, Title V Operating Permit, and various other compliance-related documents for the Landfill in order to verify ownership.

Via review of these documents, SCS substantiated that Blue Source has full ownership of the gas rights and carbon credits resulting from the Project.

3.0 CORE VERIFICATION ACTIVITIES

In accordance with the LPP, core verification activities are comprised of a four-step process by which Project GHG reduction assertions are subjected to risk assessment and data sampling efforts designed to ensure that the risk of a reporting error is addressed through appropriate sampling and review.

3.1 DETERMINATION OF PROJECT ELIGIBILITY

In order to register reduction projects with the Reserve, a project must meet three eligibility rules established by the reserve in the LPP. The applicability of each of these rules to the Project is discussed below.

3.1.1 Eligibility Rule I - Location

Only GHG reductions associated with U.S.-based projects are eligible to register reductions with the Reserve. Since the Project is entirely based in South Jordan, Utah, the Project meets this eligibility requirement.

3.1.2 Eligibility Rule II - Project Start Date

Only GHG reduction projects that commenced operation after January 1, 2001 and listed for registration within a period of 12 months from the effective date of the LPP are eligible to register reductions with the Reserve. Projects listed under older versions of the LPP may report and be verified under the newest protocol version. Since the Project commenced operation on June 29, 2005 (which is after the January 1, 2001 start date); and submitted for registration with the Reserve on December 11, 2008 under version 2.0 of the LPP dated November 18, 2008 (which is within 12 months of the initial protocol effective date and prior to the development of version 3.0 the LPP), the Project meets this eligibility requirement.

3.1.3 Eligibility Rule III - Additionality

The Reserve only registers reductions that are "additional" to what would have occurred without implementation of the Project. The Reserve implemented the additionality test to ensure that projects that yield surplus GHG reductions are above and beyond what is considered "business-as-usual," also designated as the baseline scenario. Projects are considered additional if they can pass the following two tests:

- Performance Standard Test
- Legal Requirement Test

Each of these tests are discussed below.

3.1.3.1 Performance Standard Test

According to the LPP, in order to pass the Performance Standard Test, a developer must show that they meet a performance threshold that represents "better than business as usual." The developer can pass this test by installing an LFG system at a landfill that is not otherwise required to do so by regulation. Under the Reserve, a developer must demonstrate that the project meets one of three performance threshold scenarios; 1) No LFG system was at the site prior to the Project start date; 2) a previous LFG system at the site was being used that would not qualify under the LPP; or 3) the project meets certain special conditions which apply to a pre-existing project.

Based on SCS' review, there was no 'active' collection and control of LFG prior to the construction and implementation of the Project/Project start date (Scenario 1). The Trans-Jordan Landfill was not collecting and destructing any landfill gas prior to the implementation of the Project.

3.1.3.2 Legal Requirement Test

The Reserve subjects all projects to the Legal Requirement Test to ensure that reductions achieved are done so by projects that would not have occurred in the baseline case due to federal, state, or local government regulations. On May 9, 2012, Blue Source completed the Project Developer's "Attestation of Voluntary Implementation" document which states that the project was implemented, established, operated, and conducted voluntarily.

The U.S. Environmental Protection Agency (EPA) threshold for regulatory-required installation of a GCCS is the 50 megagrams per year (Mg/yr) threshold for non-methane organic compounds (NMOC) emissions under the landfill New Source Performance Standards (NSPS) and emission guidelines (EG) regulations. Trans-Jordan Cities had Kleinfelder, Inc. conduct a Tier 2 LFG testing program on August 20, 2010 and completed the five-year NMOC emission estimate for the Trans-Jordan Landfill on December 29, 2010. The Trans-Jordan Landfill reported a 22 Mg/yr NMOC emission rate in 2011 with a conservative population growth rate not to exceed 15 percent for the next four years, which is under the 50 Mg/yr threshold. Tier 2 testing results are valid for five years, thus through 2015. Additional Tier 2 testing under the NSPS will be due in 2016 in order to maintain the Landfill's status as unregulated under NSPS regulations unless other conditions change that could increase NMOC emissions.

In addition, the Trans-Jordan Landfill is not required to comply with the federal landfill National Emissions Standards for Hazardous Air Pollutants (NESHAP) regulation, which has the same triggering threshold as the NSPS, and there are no specific State of Utah or local regulations, which pertain to the Trans-Jordan Landfill that would require the installation of a gas collection and destruction system. Through our evaluation process, SCS has concluded that the Trans-Jordan Landfill passes the Legal Requirement Test.

