

**BALDWIN COUNTY COMMISSION  
REQUEST FOR PROPOSAL  
Landfill Gas-to-Energy Project**

RFP number:

Proposal Due Date: Mon, August 19, 2019, 2:00 P.M. local time

Pre-Proposal Meeting: Non-Mandatory Site Visit and Meeting  
Wed, August 7, 2019, 11:00 am local time  
Magnolia Sanitary Landfill  
15140 County Road 49  
Summerdale, Alabama 36580

Contract Period: 15 years

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Baldwin County Commission  
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Bay Minette, AL 36507  
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**All requests for additional information shall be made in writing.  
Responses will be made available to all known Vendors in writing.  
No verbal responses will be provided.**

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## DEFINITIONS

RFP – Request for Proposals  
 BCC- Baldwin County Commission  
 LFG - Landfill Gas  
 MSLF – Magnolia Sanitary Landfill  
 ADEM – Alabama Department of Environmental Management  
 LFGTE – Landfill Gas to Energy  
 GCCS – Gas Collection and Control System  
 gpm – gallons per minute  
 psig – pounds per square inch gauge  
 FAT – Factory-acceptance Testing  
 BTU – British Thermal Unit  
 MMBTU – Million British Thermal Unit  
 scfm – standard cubic feet per minute  
 NSPS – New Source Performance Standard

## **1 GENERAL INFORMATION**

### **1-1 Purpose**

The Baldwin County Commission (BCC) is issuing a Request for Proposals (RFP) for companies interested in developing a landfill gas to energy project at the Magnolia Sanitary Landfill (MSLF), an active municipal solid waste landfill in Baldwin County, Alabama. BCC is seeking Vendors qualified to convert landfill gas (LFG) to energy.

The issuance of this RFP does not constitute an award commitment on the part of the BCC, nor does it commit the BCC to pay for any costs incurred in the submission of a response in this RFP. BCC may waive any informalities or minor defects or reject any and all proposals.

### **1-2 Pre-Proposal Meeting**

A pre-proposal meeting and site tour will be held on Wed, August 7, 2019, 11:00 am local time at the MSLF. The landfill office is at 15140 County Road 49, Summerdale, Alabama 36580. The purpose of the meeting and site visit is to familiarize Vendors with the site, discuss the work to be performed, and answer questions. Attendance is strongly encouraged but not mandatory.

### **1-3 Contract Consideration**

The Contract is expected to be negotiated after BCC selects the Vendor.

### **1-4 Rejection**

BCC reserves the right to accept or reject any or all proposals or to waive any irregularities in any proposal or to accept the proposal that best serves the interest and intent of this Project and is from the most responsive and responsible Vendor.

### **1-5 Inquiries**

For questions and additional information, contact:

Wanda Gautney  
Purchasing Director  
Baldwin County Commission  
312 Courthouse Square-Suite 15  
Bay Minette, AL 36507  
Telephone: (251) 580-2520  
Fax: (251) 580-2536  
E-mail: [wgautney@baldwincountyal.gov](mailto:wgautney@baldwincountyal.gov)

Requests for additional information regarding this RFP must be submitted in writing no later than Mon, August 12, 2019, 5:00 P.M. local time to BCC. Questions submitted by facsimile or other electronic media will be accepted; however, receipt by BCC is not guaranteed. The Vendor is responsible for ensuring receipt of the questions by BCC. BCC will respond to written requests in writing and will issue a written addendum to the proposal.

### **1-6 Addenda**

Any changes made to the RFP shall be brought to the attention of Vendors by issuing addenda. All addenda are part of the proposal documents and each Vendor will be bound by such addenda, whether or not the Vendor has received the addenda. Each Vendor is responsible for verifying that they have received all

addenda issued before proposals are opened.

## **1-7 Proposal Schedule**

**Table 1: Tentative Proposal Schedule**

Issue Requests for Proposals	Sat, July 20, 2019
Pre-Proposal Meeting and Site Tour	Wed, August 7, 2019
Requests for Additional Information Due	Mon, August 12, 2019
Receive Proposals	Mon, August 19, 2019
Evaluate Proposals/Select Vendor	Tues, October 1, 2019

## **1-8 Proposal Content and Signature**

All proposals shall be in the possession of BCC no later than Mon, August 19, 2019, 2:00 P.M. local time. Proposals must be mailed in a sealed envelope clearly marked:

Attention: Wanda Gautney  
Purchasing Director  
Baldwin County Commission  
312 Courthouse Square-Suite 15  
Bay Minette, AL 36507  
Telephone: (251) 972-6878  
Fax: (251) 580-2536  
E-mail: [wgautney@baldwincountyal.gov](mailto:wgautney@baldwincountyal.gov)

Submittals will include one original and two copies of the Vendor's proposal.

Vendors may withdraw and/or replace proposals at any time until the deadline for submission of proposals.

Submissions by facsimile or other electronic media will not be accepted under any circumstances.

Regardless of the method of delivery, each Vendor shall be responsible for their proposal being delivered on time. Proposals received after the time set for solicitation closing will be rejected and returned unopened.

## **1-9 Disclosure**

All information submitted in response to this RFP shall become a matter of public record, subject to Alabama Statutes regarding public disclosure.

## **1-10 Negotiations**

BCC, at its sole discretion, reserves the right to enter into contract negotiations with the Vendor determined to best meet the needs of BCC. If BCC and the Vendor cannot successfully negotiate a contract, BCC may terminate negotiations and begin negotiations with a second Vendor. No Vendor shall have any rights against BCC arising from such negotiations or termination.

## **1-11 Recommended Proposal Preparation Guidelines**

All Vendors shall provide a straightforward and concise description of their ability to meet the RFP requirements. The proposal shall clearly show the technical approach to include work tasks, estimated time

phasing, and the proposed approach rational. BCC discourages overly lengthy proposals.

#### **1-12 Prime Contractor Responsibilities**

The selected Vendor shall be required to assume full responsibility for all services offered in their proposal. The selected Vendor shall be the sole point of contact regarding contractual matters.

#### **1-13 License(s)**

The Vendor has sole responsibility of maintaining all license(s) required by the Federal government, the State of Alabama, Baldwin County, and/or local ordinances to perform the work specified in this Contract throughout the term of the Contract. This includes using Alabama Licensed General Contractors, an Alabama Licensed Professional Engineer, and an Alabama Licensed Professional Land Surveyor to complete the work.

#### **1-14 Permit(s)**

BCC will obtain Alabama Department of Environmental Management (ADEM) Solid Waste and Title V permits as required for construction and operation of the plant under Development Project – Option 1. The Vendor will obtain ADEM Solid Waste and Title V permits as required for construction and operation of the plant under Development Project – Option 2. The Vendor shall obtain all permits related to local building permits.

#### **1-15 Delays**

All work will begin upon authorization from BCC. All work will proceed in a timely manner without delays. An implementation schedule must be presented before Contract execution. The Vendor shall begin the work UPON RECEIPT OF NOTICE TO PROCEED and shall perform in accordance with the terms and conditions established in the Contract.

#### **1-16 Governing Laws and Regulations**

The Vendor is required to be familiar with and shall be responsible for complying with all Federal, State, and local laws, ordinances, rules, and regulations that in any manner affect the work.

#### **1-17 Indemnify and Hold Harmless Clause**

The Contractor shall at all times indemnify and hold harmless the County, and its Commissioners, officers, agents, employees and representatives, from and against all claims, damages, losses, demands, payments, suits, actions, recoveries and judgments of every nature and description and expenses, including, but not limited to, attorneys' fees and costs arising out of, resulting from or related to the performance of the work, provided that any such claim, damage, loss or expense: (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom, and (2) is caused in whole or in part by an act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

In any and all claims against the County, and its Commissioners, officers, agents, employees or representatives by any employee of the **Contractor**, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them maybe liable, the indemnification obligation under the "INDEMNITY PROVISIONS" shall not be limited in any way by any limitation on the amount or types of damages, compensation or benefits payable by or for the **Contractor** or any subcontractor under the workman's compensation acts, disability benefit acts or other employee benefits acts.

## 2 SCOPE OF WORK

The BCC is seeking proposals under two development options. The intent of **Development Option 1** is that the selected vendor will develop and construct a fully operational plant which will be financed and owned by the BCC at the project's conclusion. The intent of **Development Option 2** is that the selected vendor will develop and construct a fully operational plant which will be owned by the Vendor at the project's conclusion. Under development option 2 the BCC will sell raw LFG to the Vendor as a renewable natural gas commodity.

### 2-1 Development Option 1

The Vendor shall provide a price and qualifications proposal to develop for BCC a fully operational LFGTE project subject to the requirements and responsibilities listed below:

**BCC's responsibilities** for Option 1 shall generally include the following:

- Finance, own, and operate the Plant.
- Make periodic progress payments to the Vendor as construction is performed.
- Own, operate, and maintain the gas collection and control system (GCCS) to provide the necessary LFG flow rate and gas composition required for the project.
- Provide a prepared site for the Plant not to exceed 2 acres to include clearing, geotechnical investigation, excavation of unsuitable soils, structural fill, positive drainage, stormwater controls, grass, paved access road, and parking area within reasonable limitations.
- Retain all environmental attributes associated with LFG conversion project.
- Provide LFG from the existing blower station to the Plant at a positive pressure (>0 inches WC).
- Accept return of LFG condensate (water), waste gas, and wastewater from the Plant.
- Provide utility connections for electrical power service, potable water at the approximate rate of 20 gallons per minute (gpm) at 40 pounds per square inch gauge (psig), limited wastewater disposal via septic tank, and fiber-optic connection to the local telephone to the boundary of the Plant site.
- Obtain ADEM Solid Waste and Title V Air Operations Permits for construction and operation of the Plant to include permit fees, as required.
- Provide copies of operations data, design, and as-built drawings of the MSLF.

**The Vendor's responsibilities** for Option 1 shall generally include the following:

- Provide an LFGTE conversion plant that meets the Vendor's proposed project intent.
- Plant shall be designed to convert LFG to a renewable energy as demonstrated in the Vendor's proposal.
- Develop the Plant as specified in the Vendor's proposal.
- Provide all labor, materials, supervision, and technical support required to develop, construct, test, and train BCC staff except as noted in the BCC's responsibilities section above.
- Furnish performance and payment Bonds as security for the performance and payment of all Vendor's obligations under the Contract.
- Comply with all Federal, State, and local regulations and permits.
- Obtain all local building permits.
- Use local labor and suppliers to the maximum possible extent.
- Provide a Plant capable of maintaining a minimum capacity factor of 90%.
- Provide provisions and points of connection for future Plant expansion.
- Provide site improvements and utilities as needed beyond those provided by BCC.
- Provide hardware and programming for remote monitoring and control as required to for Plant operations.

- Provide interconnection to the existing blower station for integrated controls.
- Cooperate with BCC to minimize construction cost by MSLF self-performing a portion of the construction as identified in BCC's responsibilities.
- Cooperate with MSLF to minimize adverse impacts to landfill operations and maintain regulatory compliance to specifically include Title V Air Operations Permit requirements.
- Provide factory-acceptance testing (FAT), start-up services, and operations for 60 days.
- For the LFGTE facility provide an 18-month full warranty for parts, labor, travel time, and mileage.

## **2-2 Development Option 2**

The Vendor shall develop a high-BTU LFG-to-Energy conversion Plant to convert all, or a portion of, the landfill gas collected at the Magnolia Sanitary Landfill (MSLF). The Vendor will pay BCC for the LFG delivered to the Plant.

**BCC's responsibilities** for Option 2 shall generally include the following:

- Own, operate, and maintain the GCCS to provide a balance between supplying the Plant with LFG and maintaining Title V compliance.
- Expand the GCCS as landfilling progresses in accordance with ADEM Solid Waste and Title V permitting requirements.
- Provide a prepared site for the Plant not to exceed 2 acres to include clearing, geotechnical investigation, excavation of unsuitable soils, structural fill, positive drainage, stormwater controls, grass, paved access road, and parking area within reasonable limitations. The Developer will be responsible to deliver LFG to that location.
- Accept limited amount of return of LFG condensate (water), waste gas, from the Plant.
- Provide utility connections for potable water at the approximate rate of 20 gpm at 40 psig, limited wastewater disposal via septic tank, and fiber-optic connection to the local telephone to the boundary of the Plant site.
- Provide copies of operations data, design, and as-built drawings of the MSLF.