3.2 REGULATORY COMPLIANCE

On May 9, 2012, Blue Source completed an "Attestation of Regulatory Compliance" document, which states that the project is in material compliance with all laws. During the site visit, SCS reviewed on-site permits and interviewed on-site personnel on all applicable federal, state, and local regulations and ordinances, which the Landfill is subject to, in order to confirm the attestation statement and to ensure that the Project adheres to the regulatory compliance requirement. Through our evaluation process, SCS has concluded that the Landfill adheres to the regulatory compliance requirement and that there were no instances of non-compliance during the verification period.

3.3 IDENTIFICATION OF PROJECT AND PRE-PROJECT EMISSION SOURCES

3.3.1 Pre-Project Destruction Devices

Prior to the construction and implementation of the Project, the Trans-Jordan Landfill did not have a GCCS, therefore the baseline scenario assumes that all uncontrolled methane (CH₄) emissions were released into the atmosphere, with the exception of the amount of CH₄ that would have been oxidized by the soil bacteria in the absence of the project. The LFG collection system was designed and installed in 2004, and no LFG was collected or destroyed prior to the

installation of the project. SCS confirmed the baseline scenario through the evaluation of the LFG GCCS installation documentation and interviews with on-site landfill staff.

3.3.2 GHG Assessment Boundary

In accordance with Table 4.1 of the LPP, the following GHG sources should be included in the calculation of net emissions reductions associated with a LFG collection and destruction system similar to the flare that constitutes the Project.

- Waste Breakdown
 - Emissions resulting from waste breakdown in landfill based on destruction in destruction devices (CH₄ only) (sources, sinks, and reservoirs (SSR) 4)
- LFG Collection System
 - Emissions resulting from fossil fuel derived energy used by blowers, gathering, and upgrade systems (CO₂ only) (SSR 5)
- LFG Combustion in an Engine for Electricity Generation
 - Emissions resulting from the destruction of LFG in the engines (uncombusted CH₄ pass-through) (SSR 8)
 - Emissions resulting from the destruction of fossil fuel in the engines (uncombusted CH₄ emissions and all CO₂ emissions from fossil fuel) (SSR 6)
- LFG Combustion in a Flare
 - Emissions resulting from the destruction of LFG in the flare (uncombusted CH₄ pass-through) (SSR 9)
 - Emissions resulting from the destruction of fossil fuel in the flare (uncombusted CH₄ emissions and all CO₂ emissions from fossil fuel) (SSR 6)

Note that displacement of GHG emissions from fossil fuel destruction from electricity generated using LFG is not included in the GHG assessment boundary.

3.3.3 Project Emission Sources

Blue Source identified the following emissions sources associated with the Project:

Table 1. 2011 Emissions Sources

GHG Source Category	GHG Source
LFG Collection System	-CO ₂ emissions associated with indirect electricity usage from blowers and system (including flare). -CO ₂ emissions associated with the diesel usage from transportation of the condensate.
LFG Combusted in an Engine	-CH ₄ emissions associated with un-destroyed LFG (based on lean-burn engine destruction efficiency). -CO ₂ emissions associated with the natural gas usage from heating of the LFGTE plant building.
LFG Combusted in a Flare	-CH ₄ emissions associated with un-destroyed LFG (based on open flare destruction efficiency). -CO ₂ emissions associated with the propane usage from the flare start up.

During the site visits, SCS confirmed that there are no additional emissions sources that exist for the facility that were not included in Blue Source inventory. Note that no significant quantities of additional fuels (e.g. natural gas) are utilized on-site. The flare exclusively destroys LFG with minimal amounts of propane used for pilot gas during startups and miscellaneous uses. The engines only utilize LFG.

3.3.4 GHG Project Emissions

In accordance with the LPP, Blue Source has to report all emissions that may occur or increase as a result of the Project activity, and therefore must be deducted from the overall project reductions. Currently, emitted GHGs resulting from the Project include CO₂, CH₄, and nitrous oxide (N₂O) from grid-supplied electricity usage, and propane flare start up, propane miscellaneous uses, as well as CH₄ emissions associated with the portion of LFG that is sent through the flare but not combusted. Note that the Reserve has excluded N₂O emissions as a GHG source due to the limited amount and associated uncertainty in calculating these emissions. Thus, the Project emissions are limited to CO₂ and CH₄ from the flare, propane startup, propane miscellaneous uses, and grid supplied electricity.

3.4 REVIEW OF GHG MANAGEMENT SYSTEMS AND ESTIMATION METHODOLOGIES

In accordance with the LPP, SCS evaluated Blue Source's methodologies and management systems for calculating the Project emission reductions. This evaluation consisted of interviews with key personnel associated with reporting and calculation of the Project's GHG reductions, as well as an initial review of the Project's Monitoring Plan to evaluate its conformance to the requirements outlined in Section 6 of the LPP. Blue Source's management system meets the LPP's requirements.