**The Vendor's responsibilities** for Option 2 shall generally include the following:

- Provide an LFG to high-BTU conversion Plant capable of using all, or a portion of, the LFG collected at the MSLF including possible future expansions of the GCCS.
- Realize minimum LFG flows will not be guaranteed.
- Finance the Project.
- Design the Plant to convert the LFG to a medium or high-BTU quality fuel necessary to meet the Vendor's project intent.
- Perform evaluations and investigations as needed to estimate the amount and composition of LFG that could be generated at the MSLF reasonably collected by the GCCS and be delivered to the Plant.
- Size the Plant based on the results of the above-referenced evaluation and investigation to best use as much of the LFG as possible while balancing financial risk.
- Obtain all right-of-way and easements and other approvals as needed.
- Obtain approvals from pipeline and other authorities as needed.
- Provide all labor, materials, supervision, and technical support required to develop, construct, test, and operate the Plant except as noted in the Responsibilities of BCC.
- Furnish performance and payment Bonds as security for the performance and payment of all Vendor's obligations under the Contract.
- Comply with all Federal, State, and local regulations and permits.
- Obtain all local building permits.
- Use local labor and suppliers to the maximum possible extent.



- Provide a Plant capable of maintaining a minimum capacity factor of 90%.
- Obtain all Federal, State, and local permits for the proposed plant except as noted above.
- Provide site improvements and utilities as needed beyond those provided by BCC.
- Cooperate with MSLF to minimize adverse impacts to landfill operations and maintain regulatory compliance to specifically include Title V Air Operations Permit requirements.
- Retain all environmental attributes associated with LFG that is accepted by the Plant.
- Provide interconnection to the existing blower station for integrated controls.
- Provide an 18-month full warranty for parts, labor, travel time, and mileage for the LFGTE Plant.

### 2-3 **Project Financing**

Financing for the project will be as follows:

1. Development Project – Option 1 shall be financed by BCC.
2. Development Project – Option 2 shall be financed by the Vendor.

The Vendor is not required to propose on both options and should clearly note options not selected or exceptions taken.

## 3 **INFORMATION REQUIRED FROM VENDORS**

BCC intends to select a Vendor within 60 calendar days of the deadline for receipt of proposals. However, proposals must be firm and valid for award for a minimum of 120 calendar days after the deadline for receipt of proposals.

BCC shall not be obligated or liable for any costs incurred by Vendors before a Contract is issued. All costs to prepare and submit a response to this solicitation shall be borne by the Vendor.

Proposals for Option 1 or Option 2 shall conform to the format set forth in Table 2. A description of the required content follows.

**Table 2: Proposal Organization**

Section 1	Letter of Transmittal
Section 2	Form A - Vendor Information
Section 3	<p>Compensation</p> <p>Form B-1 – Bid Form provided in Attachment 5 must be included in the proposal under Development Option 1. The Bid Form must be signed by a representative authorized to bind the Vendor.</p> <p>Form B-2 – Bid Form provided in Attachment 5 must be included in the proposal under Development Option 2. The Bid Form must be signed by a representative authorized to bind the Vendor.</p>
Section 4	Form C - Exceptions or Deviations
Section 5	Vendor Contact Person and Company/Team Information
Section 6	Experience, Qualifications, and Financial Capability
Section 7	Technical Approach

Section 8	Compensation Proposal
Section 9	Implementation Schedule
Attachments	As Needed by Vendor

### **3-1 Letter of Transmittal**

The Letter of Transmittal shall be prepared on the letterhead of the Vendor that would execute the Contract with BCC. The Letter of Transmittal is intended to introduce the Vendor and should contain at least the following information:

- a) A statement that the Vendor is prepared to meet BCC's procurement implementation schedule.
- b) A statement noting receipt of each addenda and the associated receipt date.
- c) A signature from a representative authorized to bind the Vendor to perform the proposed services if BCC awards the Vendor a contract.

### **3-2 Vendor Information**

The completed Form A – Vendor Information provided in Attachment 5 must be included in the proposal.

### **3-3 Bid Form – Option 1**

Form B-1 – Bid Form provided in Attachment 5 must be included in the proposal under Development Option 1. The Bid Form must be signed by a representative authorized to bind the Vendor.

### **3-4 Bid Form - Option 2**

Form B-2 – Bid Form provided in Attachment 5 must be included in the proposal under Development Option 2. The Compensation Schedule must be signed by a representative authorized to bind the Vendor.

The Vendor shall compensate BCC for all LFG used by the Vendor. The units of compensation will be the value per MMBtu (\$/MMBtu).

### **3-5 Exceptions or Deviations**

Form C – Exceptions or Deviations provided in Attachment 5 must be included in the proposal. All exceptions and/or deviations from the minimum specifications outlined in this RFP must be clearly identified and noted on this sheet. If a Vendor has no exceptions or deviations, they must write “**NO EXCEPTIONS OR DEVIATIONS TAKEN**” and submit the form. The exceptions or deviations sheet must be signed by a representative authorized to bind the Vendor.

### **3-6 Vendor Contact Person and Company/Team Information**

This section shall designate the contact person (supplying name, address, telephone number, fax number, and e-mail address) to which BCC will send and receive all communication. This section shall also include at least the following:

- a) A short business history of the Vendor.
- b) Information on the Vendor, including organization, parent companies, affiliates, subsidiaries, and subcontractors that would assist in performing the scopes of services.
- c) An organizational chart and brief résumés of key individuals.

### **3-7 Experience, Qualifications, and Financial Capability**

The successful supplier must have proven competence and experience in the design, installation, and startup of similar landfill gas beneficial reuse facilities. The Vendor must have a minimum of two similar projects completed in the United States within the last 5 years. Project descriptions must include the following:

- a) Project name and location.
- b) Landfill Owner, operator, and contact information.
- c) Description of project and work and equipment specifically relevant to this project.
- d) Type of contractual relationship/Contract between the Vendor and the Owner (i.e. turnkey provider, gas user only, equity partner, etc.)
- e) Financing used to implement and operate the project.

The Vendor shall provide a listing of any judgments, claims, suits pending or outstanding, against your organization.

The Vendor shall provide financing for all work for Option 2 as noted in this RFP. Proposals for Option 2 shall include a specific statement of intent to provide financing for the scope of work proposed. The Vendor should include the following:

- a) Letter from your surety company stating your organization's bonding capacity. Vendor shall furnish performance and payment Bonds as security for the faithful performance and payment of all Vendor's obligations under the Contract. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as provided otherwise by Laws or Regulations or by the Contract. The Performance Bond shall be in an amount at least equal to the Contract Price and the Payment shall be in an amount of 100% of the Contract Price.
- b) The source of financing should be included with a letter of commitment from that source. If the Vendor expects any preconditions on financing, these shall be identified and explained.
- c) Other pertinent documentation to substantiate competence and financial responsibility.

### **3-8 Technical Approach**

This section must include a description of the approach to implementing and executing the Option(s) selected by the Vendor. The description shall provide sufficient detail to demonstrate the Vendor's understanding of the issues and constraints associated with the project's development and implementation. At a minimum the Vendor must include the following as part of this section:

- a) A description of the processes proposed to be used to convert LFG to an energy development project.
- b) Performance data of the particular technologies and equipment proposed.
- c) The plan for obtaining revenue, under Option 2.
- d) The roles and responsibilities of the Vendor and any subcontractors.

Vendors submitting proposals that identify Alternate Options must additionally include a detailed scope of services that is being proposed.

### **3-9 Compensation Proposal**

This section must include a detailed discussion of the compensation plan and explain why the proposal provides the best economic benefit to BCC. For both Option 1 and Option 2, the discussion should include a

proposed compensation schedule for the Contract period. A discussion of revenue escalation should be included.

### **3-10 Implementation Schedule**

This section must include a proposed schedule for beginning operation of the LFGTE project. Vendors should present schedules that are readily obtainable based on their experience. The implementation schedule should list the major milestones and dates. Include a Gantt Chart style diagram of the proposed schedule based on an estimated Contract execution date of Tues. December 3, 2019.

### **3-11 Insurability Requirements**

Before the Contract is executed, the Vendor shall supply proof of insurance or a written statement from a licensed insurance company that the Vendor can obtain insurance of the following type and minimum value:

1. **Liability Insurance:** The Vendor shall purchase and maintain such insurance that will protect MSLF from claims that may arise out of or result from the Vendor's operations under the terms and conditions of the Proposal. Liability insurance shall be obtained at the Vendor's expense and in the Vendor's name as the insured; the insurance shall also show BCC as an additional named insured. The limit of liability for this coverage shall not be less than \$5 million per occurrence.
2. **Workers' Compensation Insurance:** As required by the State of Alabama.
3. **Property Insurance Coverage:** For 100% of the "replacement cost value."
4. **Environmental Impairment Insurance:** Coverage shall be provided and maintained as a separate policy for \$1 million per occurrence, \$5 million aggregate.

## **4 CRITERIA FOR SELECTION**

### **4-1 Evaluation Criteria**

BCC will review each proposal regarding the Vendor's qualifications, experience, financial capability, project approach, pricing, and project schedule. BCC expects to award the Contract to the Vendor who submits the proposal judged highest by the Selection Committee.

Proposals not meeting stated terms and qualifications may be rejected by BCC as non-responsive. BCC reserves the right to waive any irregularities, technicalities, or irregularities in any proposal and to reject any or all proposals without cause.

### **4-2 Contract Period**

The proposed minimum Contract period is 15 years; however, the Vendor may propose alternate periods.

## **5 FACILITY INFORMATION**

### **5-1 MSLF Facility Description**

The Magnolia Sanitary Landfill is located on 520 acres, and has been operated as a solid waste disposal facility since the early 1970's. Disposal from opening through the inception of Subtitle "D" regulations was completed via trench style disposal on approximately 200 acres of the facility. Beginning with the implementation of the Subtitle "D" regulations in 1996, the facility permitted and began disposal

operations on a 96-acre MSW disposal area, of which 60-acres have been constructed to date.

The facility is permitted to accept a maximum of 1,500 tons per day of MSW and C/D materials from a service area that includes Baldwin County and all its municipalities. At present, the facility accepts approximately 550 tons/day of municipal solid waste and 300 tons per day of construction/demolition waste from various public and private disposal entities in Baldwin County.

In addition to the disposal facility, the Magnolia SLF has a self-contained wastewater treatment facility for the handling/disposal of leachate and various other wastewater on-site. The facility is designed to handle the MSW leachate production at full build-out.

In 2007, the Magnolia SLF installed and began operating a landfill gas collection and control system over its active MSW disposal area. The active system consists of 33 vertical wells constructed on interim slopes. At present, the system collects approximately 600 scfm of landfill gas that is combusted through a candlestick flare.

## **5-2 Regulation**

The facility is currently under New Source Performance Standards (NSPS) requirements. Table 3 shows the NSPS active gas collection requirements based on each cell.

**Table 3: MSLF Construction Dates by Cell**

Cell No.	Date Cell began accepting waste	Cell at final grade?
Cell 1-6	Prior to July 2004	No
Cell 7	September 2008	No
Cell 8	April 2014	No

## **5-3 GCCS Design**

The landfill is served by an active collection system consisting of a combination of vertical collection wells and horizontal collection trenches. The collection devices are connected to the flare station via a header system. A description of the GCCS is provided below and Attachment 3 shows the GCCS Design Plan.