The Monitoring Plan provided by Blue Source provides a written account of the frequency of data acquisition, a record keeping plan, frequency of instrument calibration activities, as well as quality assurance and quality control (QA/QC) provisions to ensure that meter calibration and data acquisition are carried out consistently. SCS interviewed Blue Source, Granger, and onsite personnel in regards to the implantation of the monitoring plan. The flow of LFG and fraction of methane in the LFG to the engines is measured continuously and recorded every ten minutes. The Project, LFG flow meters, methane analyzer, and entire LFGTE Plant, are inspected daily. The LFG flare skid required manual starting and stopping and is inspected daily when in use. **Table 2** outlines the frequency for instrument inspections, cleaning, field checks, and manufactures calibration.

Table 2. Monitoring Equipment QA/QC

	LFG Flow Meter		Methane Analyzer	
	Plant (Yokogawa Flow Meter)	Flare (Yokogawa Flow Meter)	Plant (Siemens Ultramat 23 Continuous Analyzer)	Portable (LANDTEC 2000 Portable IR Gas Analyzer GEM-2000)
Inspection	Daily	Daily ¹	Daily	Prior to taking readings
Cleaning	Quarterly	Quarterly	Quarterly	
Field Checks	Quarterly ³	Quarterly ³	Weekly ³	
Manufacturer Calibration	5 years	5 years	Quarterly ²	6 months

¹Flare flow meter is inspected daily when operational.

²Siemens recommends an annual field calibration and the unit does not need to be sent in for a factory calibration.

³At least once during the reporting period (2 months prior to the end date of reporting).

The Project's monitoring instrumentation, including flow meters, methane meters, flare combustion temperature monitoring equipment, and all associated equipment specification documents and calibration records showed that all instruments are operating within the thresholds set forth in the LPP. The flow meter to the LFGTE plant and the DP Transmitter flow meter to the flare were calibrated by Process Engineered Products on a quarterly basis. The Siemens Ultramat 23 gas analyzer was calibrated on site by facility operators on a weekly basis and in addition third party calibrations have been performed by the manufacturer as well as Process Engineered Products. SCS can confirm, based on the documentation provided, that the calibration flow check events were carried out in a manner consistent with the LPP. The flow meter to the LFGTE Plant corrects flow data from typical operating conditions of 80 degrees Fahrenheit (°F) and 7 pounds per square inch gauge (psig) to standard conditions of 60 °F and 1 atmosphere. The PLC further adjusts flow to standard conditions as the actual temperature and pressure of the LFG change in real time. From January 1, 2011 to November 15, 2011 the PLC incorrectly adjusted the flow from operating parameters of 60 °F and 10 psig. On November 15, 2011, Newkirk Electric Associates, Inc. reprogrammed the PLC to adjust the flow to from operating conditions of 80°F and 7 psig, and the flow was recorded in this manner until the end of the reporting period, December 31, 2011. All LFG flows for the reporting period have been accurately corrected to 60°F and one atmosphere for the emission calculations.

Blue Source had all three engines source tested on May 1st and 2nd, 2012 by Air Pollution Testing, Inc. (APT) and calculated the site specific methane destruction efficiency. APT, an accredited source test service provider, conducted three test runs on each engine. The destruction efficiency value of one standard deviation below the mean of the measured efficiencies was used in the emission reduction calculations. APT followed the EPA source emissions test methods in accordance with 40 CFR Part 60, Method 3A and Method 25A when conducting the source test. The facility followed the Reserve's guidance and process for determining a site-specific destruction efficiency in accordance with the Reserves best practice outlined in version 4.0 of the LPP.

Granger is responsible for the day-to-day operation of the GCCS and LFGTE plant, flare and engines collection and recording of monitoring data associated with the Project. The Director of Operations for Granger oversees the collection and reporting of the monitoring data associated with the Project and conducts QA/QC checks. Blue Source is responsible for performing the calculations, as well as QA/QC of the data provided by Granger, and the registration of GHG reductions from the Project as well other aspects of Project management. Blue Source, is responsible for overall management of the Project, including final review and approval of Project data, calculations and QA/QC.

During interviews and discussions with the above-mentioned staff, all appeared to be knowledgeable with regard to their respective roles in the data acquisition and reporting processes.

Documentation of electricity usage, fuel consumption, and other related activities are retained in a manner appropriate for accurate GHG reduction reporting and are outlined in the Monitoring Plan. Documentation is retained through spreadsheets, internal databases, invoicing databases,

purchase records, and other similar methods. Blue Source's current GHG management system is appropriate for the emissions reductions identified in each emission source category as well as for the GHGs reported.

Blue Source used the default emission factors and standardized estimation methods in the LPP when available. The Project Monitoring Plan and QA/QC procedures are consistent with the requirements in version 3.0 of the LPP.

3.5 VARIANCE REVIEW

The Project did not apply for, nor was granted, any variances during this reporting period.