### Vertical Collection Wells

Vertical collection wells are spaced approximately every 250 feet and have been triangulated to provide coverage in combination with the horizontal collection trenches over the area of waste mass. The vertical collection wells are constructed of solid and perforated 8-inch Schedule 80 PVC pipe installed in a 36 inch-diameter borehole. Vertical collection wells are the primary method of gas collection in Cells 1 to 8.

### Wellfield Piping

The wellfield is connected through a series of HDPE header pipes that convey the LFG to the flare station for destruction. A 16-inch header is the primary loop around the perimeter of Cells 1 to 8. Attachment 3 contains the Design Plan showing the existing wellfield piping layout.

### Condensate Management

Condensate generated in the GCCS is managed by collection and pumping to the existing leachate collection system at specific locations around the landfill.

### Flare Station

The Landfill GCCS is conveyed to an existing flare station, which includes the following gas control equipment:

- 2 ~ 1,205 standard cubic feet per minute (scfm) 22-horsepower centrifugal blowers with -50 inches water column vacuum at the blower inlet.
- A thermal mass flow meter.
- A non-assisted candlestick utility flare rated to a maximum flow rate of 3,000 scfm.

## **5-4 Waste Stream Projections**

Table 4 shows a numerical summary of historical landfilled MSW waste data. The quantity of MSW waste is projected for 2019 through 2033 based on total historical tonnage data from 1997 through 2018. The projections were calculated based on historical growth trends and average population forecasts for the contributing counties. These trends estimate a 2.91% percent increase from 2018 to 2026. **These waste stream projections are based on historical waste trends that change over time; there is no guarantee of these waste tonnages.**

**Table 4: Historical Waste Disposal Tonnage**

Year	MSW Historical [tpy]	Percent Increase
1997	100,367	-5.37%
1998	94,978	-10.02%
1999	85,461	14.08%
2000	97,493	11.16%
2001	108,373	3.33%
2002	111,985	7.55%
2003	120,441	24.90%
2004	150,427	-19.93%
2005	120,446	2.54%
2006	123,507	2.48%
2007	126,567	12.37%
2008	142,225	-14.62%

Year	MSW Historical [tpy]	Percent Increase
2009	121,428	14.15%
2010	138,613	0.76%
2011	139,660	0.76%
2012	134,172	-3.93%
2013	134,534	0.27%
2014	133,594	-0.70%
2015	137,884	3.21%
2016	170,707	23.80%
2017	157,347	-7.83%
2018	169,512	7.73%
<b>Total Tonnage</b>	2,819,720	

**Table 5: Projected Waste Disposal Tonnage**

Year	MSW Projection [tpy]	Percent Increase
2019	174,445	2.91%
2020	179,521	2.91%
2021	184,745	2.91%
2022	190,121	2.91%
2023	195,654	2.91%
2024	201,347	2.91%
2025	207,207	2.91%
2026	213,236	2.91%
2027	219,441	2.91%
2028	225,827	2.91%
2029	232,399	2.91%
2030	239,162	2.91%
2031	246,121	2.91%
2032	253,283	2.91%
2033	260,654	2.91%

#### **5-5     Conceptual Site Lifespan**

The apparent density of landfilled waste in the MSLF MSW landfill is approximately 1,200 pounds per cubic yard. Estimated remaining landfill volume is based on conceptual final closure surfaces for the MSW Disposal Area.

#### **5-6     Historical Gas Data**

Limited historical gas data are available. **Figure 1** and **Figure 2** show the historical flow rate (in scfm) and methane composition data from January 1, 2016 to April 2019. **A minimum LFG flow rate and gas composition is not guaranteed.**

Figure 1. Average Landfill Gas Flow

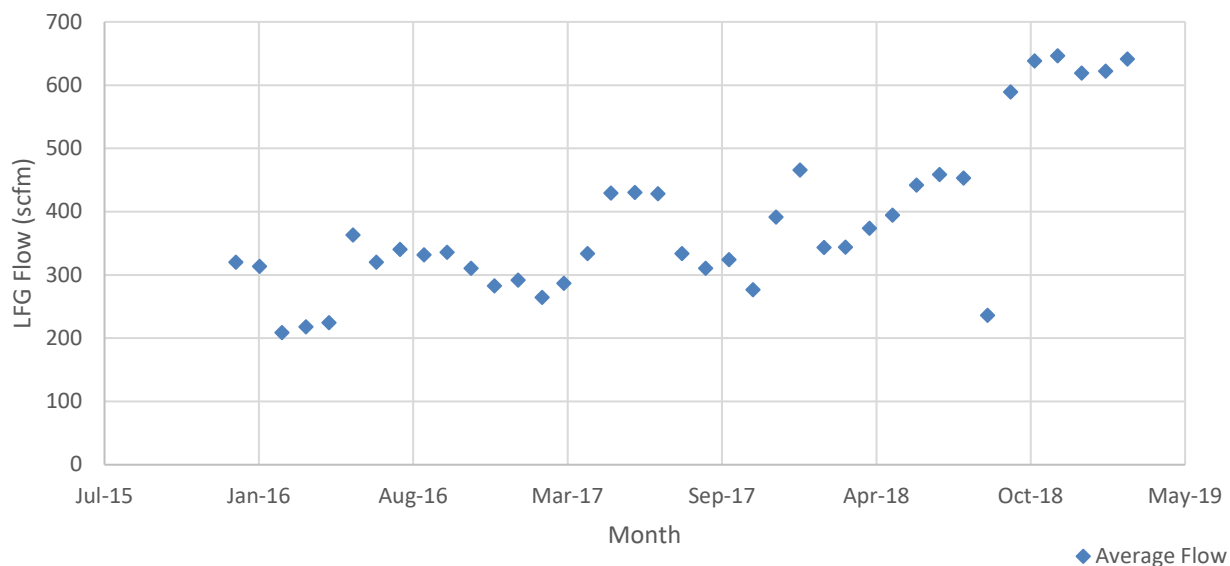
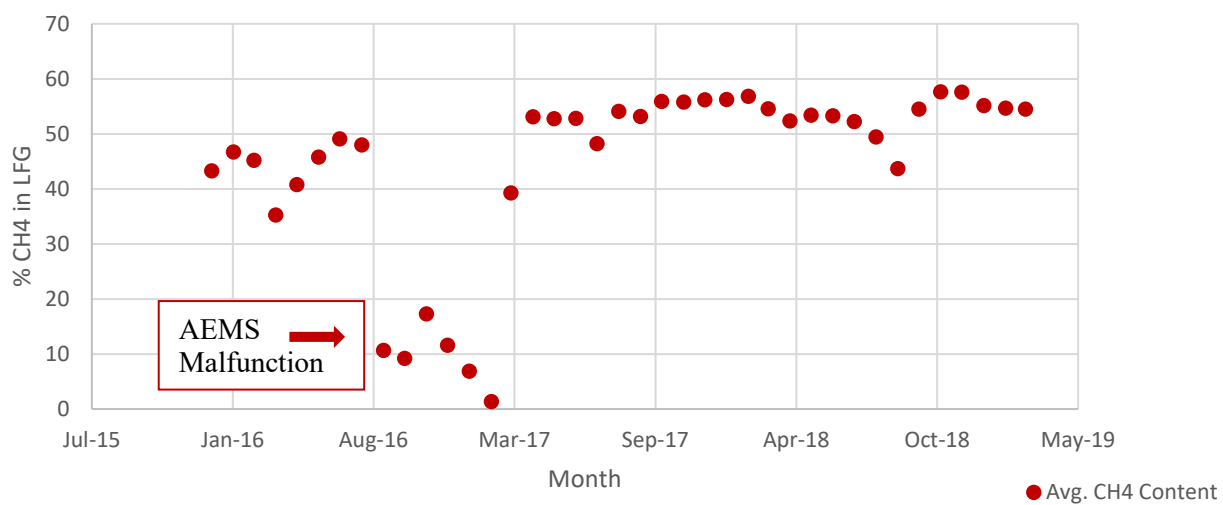


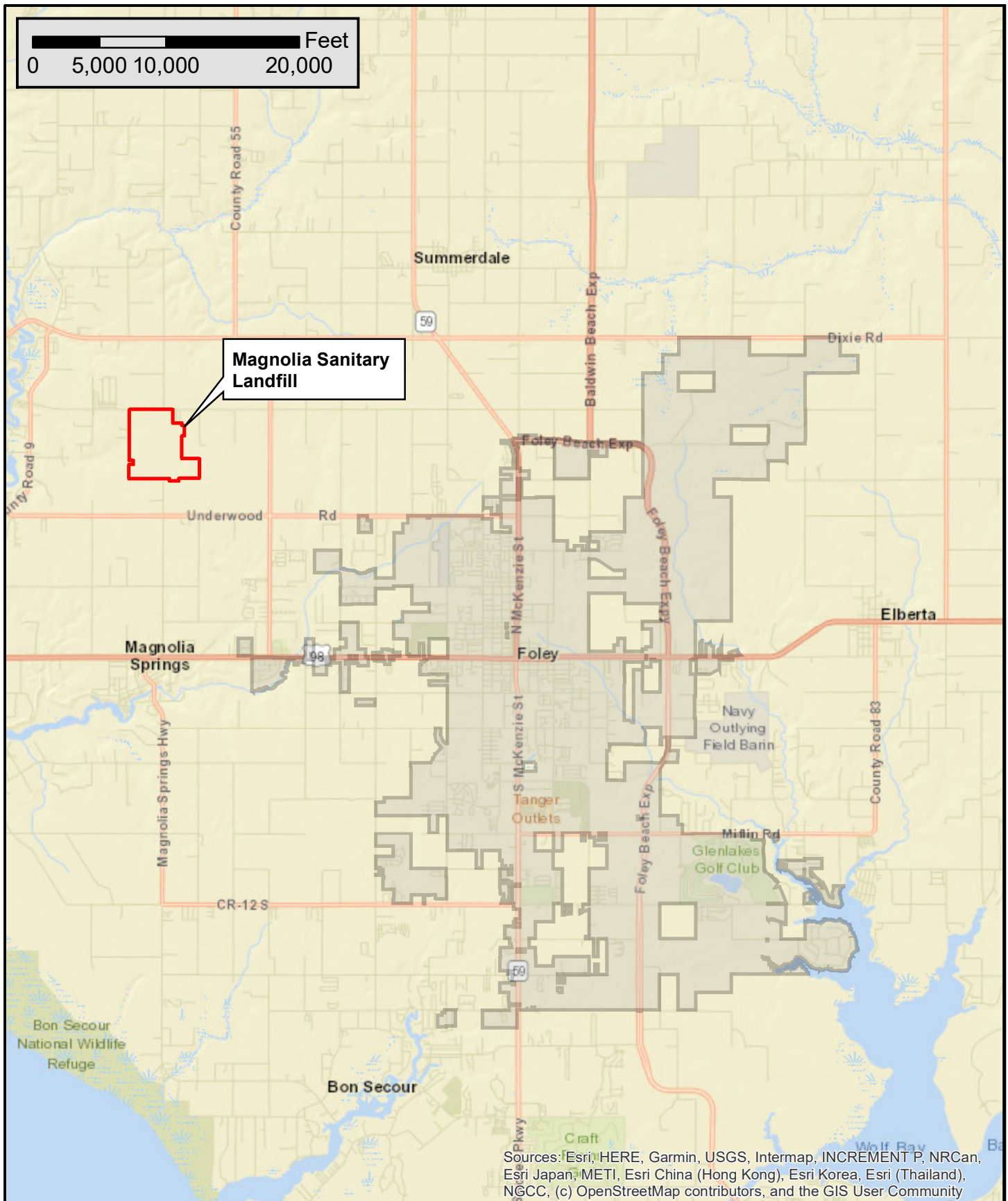
Figure 2. Average Methane Content (%)





# **ATTACHMENT 1**

## **SITE LOCATION MAP**



Attachment 1 - Site Location Map  
**Magnolia Sanitary Landfill**  
 Summerdale, AL



Engineering. Environmental. Answers.



Sheet No.