3.6 VERIFICATION OF EMISSIONS ESTIMATES

3.6.1 Initial Verification Review

On April 17, 2012, SCS performed a site visit to the Landfill facility as part of this verification. The purpose of the onsite inspection and desktop verification were to ensure that the collection and destruction devices were installed and operated correctly, the Monitoring Plan was being properly implemented and that all emission sources (e.g., facility, source, and fuel) were identified by Blue Source and correctly deducted. Discussions of the emission reductions and sources identified by Blue Source are presented below.

In addition, based on Blue Source's identified emission sources, management systems, and corresponding risk profile of GHG emissions, SCS selected the following emissions estimates for verification review:

- Review of electricity usage data using third-party utility bills
- GHG reduction recalculation

A discussion of the verification process for each of these emissions sources is presented below.

3.6.1.1 Review of Electricity Records

SCS reviewed Blue Source's electricity data from third-party utility bills and spreadsheets. The spreadsheets are used to track monthly and annual utility expenses for each facility operated by the Landfill and were reviewed by SCS for January 2011 through December 2011. In addition, original copies of the individual electricity bills were reviewed for the Project. From this information, SCS was able to verify that the utility records are consistent with Blue Source's emissions calculations.

3.6.1.2 Review and Recalculation of GHG Emissions

As a part of the verification process, SCS reviewed the data, deductions, and calculations that were used in the determination of requested emissions reductions for the Project. In accordance with the LPP, the emissions reduction calculations included the following factors:

- **99.7% destruction efficiency** for CH₄ destruction due to CH₄ destruction by lean burn engines determined by site specific source test.
- **96% destruction efficiency** for CH₄ destruction due to CH₄ destruction by an open flare.
- **10% methane oxidation factor** due to the lack of a synthetic cap on landfill.

Additional to the requirements of the LPP, SCS re-calculated all of the GHG reductions and emissions associated with the Project. SCS performed independent calculations of the Project's sources and reductions and compared the calculations to the emission levels reported by Blue Source for the 2011 reporting period.

A comparison of the direct and indirect emissions and the total emission reductions performed by SCS, with the original emissions totals as reported by Blue Source, was conducted. This comparison of emissions calculations is used to determine if there is a large difference (defined as greater than 1% difference of the total emissions) in calculations performed by SCS and Blue Source.

3.6.2 Initial Verification Findings

Based on the results of our verification activities, the findings of our initial review were presented in an Initial Verification Findings Log and discussed with Blue Source through email and telephone conversation on May 8, 2012. The initial findings log identified material misstatements and immaterial misstatements. The initial verification findings log has been posted on the Reserve website as a private document.

3.6.3 Final Verification

On May 11, 2012, Blue Source submitted an updated version of its Monitoring Plan and associated GHG reduction calculations, in response to SCS's initial findings. As such, this section addresses the final emissions report for Blue Source.

SCS performed a complete emissions data review, combined with weighted GHG emissions risk assessment, in order to ensure that no material emissions sources were excluded and that the risk of error is assessed and addressed through the appropriate sampling and review. During this assessment, SCS determined that the 2011 emission reductions of GHG as well as all of the emissions factors used were consistent with the LPP.

3.7 IDENTIFICATION OF MATERIAL/IMMATERIAL MISSTATEMENTS

In accordance with the LPP, for SCS to verify a GHG emission reduction report, a sample of data must be free of material misstatement. As defined by the Reserve, material misstatements may be comprised of:

- 1) Any non-conformance with the LPP or other pertinent Reserve requirements;
- 2) Emissions sources that are not reported, i.e., missed in the participant's inventory;
- 3) Use of inappropriate emissions factors;

- 4) An identified discrepancy which results in a difference between the verifier and the participant's calculated total emission of more than 1%. Note that a difference is considered immaterial if this difference is less than 1%;
- 5) Inconsistent records (e.g. fuel use does not match fuel purchased);
- 6) Exclusion of material GHG emissions;
- 7) Other issues/items identified by the verifier during the verification process.

SCS's total combined (indirect and direct) emissions were within 1% of Blue Source's combined calculated emissions. From this information as well as other components of our review, it can be concluded that no material misstatements exist.

4.0 FINDINGS

4.1 2011 EMISSION REDUCTIONS

Based on the verification activities conducted by SCS, it has been determined that Blue Source's Landfill Project's GHG emission reductions for the January 1, 2011 through December 31, 2011 reporting period are consistent with the Project methodology, free of material misstatement, and can be considered to a reasonable level of assurance.

Table 3. 2011 Verified GHG Emission Reductions

Reporting Period: January 1 to December 31, 2011	
Baseline Emissions Reductions	138,711 metric tons CO ₂ e
Pre-Project/Project Emissions	12 metric tons CO ₂ e
TOTAL	138,699 metric tons CO₂e