1

Project No. R079318012

Drawn By: LKY

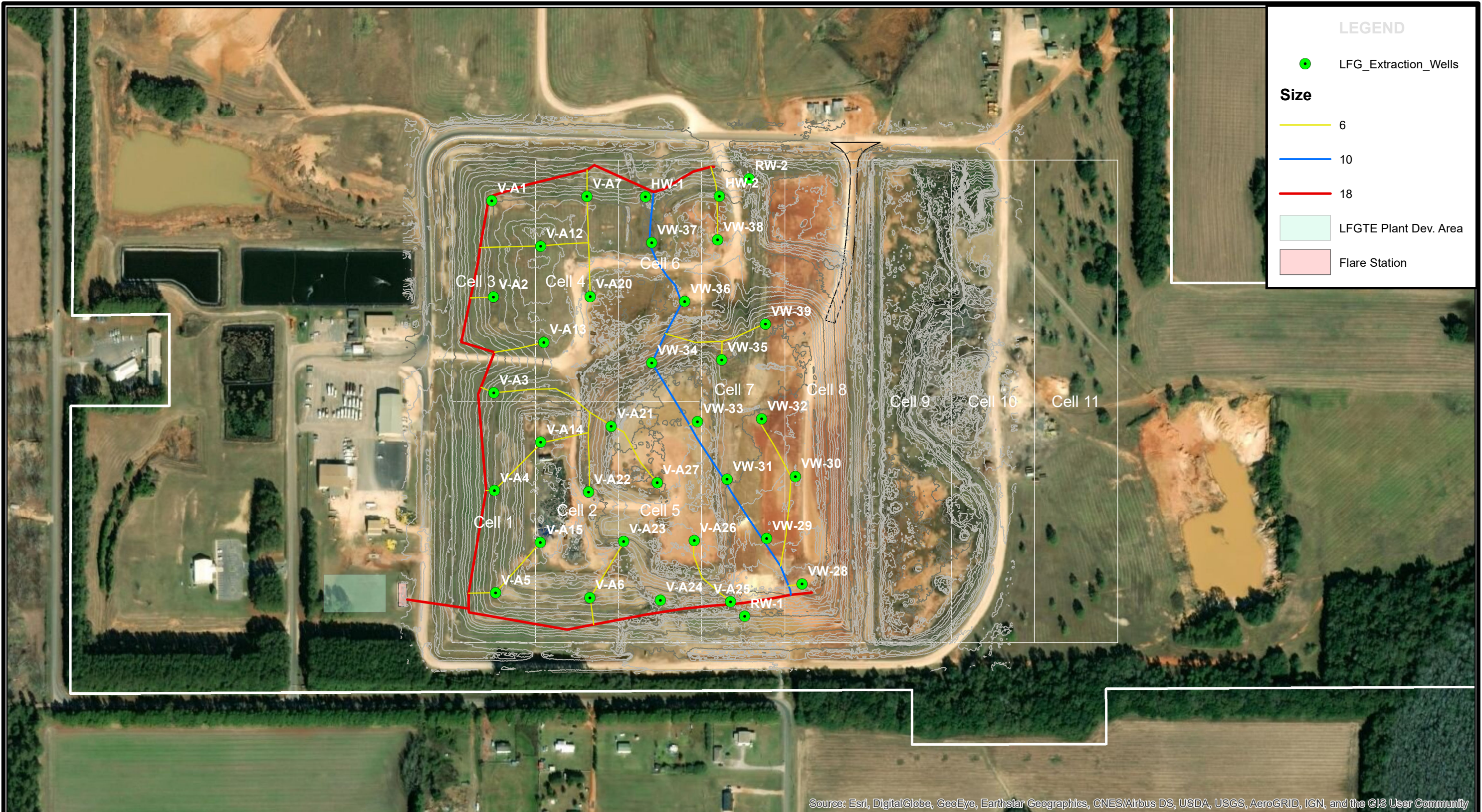
Checked By: RDW

Date: May 2019

## **ATTACHMENT 2**

### **SITE PLAN**





Attachment 2 - Site Plan  
**Magnolia Sanitary Landfill**  
Summerdale, AL



1840 E. Three Notch St.  
Andalusia, AL 36420  
(334) 222-9431  
(334) 222-4018 FAX  
www.cdge.com



Sheet No.

1

Project No. R079318012

Drawn By: JRA

Checked by: RDW

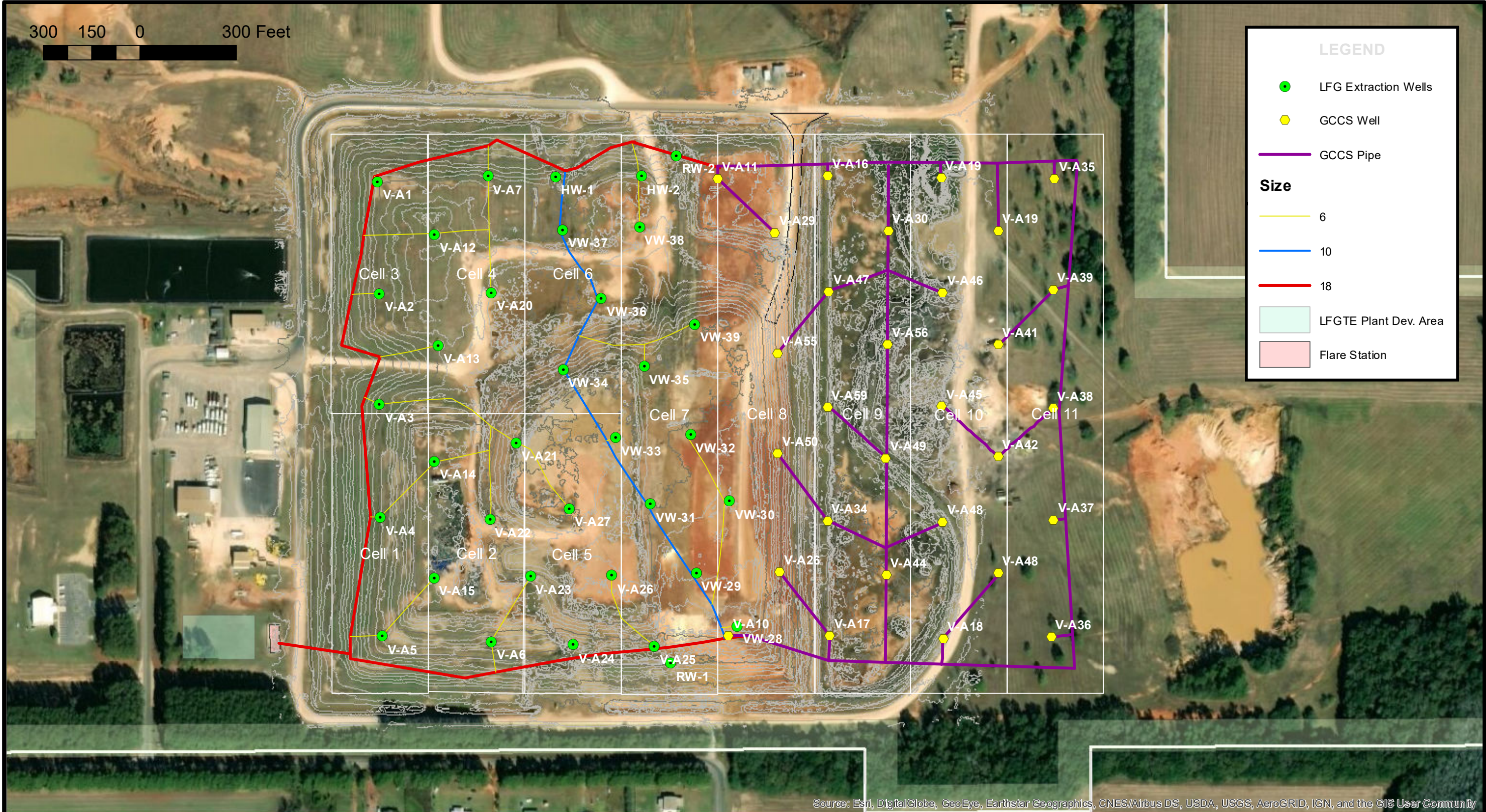
Date: May 2019



## **ATTACHMENT 3**

### **GCCS DESIGN PLAN**





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Design Plan- GCCS  
**Magnolia Sanitary Landfill**  
Summerdale, AL



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Sheet No.

1

Project No. R079318012

Drawn By: JRA

Checked by: RDW

Date: May 2019



**ATTACHMENT 4**

**LANDGEM MODEL – MSW**

**DISPOSAL AREA**



## Summary Report

**Landfill Name or Identifier:** Magnolia Sanitary Landfill - Active MSW Area

**Date:** Tuesday, June 25, 2019

### Description/Comments:

model of Active MSW disposal area using Inventory Conventional data and projecting waste acceptance growth rate of 2.91%.

### About LandGEM:

First-Order Decomposition Rate Equation:

$$Q_{CH_4} = \sum_{i=1}^n \sum_{j=0.1}^1 k L_o \left( \frac{M_i}{10} \right) e^{-k t_{ij}}$$

Where,

$Q_{CH_4}$  = annual methane generation in the year of the calculation ( $m^3/year$ )

$i$  = 1-year time increment

$n$  = (year of the calculation) - (initial year of waste acceptance)

$j$  = 0.1-year time increment

$k$  = methane generation rate ( $year^{-1}$ )

$L_o$  = potential methane generation capacity ( $m^3/Mg$ )

$M_i$  = mass of waste accepted in the  $i^{th}$  year ( $Mg$ )

$t_{ij}$  = age of the  $j^{th}$  section of waste mass  $M_i$  accepted in the  $i^{th}$  year (decimal years, e.g., 3.2 years)

LandGEM is based on a first-order decomposition rate equation for quantifying emissions from the decomposition of landfilled waste in municipal solid waste (MSW) landfills. The software provides a relatively simple approach to estimating landfill gas emissions. Model defaults are based on empirical data from U.S. landfills. Field test data can also be used in place of model defaults when available. Further guidance on EPA test methods, Clean Air Act (CAA) regulations, and other guidance regarding landfill gas emissions and control technology requirements can be found at <http://www.epa.gov/ttnatw01/landfill/landflpg.html>.

LandGEM is considered a screening tool — the better the input data, the better the estimates. Often, there are limitations with the available data regarding waste quantity and composition, variation in design and operating practices over time, and changes occurring over time that impact the emissions potential. Changes to landfill operation, such as operating under wet conditions through leachate recirculation or other liquid additions, will result in generating more gas at a faster rate. Defaults for estimating emissions for this type of operation are being developed to include in LandGEM along with defaults for conventional landfills (no leachate or liquid additions) for developing emission inventories and determining CAA applicability. Refer to the Web site identified above for future updates.



## Input Review

### LANDFILL CHARACTERISTICS

Landfill Open Year	<b>1997</b>	
Landfill Closure Year (with 80-year limit)	<b>2045</b>	
Actual Closure Year (without limit)	<b>2045</b>	
Have Model Calculate Closure Year?	<b>Yes</b>	
Waste Design Capacity	<b>9,709,951</b>	<i>short tons</i>

### MODEL PARAMETERS

Methane Generation Rate, k	<b>0.040</b>	<i>year<sup>-1</sup></i>
Potential Methane Generation Capacity, L <sub>0</sub>	<b>100</b>	<i>m<sup>3</sup>/Mg</i>
NMOC Concentration	<b>600</b>	<i>ppmv as hexane</i>
Methane Content	<b>50</b>	<i>% by volume</i>

### GASES / POLLUTANTS SELECTED

Gas / Pollutant #1:	<b>Total landfill gas</b>
Gas / Pollutant #2:	<b>Methane</b>
Gas / Pollutant #3:	<b>Carbon dioxide</b>
Gas / Pollutant #4:	<b>NMOC</b>

### WASTE ACCEPTANCE RATES

Year	Waste Accepted		Waste-In-Place	
	(Mg/year)	(short tons/year)	(Mg)	(short tons)
1997	91,243	100,367	0	0
1998	86,344	94,978	91,243	100,367
1999	77,692	85,461	177,587	195,345
2000	88,630	97,493	255,279	280,807
2001	98,521	108,373	343,909	378,300
2002	101,804	111,985	442,429	486,672
2003	109,491	120,441	544,234	598,657
2004	136,752	150,427	653,725	719,097
2005	109,496	120,446	790,477	869,525
2006	112,279	123,507	899,973	989,970
2007	115,061	126,567	1,012,252	1,113,477
2008	129,296	142,225	1,127,313	1,240,044
2009	110,389	121,428	1,256,609	1,382,270
2010	126,012	138,613	1,366,998	1,503,698
2011	126,964	139,660	1,493,010	1,642,311
2012	121,974	134,172	1,619,973	1,781,971
2013	122,304	134,534	1,741,947	1,916,142
2014	121,449	133,594	1,864,251	2,050,676
2015	125,349	137,884	1,985,700	2,184,270
2016	155,188	170,707	2,111,049	2,322,154
2017	143,043	157,347	2,266,237	2,492,861
2018	154,102	169,512	2,409,280	2,650,208
2019	158,586	174,445	2,563,382	2,819,720
2020	163,201	179,521	2,721,968	2,994,165
2021	167,950	184,745	2,885,169	3,173,686
2022	172,838	190,121	3,053,119	3,358,431
2023	177,867	195,654	3,225,957	3,548,553
2024	183,043	201,347	3,403,824	3,744,207
2025	188,370	207,207	3,586,867	3,945,554
2026	193,851	213,236	3,775,237	4,152,760
2027	199,492	219,441	3,969,088	4,365,997
2028	205,297	225,827	4,168,580	4,585,438
2029	211,272	232,399	4,373,878	4,811,265
2030	217,420	239,162	4,585,149	5,043,664
2031	223,747	246,121	4,802,569	5,282,826
2032	230,258	253,283	5,026,315	5,528,947
2033	236,958	260,654	5,256,573	5,782,230
2034	243,854	268,239	5,493,531	6,042,884
2035	250,950	276,045	5,737,384	6,311,123
2036	258,252	284,078	5,988,334	6,587,167

## WASTE ACCEPTANCE RATES (Continued)

Year	Waste Accepted		Waste-In-Place	
	(Mg/year)	(short tons/year)	(Mg)	(short tons)
2037	265,767	292,344	6,246,586	6,871,245
2038	273,501	300,851	6,512,354	7,163,589
2039	281,460	309,606	6,785,855	7,464,440
2040	289,651	318,616	7,067,315	7,774,047
2041	298,079	327,887	7,356,966	8,092,662
2042	306,754	337,429	7,655,045	8,420,550
2043	315,680	347,248	7,961,799	8,757,979
2044	324,866	357,353	8,277,479	9,105,227
2045	224,883	247,371	8,602,345	9,462,580
2046	0	0	8,827,228	9,709,951
2047	0	0	8,827,228	9,709,951
2048	0	0	8,827,228	9,709,951
2049	0	0	8,827,228	9,709,951
2050	0	0	8,827,228	9,709,951
2051	0	0	8,827,228	9,709,951
2052	0	0	8,827,228	9,709,951
2053	0	0	8,827,228	9,709,951
2054	0	0	8,827,228	9,709,951
2055	0	0	8,827,228	9,709,951
2056	0	0	8,827,228	9,709,951
2057	0	0	8,827,228	9,709,951
2058	0	0	8,827,228	9,709,951
2059	0	0	8,827,228	9,709,951
2060	0	0	8,827,228	9,709,951
2061	0	0	8,827,228	9,709,951
2062	0	0	8,827,228	9,709,951
2063	0	0	8,827,228	9,709,951
2064	0	0	8,827,228	9,709,951
2065	0	0	8,827,228	9,709,951
2066	0	0	8,827,228	9,709,951
2067	0	0	8,827,228	9,709,951
2068	0	0	8,827,228	9,709,951
2069	0	0	8,827,228	9,709,951
2070	0	0	8,827,228	9,709,951
2071	0	0	8,827,228	9,709,951
2072	0	0	8,827,228	9,709,951
2073	0	0	8,827,228	9,709,951
2074	0	0	8,827,228	9,709,951
2075	0	0	8,827,228	9,709,951
2076	0	0	8,827,228	9,709,951

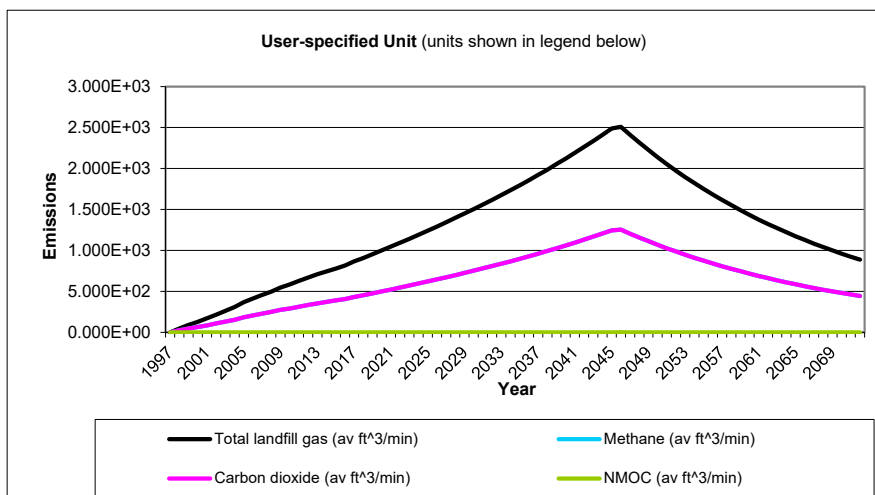
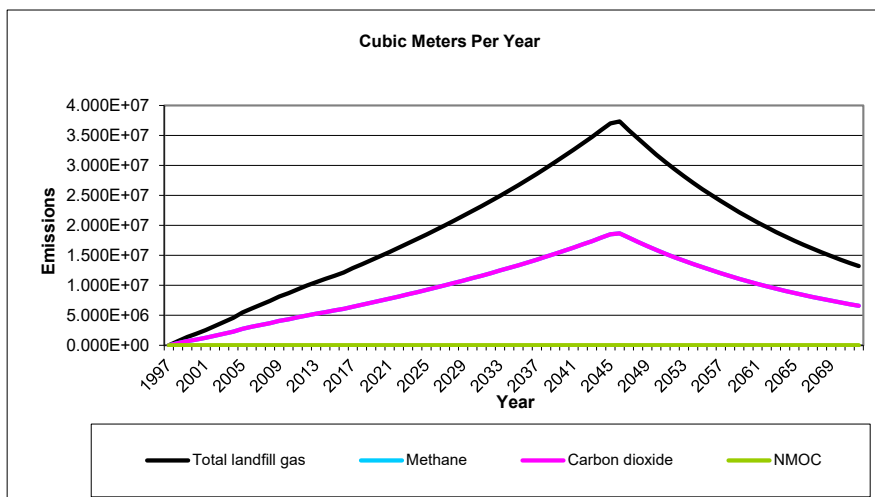
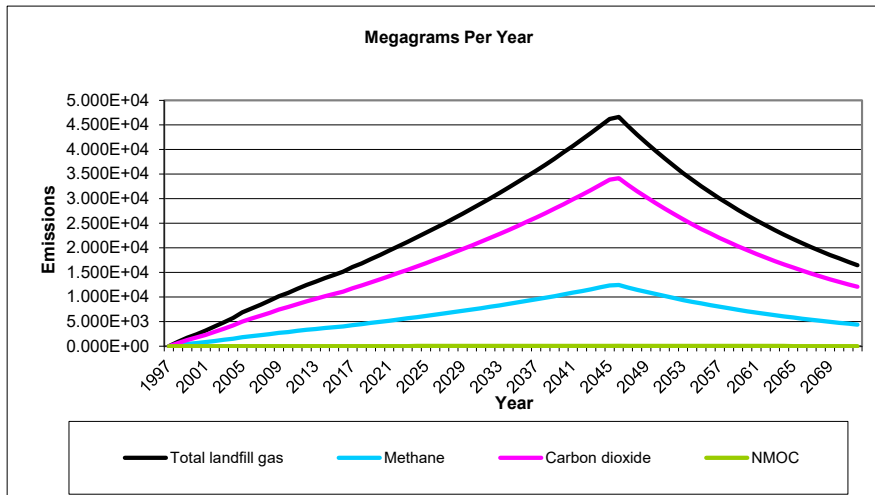
**Pollutant Parameters**

<b>Gas / Pollutant Default Parameters:</b>				<b>User-specified Pollutant Parameters:</b>	
	Compound	Concentration (ppmv)	Molecular Weight	Concentration (ppmv)	Molecular Weight
<b>Gases</b>	Total landfill gas		0.00		
	Methane		16.04		
	Carbon dioxide		44.01		
	NMOC		86.18		
<b>Pollutants</b>	1,1,1-Trichloroethane (methyl chloroform) - HAP	0.48	133.41		
	1,1,2,2- Tetrachloroethane - HAP/VOC	1.1	167.85		
	1,1-Dichloroethane (ethylidene dichloride) - HAP/VOC	2.4	98.97		
	1,1-Dichloroethene (vinylidene chloride) - HAP/VOC	0.20	96.94		
	1,2-Dichloroethane (ethylene dichloride) - HAP/VOC	0.41	98.96		
	1,2-Dichloropropane (propylene dichloride) - HAP/VOC	0.18	112.99		
	2-Propanol (isopropyl alcohol) - VOC	50	60.11		
	Acetone	7.0	58.08		
	Acrylonitrile - HAP/VOC	6.3	53.06		
	Benzene - No or Unknown Co-disposal - HAP/VOC	1.9	78.11		
	Benzene - Co-disposal - HAP/VOC	11	78.11		
	Bromodichloromethane - VOC	3.1	163.83		
	Butane - VOC	5.0	58.12		
	Carbon disulfide - HAP/VOC	0.58	76.13		
	Carbon monoxide	140	28.01		
	Carbon tetrachloride - HAP/VOC	4.0E-03	153.84		
	Carbonyl sulfide - HAP/VOC	0.49	60.07		
	Chlorobenzene - HAP/VOC	0.25	112.56		
	Chlorodifluoromethane	1.3	86.47		
	Chloroethane (ethyl chloride) - HAP/VOC	1.3	64.52		
	Chloroform - HAP/VOC	0.03	119.39		
	Chloromethane - VOC	1.2	50.49		
	Dichlorobenzene - (HAP for para isomer/VOC)	0.21	147		
	Dichlorodifluoromethane	16	120.91		
	Dichlorofluoromethane - VOC	2.6	102.92		
	Dichloromethane (methylene chloride) - HAP	14	84.94		
	Dimethyl sulfide (methyl sulfide) - VOC	7.8	62.13		
	Ethane	890	30.07		
	Ethanol - VOC	27	46.08		

**Pollutant Parameters (Continued)**

<b>Gas / Pollutant Default Parameters:</b>				<b>User-specified Pollutant Parameters:</b>	
	Compound	Concentration (ppmv)	Molecular Weight	Concentration (ppmv)	Molecular Weight
<b>Pollutants</b>	Ethyl mercaptan (ethanethiol) - VOC	2.3	62.13		
	Ethylbenzene - HAP/VOC	4.6	106.16		
	Ethylene dibromide - HAP/VOC	1.0E-03	187.88		
	Fluorotrichloromethane - VOC	0.76	137.38		
	Hexane - HAP/VOC	6.6	86.18		
	Hydrogen sulfide	36	34.08		
	Mercury (total) - HAP	2.9E-04	200.61		
	Methyl ethyl ketone - HAP/VOC	7.1	72.11		
	Methyl isobutyl ketone - HAP/VOC	1.9	100.16		
	Methyl mercaptan - VOC	2.5	48.11		
	Pentane - VOC	3.3	72.15		
	Perchloroethylene (tetrachloroethylene) - HAP	3.7	165.83		
	Propane - VOC	11	44.09		
	t-1,2-Dichloroethene - VOC	2.8	96.94		
	Toluene - No or Unknown Co-disposal - HAP/VOC	39	92.13		
	Toluene - Co-disposal - HAP/VOC	170	92.13		
	Trichloroethylene (trichloroethene) - HAP/VOC	2.8	131.40		
	Vinyl chloride - HAP/VOC	7.3	62.50		
	Xylenes - HAP/VOC	12	106.16		

## Graphs



## Results

Year	Total landfill gas			Methane		
	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)
1997	0	0	0	0	0	0
1998	8.954E+02	7.170E+05	4.817E+01	2.392E+02	3.585E+05	2.409E+01
1999	1.708E+03	1.367E+06	9.187E+01	4.561E+02	6.837E+05	4.594E+01
2000	2.403E+03	1.924E+06	1.293E+02	6.419E+02	9.621E+05	6.464E+01
2001	3.178E+03	2.545E+06	1.710E+02	8.490E+02	1.273E+06	8.551E+01
2002	4.021E+03	3.220E+06	2.163E+02	1.074E+03	1.610E+06	1.082E+02
2003	4.862E+03	3.893E+06	2.616E+02	1.299E+03	1.947E+06	1.308E+02
2004	5.746E+03	4.601E+06	3.091E+02	1.535E+03	2.300E+06	1.546E+02
2005	6.862E+03	5.495E+06	3.692E+02	1.833E+03	2.748E+06	1.846E+02
2006	7.668E+03	6.140E+06	4.126E+02	2.048E+03	3.070E+06	2.063E+02
2007	8.469E+03	6.782E+06	4.557E+02	2.262E+03	3.391E+06	2.278E+02
2008	9.266E+03	7.420E+06	4.985E+02	2.475E+03	3.710E+06	2.493E+02
2009	1.017E+04	8.145E+06	5.473E+02	2.717E+03	4.072E+06	2.736E+02
2010	1.086E+04	8.693E+06	5.841E+02	2.900E+03	4.346E+06	2.920E+02
2011	1.167E+04	9.342E+06	6.277E+02	3.116E+03	4.671E+06	3.139E+02
2012	1.246E+04	9.974E+06	6.701E+02	3.327E+03	4.987E+06	3.351E+02
2013	1.316E+04	1.054E+07	7.082E+02	3.516E+03	5.270E+06	3.541E+02
2014	1.385E+04	1.109E+07	7.450E+02	3.699E+03	5.544E+06	3.725E+02
2015	1.450E+04	1.161E+07	7.800E+02	3.872E+03	5.804E+06	3.900E+02
2016	1.516E+04	1.214E+07	8.156E+02	4.049E+03	6.069E+06	4.078E+02
2017	1.609E+04	1.288E+07	8.655E+02	4.297E+03	6.441E+06	4.328E+02
2018	1.686E+04	1.350E+07	9.071E+02	4.503E+03	6.750E+06	4.535E+02
2019	1.771E+04	1.418E+07	9.529E+02	4.731E+03	7.091E+06	4.764E+02
2020	1.857E+04	1.487E+07	9.992E+02	4.961E+03	7.436E+06	4.996E+02
2021	1.945E+04	1.557E+07	1.046E+03	5.194E+03	7.786E+06	5.231E+02
2022	2.033E+04	1.628E+07	1.094E+03	5.431E+03	8.140E+06	5.469E+02
2023	2.123E+04	1.700E+07	1.142E+03	5.671E+03	8.500E+06	5.711E+02
2024	2.214E+04	1.773E+07	1.191E+03	5.915E+03	8.866E+06	5.957E+02
2025	2.307E+04	1.847E+07	1.241E+03	6.163E+03	9.237E+06	6.206E+02
2026	2.402E+04	1.923E+07	1.292E+03	6.415E+03	9.615E+06	6.460E+02
2027	2.498E+04	2.000E+07	1.344E+03	6.671E+03	1.000E+07	6.719E+02
2028	2.595E+04	2.078E+07	1.396E+03	6.933E+03	1.039E+07	6.982E+02
2029	2.695E+04	2.158E+07	1.450E+03	7.199E+03	1.079E+07	7.250E+02
2030	2.797E+04	2.239E+07	1.505E+03	7.470E+03	1.120E+07	7.524E+02
2031	2.900E+04	2.323E+07	1.561E+03	7.747E+03	1.161E+07	7.803E+02
2032	3.006E+04	2.407E+07	1.617E+03	8.030E+03	1.204E+07	8.087E+02
2033	3.114E+04	2.494E+07	1.676E+03	8.319E+03	1.247E+07	8.378E+02
2034	3.225E+04	2.582E+07	1.735E+03	8.614E+03	1.291E+07	8.675E+02
2035	3.338E+04	2.673E+07	1.796E+03	8.915E+03	1.336E+07	8.979E+02
2036	3.453E+04	2.765E+07	1.858E+03	9.223E+03	1.382E+07	9.289E+02
2037	3.571E+04	2.860E+07	1.921E+03	9.539E+03	1.430E+07	9.606E+02
2038	3.692E+04	2.956E+07	1.986E+03	9.861E+03	1.478E+07	9.931E+02
2039	3.815E+04	3.055E+07	2.053E+03	1.019E+04	1.528E+07	1.026E+03
2040	3.942E+04	3.157E+07	2.121E+03	1.053E+04	1.578E+07	1.060E+03
2041	4.072E+04	3.260E+07	2.191E+03	1.088E+04	1.630E+07	1.095E+03
2042	4.205E+04	3.367E+07	2.262E+03	1.123E+04	1.683E+07	1.131E+03
2043	4.341E+04	3.476E+07	2.335E+03	1.159E+04	1.738E+07	1.168E+03
2044	4.480E+04	3.588E+07	2.410E+03	1.197E+04	1.794E+07	1.205E+03
2045	4.623E+04	3.702E+07	2.487E+03	1.235E+04	1.851E+07	1.244E+03
2046	4.663E+04	3.734E+07	2.509E+03	1.245E+04	1.867E+07	1.254E+03

**Results (Continued)**

Year	Total landfill gas			Methane		
	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)
2047	4.480E+04	3.587E+07	2.410E+03	1.197E+04	1.794E+07	1.205E+03
2048	4.304E+04	3.447E+07	2.316E+03	1.150E+04	1.723E+07	1.158E+03
2049	4.136E+04	3.312E+07	2.225E+03	1.105E+04	1.656E+07	1.113E+03
2050	3.973E+04	3.182E+07	2.138E+03	1.061E+04	1.591E+07	1.069E+03
2051	3.818E+04	3.057E+07	2.054E+03	1.020E+04	1.528E+07	1.027E+03
2052	3.668E+04	2.937E+07	1.973E+03	9.797E+03	1.469E+07	9.867E+02
2053	3.524E+04	2.822E+07	1.896E+03	9.413E+03	1.411E+07	9.480E+02
2054	3.386E+04	2.711E+07	1.822E+03	9.044E+03	1.356E+07	9.108E+02
2055	3.253E+04	2.605E+07	1.750E+03	8.689E+03	1.302E+07	8.751E+02
2056	3.126E+04	2.503E+07	1.682E+03	8.349E+03	1.251E+07	8.408E+02
2057	3.003E+04	2.405E+07	1.616E+03	8.021E+03	1.202E+07	8.078E+02
2058	2.885E+04	2.310E+07	1.552E+03	7.707E+03	1.155E+07	7.762E+02
2059	2.772E+04	2.220E+07	1.491E+03	7.405E+03	1.110E+07	7.457E+02
2060	2.663E+04	2.133E+07	1.433E+03	7.114E+03	1.066E+07	7.165E+02
2061	2.559E+04	2.049E+07	1.377E+03	6.835E+03	1.025E+07	6.884E+02
2062	2.459E+04	1.969E+07	1.323E+03	6.567E+03	9.844E+06	6.614E+02
2063	2.362E+04	1.892E+07	1.271E+03	6.310E+03	9.458E+06	6.355E+02
2064	2.270E+04	1.817E+07	1.221E+03	6.062E+03	9.087E+06	6.106E+02
2065	2.181E+04	1.746E+07	1.173E+03	5.825E+03	8.731E+06	5.866E+02
2066	2.095E+04	1.678E+07	1.127E+03	5.596E+03	8.388E+06	5.636E+02
2067	2.013E+04	1.612E+07	1.083E+03	5.377E+03	8.059E+06	5.415E+02
2068	1.934E+04	1.549E+07	1.041E+03	5.166E+03	7.743E+06	5.203E+02
2069	1.858E+04	1.488E+07	9.998E+02	4.963E+03	7.440E+06	4.999E+02
2070	1.785E+04	1.430E+07	9.606E+02	4.769E+03	7.148E+06	4.803E+02
2071	1.715E+04	1.374E+07	9.229E+02	4.582E+03	6.868E+06	4.614E+02
2072	1.648E+04	1.320E+07	8.867E+02	4.402E+03	6.599E+06	4.434E+02
2073	1.583E+04	1.268E+07	8.519E+02	4.230E+03	6.340E+06	4.260E+02
2074	1.521E+04	1.218E+07	8.185E+02	4.064E+03	6.091E+06	4.093E+02
2075	1.462E+04	1.170E+07	7.864E+02	3.904E+03	5.852E+06	3.932E+02
2076	1.404E+04	1.125E+07	7.556E+02	3.751E+03	5.623E+06	3.778E+02
2077	1.349E+04	1.080E+07	7.260E+02	3.604E+03	5.402E+06	3.630E+02
2078	1.296E+04	1.038E+07	6.975E+02	3.463E+03	5.191E+06	3.488E+02
2079	1.246E+04	9.974E+06	6.702E+02	3.327E+03	4.987E+06	3.351E+02
2080	1.197E+04	9.583E+06	6.439E+02	3.197E+03	4.792E+06	3.219E+02
2081	1.150E+04	9.207E+06	6.186E+02	3.071E+03	4.604E+06	3.093E+02
2082	1.105E+04	8.846E+06	5.944E+02	2.951E+03	4.423E+06	2.972E+02
2083	1.061E+04	8.499E+06	5.711E+02	2.835E+03	4.250E+06	2.855E+02
2084	1.020E+04	8.166E+06	5.487E+02	2.724E+03	4.083E+06	2.743E+02
2085	9.798E+03	7.846E+06	5.272E+02	2.617E+03	3.923E+06	2.636E+02
2086	9.414E+03	7.538E+06	5.065E+02	2.515E+03	3.769E+06	2.532E+02
2087	9.045E+03	7.243E+06	4.866E+02	2.416E+03	3.621E+06	2.433E+02
2088	8.690E+03	6.959E+06	4.676E+02	2.321E+03	3.479E+06	2.338E+02
2089	8.349E+03	6.686E+06	4.492E+02	2.230E+03	3.343E+06	2.246E+02
2090	8.022E+03	6.424E+06	4.316E+02	2.143E+03	3.212E+06	2.158E+02
2091	7.708E+03	6.172E+06	4.147E+02	2.059E+03	3.086E+06	2.073E+02
2092	7.405E+03	5.930E+06	3.984E+02	1.978E+03	2.965E+06	1.992E+02
2093	7.115E+03	5.697E+06	3.828E+02	1.900E+03	2.849E+06	1.914E+02
2094	6.836E+03	5.474E+06	3.678E+02	1.826E+03	2.737E+06	1.839E+02
2095	6.568E+03	5.259E+06	3.534E+02	1.754E+03	2.630E+06	1.767E+02
2096	6.310E+03	5.053E+06	3.395E+02	1.686E+03	2.527E+06	1.698E+02
2097	6.063E+03	4.855E+06	3.262E+02	1.619E+03	2.427E+06	1.631E+02

**Results (Continued)**

Year	Total landfill gas			Methane		
	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)
2098	5.825E+03	4.665E+06	3.134E+02	1.556E+03	2.332E+06	1.567E+02
2099	5.597E+03	4.482E+06	3.011E+02	1.495E+03	2.241E+06	1.506E+02
2100	5.377E+03	4.306E+06	2.893E+02	1.436E+03	2.153E+06	1.447E+02
2101	5.167E+03	4.137E+06	2.780E+02	1.380E+03	2.069E+06	1.390E+02
2102	4.964E+03	3.975E+06	2.671E+02	1.326E+03	1.987E+06	1.335E+02
2103	4.769E+03	3.819E+06	2.566E+02	1.274E+03	1.910E+06	1.283E+02
2104	4.582E+03	3.669E+06	2.465E+02	1.224E+03	1.835E+06	1.233E+02
2105	4.403E+03	3.525E+06	2.369E+02	1.176E+03	1.763E+06	1.184E+02
2106	4.230E+03	3.387E+06	2.276E+02	1.130E+03	1.694E+06	1.138E+02
2107	4.064E+03	3.254E+06	2.187E+02	1.086E+03	1.627E+06	1.093E+02
2108	3.905E+03	3.127E+06	2.101E+02	1.043E+03	1.563E+06	1.050E+02
2109	3.752E+03	3.004E+06	2.018E+02	1.002E+03	1.502E+06	1.009E+02
2110	3.605E+03	2.886E+06	1.939E+02	9.628E+02	1.443E+06	9.697E+01
2111	3.463E+03	2.773E+06	1.863E+02	9.251E+02	1.387E+06	9.316E+01
2112	3.327E+03	2.664E+06	1.790E+02	8.888E+02	1.332E+06	8.951E+01
2113	3.197E+03	2.560E+06	1.720E+02	8.539E+02	1.280E+06	8.600E+01
2114	3.072E+03	2.460E+06	1.653E+02	8.205E+02	1.230E+06	8.263E+01
2115	2.951E+03	2.363E+06	1.588E+02	7.883E+02	1.182E+06	7.939E+01
2116	2.835E+03	2.270E+06	1.526E+02	7.574E+02	1.135E+06	7.628E+01
2117	2.724E+03	2.181E+06	1.466E+02	7.277E+02	1.091E+06	7.329E+01
2118	2.617E+03	2.096E+06	1.408E+02	6.991E+02	1.048E+06	7.041E+01
2119	2.515E+03	2.014E+06	1.353E+02	6.717E+02	1.007E+06	6.765E+01
2120	2.416E+03	1.935E+06	1.300E+02	6.454E+02	9.674E+05	6.500E+01
2121	2.321E+03	1.859E+06	1.249E+02	6.201E+02	9.295E+05	6.245E+01
2122	2.230E+03	1.786E+06	1.200E+02	5.958E+02	8.930E+05	6.000E+01
2123	2.143E+03	1.716E+06	1.153E+02	5.724E+02	8.580E+05	5.765E+01
2124	2.059E+03	1.649E+06	1.108E+02	5.500E+02	8.244E+05	5.539E+01
2125	1.978E+03	1.584E+06	1.064E+02	5.284E+02	7.920E+05	5.322E+01
2126	1.901E+03	1.522E+06	1.023E+02	5.077E+02	7.610E+05	5.113E+01
2127	1.826E+03	1.462E+06	9.825E+01	4.878E+02	7.311E+05	4.913E+01
2128	1.755E+03	1.405E+06	9.440E+01	4.687E+02	7.025E+05	4.720E+01
2129	1.686E+03	1.350E+06	9.070E+01	4.503E+02	6.749E+05	4.535E+01
2130	1.620E+03	1.297E+06	8.714E+01	4.326E+02	6.485E+05	4.357E+01
2131	1.556E+03	1.246E+06	8.372E+01	4.157E+02	6.230E+05	4.186E+01
2132	1.495E+03	1.197E+06	8.044E+01	3.994E+02	5.986E+05	4.022E+01
2133	1.436E+03	1.150E+06	7.729E+01	3.837E+02	5.751E+05	3.864E+01
2134	1.380E+03	1.105E+06	7.426E+01	3.687E+02	5.526E+05	3.713E+01
2135	1.326E+03	1.062E+06	7.134E+01	3.542E+02	5.309E+05	3.567E+01
2136	1.274E+03	1.020E+06	6.855E+01	3.403E+02	5.101E+05	3.427E+01
2137	1.224E+03	9.802E+05	6.586E+01	3.270E+02	4.901E+05	3.293E+01



**Results (Continued)**

Year	Carbon dioxide			NMOC		
	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)
1997	0	0	0	0	0	0
1998	6.562E+02	3.585E+05	2.409E+01	1.542E+00	4.302E+02	2.890E-02
1999	1.251E+03	6.837E+05	4.594E+01	2.941E+00	8.204E+02	5.512E-02
2000	1.761E+03	9.621E+05	6.464E+01	4.138E+00	1.155E+03	7.757E-02
2001	2.329E+03	1.273E+06	8.551E+01	5.474E+00	1.527E+03	1.026E-01
2002	2.947E+03	1.610E+06	1.082E+02	6.924E+00	1.932E+03	1.298E-01
2003	3.563E+03	1.947E+06	1.308E+02	8.373E+00	2.336E+03	1.570E-01
2004	4.211E+03	2.300E+06	1.546E+02	9.895E+00	2.761E+03	1.855E-01
2005	5.029E+03	2.748E+06	1.846E+02	1.182E+01	3.297E+03	2.215E-01
2006	5.620E+03	3.070E+06	2.063E+02	1.321E+01	3.684E+03	2.475E-01
2007	6.207E+03	3.391E+06	2.278E+02	1.459E+01	4.069E+03	2.734E-01
2008	6.791E+03	3.710E+06	2.493E+02	1.596E+01	4.452E+03	2.991E-01
2009	7.455E+03	4.072E+06	2.736E+02	1.752E+01	4.887E+03	3.284E-01
2010	7.956E+03	4.346E+06	2.920E+02	1.870E+01	5.216E+03	3.504E-01
2011	8.550E+03	4.671E+06	3.139E+02	2.009E+01	5.605E+03	3.766E-01
2012	9.128E+03	4.987E+06	3.351E+02	2.145E+01	5.984E+03	4.021E-01
2013	9.648E+03	5.270E+06	3.541E+02	2.267E+01	6.325E+03	4.249E-01
2014	1.015E+04	5.544E+06	3.725E+02	2.385E+01	6.653E+03	4.470E-01
2015	1.062E+04	5.804E+06	3.900E+02	2.497E+01	6.965E+03	4.680E-01
2016	1.111E+04	6.069E+06	4.078E+02	2.610E+01	7.283E+03	4.893E-01
2017	1.179E+04	6.441E+06	4.328E+02	2.770E+01	7.729E+03	5.193E-01
2018	1.236E+04	6.750E+06	4.535E+02	2.904E+01	8.100E+03	5.443E-01
2019	1.298E+04	7.091E+06	4.764E+02	3.050E+01	8.509E+03	5.717E-01
2020	1.361E+04	7.436E+06	4.996E+02	3.198E+01	8.923E+03	5.995E-01
2021	1.425E+04	7.786E+06	5.231E+02	3.349E+01	9.343E+03	6.277E-01
2022	1.490E+04	8.140E+06	5.469E+02	3.501E+01	9.768E+03	6.563E-01
2023	1.556E+04	8.500E+06	5.711E+02	3.656E+01	1.020E+04	6.853E-01
2024	1.623E+04	8.866E+06	5.957E+02	3.813E+01	1.064E+04	7.148E-01
2025	1.691E+04	9.237E+06	6.206E+02	3.973E+01	1.108E+04	7.448E-01
2026	1.760E+04	9.615E+06	6.460E+02	4.136E+01	1.154E+04	7.752E-01
2027	1.830E+04	1.000E+07	6.719E+02	4.301E+01	1.200E+04	8.063E-01
2028	1.902E+04	1.039E+07	6.982E+02	4.470E+01	1.247E+04	8.378E-01
2029	1.975E+04	1.079E+07	7.250E+02	4.641E+01	1.295E+04	8.700E-01
2030	2.050E+04	1.120E+07	7.524E+02	4.816E+01	1.344E+04	9.028E-01
2031	2.126E+04	1.161E+07	7.803E+02	4.995E+01	1.394E+04	9.363E-01
2032	2.203E+04	1.204E+07	8.087E+02	5.177E+01	1.444E+04	9.705E-01
2033	2.282E+04	1.247E+07	8.378E+02	5.363E+01	1.496E+04	1.005E+00
2034	2.363E+04	1.291E+07	8.675E+02	5.554E+01	1.549E+04	1.041E+00
2035	2.446E+04	1.336E+07	8.979E+02	5.748E+01	1.604E+04	1.077E+00
2036	2.531E+04	1.382E+07	9.289E+02	5.947E+01	1.659E+04	1.115E+00
2037	2.617E+04	1.430E+07	9.606E+02	6.150E+01	1.716E+04	1.153E+00
2038	2.706E+04	1.478E+07	9.931E+02	6.358E+01	1.774E+04	1.192E+00
2039	2.796E+04	1.528E+07	1.026E+03	6.571E+01	1.833E+04	1.232E+00
2040	2.889E+04	1.578E+07	1.060E+03	6.789E+01	1.894E+04	1.273E+00
2041	2.984E+04	1.630E+07	1.095E+03	7.012E+01	1.956E+04	1.314E+00
2042	3.081E+04	1.683E+07	1.131E+03	7.241E+01	2.020E+04	1.357E+00
2043	3.181E+04	1.738E+07	1.168E+03	7.475E+01	2.085E+04	1.401E+00
2044	3.284E+04	1.794E+07	1.205E+03	7.716E+01	2.153E+04	1.446E+00
2045	3.388E+04	1.851E+07	1.244E+03	7.962E+01	2.221E+04	1.492E+00
2046	3.417E+04	1.867E+07	1.254E+03	8.030E+01	2.240E+04	1.505E+00

**Results (Continued)**

Year	Carbon dioxide			NMOC		
	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)
2047	3.283E+04	1.794E+07	1.205E+03	7.715E+01	2.152E+04	1.446E+00
2048	3.155E+04	1.723E+07	1.158E+03	7.413E+01	2.068E+04	1.389E+00
2049	3.031E+04	1.656E+07	1.113E+03	7.122E+01	1.987E+04	1.335E+00
2050	2.912E+04	1.591E+07	1.069E+03	6.843E+01	1.909E+04	1.283E+00
2051	2.798E+04	1.528E+07	1.027E+03	6.574E+01	1.834E+04	1.232E+00
2052	2.688E+04	1.469E+07	9.867E+02	6.317E+01	1.762E+04	1.184E+00
2053	2.583E+04	1.411E+07	9.480E+02	6.069E+01	1.693E+04	1.138E+00
2054	2.481E+04	1.356E+07	9.108E+02	5.831E+01	1.627E+04	1.093E+00
2055	2.384E+04	1.302E+07	8.751E+02	5.602E+01	1.563E+04	1.050E+00
2056	2.291E+04	1.251E+07	8.408E+02	5.383E+01	1.502E+04	1.009E+00
2057	2.201E+04	1.202E+07	8.078E+02	5.172E+01	1.443E+04	9.694E-01
2058	2.115E+04	1.155E+07	7.762E+02	4.969E+01	1.386E+04	9.314E-01
2059	2.032E+04	1.110E+07	7.457E+02	4.774E+01	1.332E+04	8.949E-01
2060	1.952E+04	1.066E+07	7.165E+02	4.587E+01	1.280E+04	8.598E-01
2061	1.875E+04	1.025E+07	6.884E+02	4.407E+01	1.229E+04	8.261E-01
2062	1.802E+04	9.844E+06	6.614E+02	4.234E+01	1.181E+04	7.937E-01
2063	1.731E+04	9.458E+06	6.355E+02	4.068E+01	1.135E+04	7.626E-01
2064	1.663E+04	9.087E+06	6.106E+02	3.909E+01	1.090E+04	7.327E-01
2065	1.598E+04	8.731E+06	5.866E+02	3.755E+01	1.048E+04	7.039E-01
2066	1.535E+04	8.388E+06	5.636E+02	3.608E+01	1.007E+04	6.763E-01
2067	1.475E+04	8.059E+06	5.415E+02	3.467E+01	9.671E+03	6.498E-01
2068	1.417E+04	7.743E+06	5.203E+02	3.331E+01	9.292E+03	6.243E-01
2069	1.362E+04	7.440E+06	4.999E+02	3.200E+01	8.928E+03	5.999E-01
2070	1.308E+04	7.148E+06	4.803E+02	3.075E+01	8.578E+03	5.763E-01
2071	1.257E+04	6.868E+06	4.614E+02	2.954E+01	8.241E+03	5.537E-01
2072	1.208E+04	6.599E+06	4.434E+02	2.838E+01	7.918E+03	5.320E-01
2073	1.160E+04	6.340E+06	4.260E+02	2.727E+01	7.608E+03	5.112E-01
2074	1.115E+04	6.091E+06	4.093E+02	2.620E+01	7.309E+03	4.911E-01
2075	1.071E+04	5.852E+06	3.932E+02	2.517E+01	7.023E+03	4.719E-01
2076	1.029E+04	5.623E+06	3.778E+02	2.419E+01	6.747E+03	4.534E-01
2077	9.889E+03	5.402E+06	3.630E+02	2.324E+01	6.483E+03	4.356E-01
2078	9.501E+03	5.191E+06	3.488E+02	2.233E+01	6.229E+03	4.185E-01
2079	9.129E+03	4.987E+06	3.351E+02	2.145E+01	5.984E+03	4.021E-01
2080	8.771E+03	4.792E+06	3.219E+02	2.061E+01	5.750E+03	3.863E-01
2081	8.427E+03	4.604E+06	3.093E+02	1.980E+01	5.524E+03	3.712E-01
2082	8.097E+03	4.423E+06	2.972E+02	1.903E+01	5.308E+03	3.566E-01
2083	7.779E+03	4.250E+06	2.855E+02	1.828E+01	5.100E+03	3.426E-01
2084	7.474E+03	4.083E+06	2.743E+02	1.756E+01	4.900E+03	3.292E-01
2085	7.181E+03	3.923E+06	2.636E+02	1.687E+01	4.708E+03	3.163E-01
2086	6.899E+03	3.769E+06	2.532E+02	1.621E+01	4.523E+03	3.039E-01
2087	6.629E+03	3.621E+06	2.433E+02	1.558E+01	4.346E+03	2.920E-01
2088	6.369E+03	3.479E+06	2.338E+02	1.497E+01	4.175E+03	2.805E-01
2089	6.119E+03	3.343E+06	2.246E+02	1.438E+01	4.012E+03	2.695E-01
2090	5.879E+03	3.212E+06	2.158E+02	1.382E+01	3.854E+03	2.590E-01
2091	5.649E+03	3.086E+06	2.073E+02	1.327E+01	3.703E+03	2.488E-01
2092	5.427E+03	2.965E+06	1.992E+02	1.275E+01	3.558E+03	2.391E-01
2093	5.214E+03	2.849E+06	1.914E+02	1.225E+01	3.418E+03	2.297E-01
2094	5.010E+03	2.737E+06	1.839E+02	1.177E+01	3.284E+03	2.207E-01
2095	4.814E+03	2.630E+06	1.767E+02	1.131E+01	3.156E+03	2.120E-01
2096	4.625E+03	2.527E+06	1.698E+02	1.087E+01	3.032E+03	2.037E-01
2097	4.443E+03	2.427E+06	1.631E+02	1.044E+01	2.913E+03	1.957E-01

**Results (Continued)**

Year	Carbon dioxide			NMOC		
	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)	(Mg/year)	(m <sup>3</sup> /year)	(av ft <sup>3</sup> /min)
2098	4.269E+03	2.332E+06	1.567E+02	1.003E+01	2.799E+03	1.880E-01
2099	4.102E+03	2.241E+06	1.506E+02	9.639E+00	2.689E+03	1.807E-01
2100	3.941E+03	2.153E+06	1.447E+02	9.261E+00	2.584E+03	1.736E-01
2101	3.786E+03	2.069E+06	1.390E+02	8.898E+00	2.482E+03	1.668E-01
2102	3.638E+03	1.987E+06	1.335E+02	8.549E+00	2.385E+03	1.602E-01
2103	3.495E+03	1.910E+06	1.283E+02	8.213E+00	2.291E+03	1.540E-01
2104	3.358E+03	1.835E+06	1.233E+02	7.891E+00	2.202E+03	1.479E-01
2105	3.227E+03	1.763E+06	1.184E+02	7.582E+00	2.115E+03	1.421E-01
2106	3.100E+03	1.694E+06	1.138E+02	7.285E+00	2.032E+03	1.366E-01
2107	2.979E+03	1.627E+06	1.093E+02	6.999E+00	1.953E+03	1.312E-01
2108	2.862E+03	1.563E+06	1.050E+02	6.725E+00	1.876E+03	1.261E-01
2109	2.750E+03	1.502E+06	1.009E+02	6.461E+00	1.802E+03	1.211E-01
2110	2.642E+03	1.443E+06	9.697E+01	6.208E+00	1.732E+03	1.164E-01
2111	2.538E+03	1.387E+06	9.316E+01	5.964E+00	1.664E+03	1.118E-01
2112	2.439E+03	1.332E+06	8.951E+01	5.730E+00	1.599E+03	1.074E-01
2113	2.343E+03	1.280E+06	8.600E+01	5.506E+00	1.536E+03	1.032E-01
2114	2.251E+03	1.230E+06	8.263E+01	5.290E+00	1.476E+03	9.916E-02
2115	2.163E+03	1.182E+06	7.939E+01	5.082E+00	1.418E+03	9.527E-02
2116	2.078E+03	1.135E+06	7.628E+01	4.883E+00	1.362E+03	9.153E-02
2117	1.997E+03	1.091E+06	7.329E+01	4.692E+00	1.309E+03	8.794E-02
2118	1.918E+03	1.048E+06	7.041E+01	4.508E+00	1.258E+03	8.449E-02
2119	1.843E+03	1.007E+06	6.765E+01	4.331E+00	1.208E+03	8.118E-02
2120	1.771E+03	9.674E+05	6.500E+01	4.161E+00	1.161E+03	7.800E-02
2121	1.701E+03	9.295E+05	6.245E+01	3.998E+00	1.115E+03	7.494E-02
2122	1.635E+03	8.930E+05	6.000E+01	3.841E+00	1.072E+03	7.200E-02
2123	1.571E+03	8.580E+05	5.765E+01	3.691E+00	1.030E+03	6.918E-02
2124	1.509E+03	8.244E+05	5.539E+01	3.546E+00	9.892E+02	6.647E-02
2125	1.450E+03	7.920E+05	5.322E+01	3.407E+00	9.504E+02	6.386E-02
2126	1.393E+03	7.610E+05	5.113E+01	3.273E+00	9.132E+02	6.136E-02
2127	1.338E+03	7.311E+05	4.913E+01	3.145E+00	8.774E+02	5.895E-02
2128	1.286E+03	7.025E+05	4.720E+01	3.022E+00	8.430E+02	5.664E-02
2129	1.235E+03	6.749E+05	4.535E+01	2.903E+00	8.099E+02	5.442E-02
2130	1.187E+03	6.485E+05	4.357E+01	2.789E+00	7.782E+02	5.228E-02
2131	1.140E+03	6.230E+05	4.186E+01	2.680E+00	7.476E+02	5.023E-02
2132	1.096E+03	5.986E+05	4.022E+01	2.575E+00	7.183E+02	4.826E-02
2133	1.053E+03	5.751E+05	3.864E+01	2.474E+00	6.902E+02	4.637E-02
2134	1.012E+03	5.526E+05	3.713E+01	2.377E+00	6.631E+02	4.455E-02
2135	9.718E+02	5.309E+05	3.567E+01	2.284E+00	6.371E+02	4.281E-02
2136	9.337E+02	5.101E+05	3.427E+01	2.194E+00	6.121E+02	4.113E-02
2137	8.971E+02	4.901E+05	3.293E+01	2.108E+00	5.881E+02	3.952E-02

## **ATTACHMENT 5**

### **PROPOSAL FORMS:**

**FORM A - VENDOR  
INFORMATION**

**FORM B.1 – BID FORM**

**FORM B.2 –  
COMPENSATION SCHEDULE**

**FORM C - EXCEPTIONS OR  
DEVIATIONS**

**FORM A**  
**BALDWIN COUNTY COMMISSION**  
**REQUEST FOR PROPOSAL**  
**Landfill Gas-to-Energy**  
**Project RFP:**

Name of Firm Submitting Proposal \_\_\_\_\_

**VENDOR INFORMATION SHEET**

Federal Employer Identification Number:			
Name and Title of Contact Person:			
Name:		Title:	
Mailing Address:			
Street Address:			
City, State, Zip:			
Telephone:		Fax:	
Email:			
Organization Structure:			
Circle one:	Corporation	Partnership	Proprietorship
_____ <small>(Specify Sole Officer)</small>			
Joint Venture		Other (explain)	
If Corporation:			
Date of Incorporation:			
State of Incorporation:			
States registered in as foreign Corporation:			
Authorized Person:			
Print Name:			
Title:			
Telephone:		Fax:	
Email:			

Signature of Authorized Person \_\_\_\_\_ Date: \_\_\_\_\_

**FORM B-1. COMPENSATION SCHEDULE - Option 1**  
**Baldwin County Commission**  
**Request for Proposal - Landfill Gas to Energy Project**  
**Request for Proposal #**

**Vendor Developed, Turn-key Plant, Operated by the BCC for the Duration of the Contract**

Company Name: \_\_\_\_\_  
Name and Title: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
Phone No.: \_\_\_\_\_  
Email: \_\_\_\_\_

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Item	Description	Estimated Quantity	Units
1. Purchasing Price of LFGTE Plant	Paid by BCC to Vendor		Lump Sum
2. Annual O&M Cost	Estimated Annual O&M Cost of the Plant	\$	\$/yr
	Utility Costs (Electrical, Water, Supp. Nat. Gas)	\$	\$/yr
4. Revenues to BCC	Estimated Annual Revenue from Plant Operations	\$	\$/yr

Notes:  
1 - This form may be modified as needed to better present the Vendor specific compensation schedule.  
2 - Revenue estimates to be based on the initial capacity of the plant without expansion.

**FORM B-2. COMPENSATION SCHEDULE - Option 2**  
**Baldwin County Commission**  
**Request for Proposal - Landfill Gas to Energy Project**  
**RFP #**

**Vendor Developed, Financed Turn-key Plant, Operated by the Vendor for the Duration of the Contract**

Company Name: \_\_\_\_\_  
 Name and Title: \_\_\_\_\_  
 Business Address: \_\_\_\_\_  
 Phone No.: \_\_\_\_\_  
 Email: \_\_\_\_\_

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

Item	Description	Estimated Quantity	Units
1. Purchasing Price of LFG	Paid by Vendor to BCC		
	Purchase Price of LFG (first year)		\$/MMBTU
	Estimated Annual Revenue to BCC (first year)	\$	
	Estimated Annual Revenue to BCC (15 year)	\$	
2. Annual O&M Cost	Estimated Annual O&M Cost of the Plant	\$	\$/yr

**Notes:**

- 1 - This form may be modified as needed to better present the Vendor specific compensation schedule.
- 2 - Revenue estimates to be based on the initial capacity of the plant without expansion.

Name of Firm Submitting Proposal\_\_\_\_\_

Acknowledgment of Receipt of Addenda # \_\_\_\_\_

[illegible]

**Signature of Authorized Person** \_\_\_\_\_ **Date:** \_\_\_\_\_