



REQUEST FOR PROPOSAL

Landfill Gas-to-Energy Development Project for the Region 2000 Regional Landfill – Livestock Road Facility

Issue Date: November 4, 2019

Proposal Due Date: December 19, 2019
Time: 4:00 PM EST

Virginia's Region 2000 Local Government Council
Region 2000 Services Authority
361 Livestock Road
Rustburg, VA 24588
434-455-6079



Table of Contents

Section	Page
ADVERTISEMENT FOR REQUEST FOR PROPOSAL.....	1
NOTICE TO PROPOSERS FOR LANDFILL GAS DEVELOPMENT SERVICES.....	2
SECTION 1 – GENERAL INFORMATION.....	4
RFP Objective	4
Proposal Submission	5
Contact Person/Additional Information.....	5
Overview of Procurement and Implementation Process	5
Rights of the Authority	6
Cost Incurred by Respondents.....	6
Rights of the Selection Committee	6
Proposals to Remain Open.....	6
General Conditions for Insurance, Indemnification, and Performance Guarantees	6
Definitions	7
SECTION 2 – FORECAST OF LANDFILL GAS RESERVES.....	8
Livestock Road Facility (SWP 610)	8
Regulatory Status.....	10
Landfill Gas Recovery Modeling.....	10
Landfill Gas Forecast Disclaimer	11
Measured Landfill Gas Methane Content	14
Measured Landfill Gas Collection Rate	14
Section 3 – SCOPE OF SERVICES	16
General	16
Rights and Responsibilities of Region 2000 Services Authority.....	16
Rights and Responsibilities of the Company.....	18
SECTION 4 – SUBMITTAL REQUIREMENTS	22
Organization of Proposal	22
1. Parent Company Confirmation	22
2. Qualifications and Experience.....	22
3. Notice of Violations and Compliance Actions.....	23
4. Proposal Certification and Non-Collusion Affidavit	23
5. Proposal Security	23
6. Project Approach and Scope of Services Assumptions	23
7. Capital Improvement Plan.....	24
8. Landfill Gas Payment Form	24
9. Environmental Permits and Documentation Requirements	25
10. Other Innovative and Alternative Recommendations.....	25
SECTION 5 – SELECTION PROCESS.....	26
FORM A – PROPOSAL SUBMITTAL FORM.....	27
FORM B – PROPOSAL CERTIFICATION AND NON-COLLUSION AFFIDAVIT	28
FORM C – LANDFILL GAS PAYMENT FORM.....	31

Exhibits

Exhibit 1.	Site Map.....	9
Exhibit 2.	Landfill Gas Recovery Projections – Scenarios A and B.....	14
Exhibit 3.	Average Methane Concentration of Landfill Gas – Flare Station Data.....	15
Exhibit 4.	Average Landfill Gas Collection Rate – Flare Station Data	15

Tables

Table 1.	Livestock Road Facility Cell Phase and Volumes	8
Table 2.	Landfill Gas Recovery Projection – Scenario A: Infrequent Wellfield Expansions	12
Table 3.	Landfill Gas Recovery Projection – Scenario B: Frequent Wellfield Expansions	13



ADVERTISEMENT FOR REQUEST FOR PROPOSAL

Virginia's Region 2000 Local Government Council
Region 2000 Services Authority

Landfill Gas-to-Energy Development Project for the
Region 2000 Regional Landfill – Livestock Road Facility

Issue Date: Monday, November 4, 2019

Title: Landfill Gas-to-Energy Development Project for the Region 2000 Regional Landfill – Livestock Road Facility

Issuing Agency & Address: Region 2000 Services Authority
361 Livestock Road
Rustburg, VA 24588

Location of Work: Region 2000 Regional Landfill - Livestock Road Facility, Rustburg, Virginia 24588

Proposed Term of Contract: Twenty (20) Years

Contact Person: Clarke W. Gibson, P.E., Director, Region 2000 Services Authority
email: cgibson@region2000.org
phone: 434-455-6079

Proposal packages must be labeled: Proposal for Landfill Gas-to-Energy Development Project for the Region 2000 Regional Landfill – Livestock Road Facility

Pre-Proposal Conference: A mandatory pre-proposal conference will be conducted on Thursday, November 14, 2019 at 10:00 AM EST at the Region 2000 Services Authority Administration Office Building located at 361 Livestock Road, Rustburg, VA 24588.

Proposals are due before Thursday, December 19, 2019 at 4:00, PM EST at Region 2000 Services Authority, 361 Livestock Road, Rustburg, VA 24588. Proposals will be date stamped and recorded as they are received. Proposals received after this date and time will not be considered and will be returned to the proposer unopened.

The Authority requests 5 paper copies and 1 electronic copy of the Proposal from each prospective Proposer.

NOTICE TO PROPOSERS FOR LANDFILL GAS DEVELOPMENT SERVICES

The Region 2000 Services Authority (Authority) is the owner and operator of the Region 2000 Regional Landfill - Livestock Road Facility (LRF), a permitted sanitary landfill under Virginia Solid Waste Landfill Permit No. 610 and Stationary Source Air Permit No. 21547. The LRF is located east of U.S Route 29, at the end of State Route 674, approximately five miles south of Lynchburg, in Campbell County, Virginia.

The Authority has elected to issue this Request for Proposal (RFP) to solicit proposals from qualified Proposers to develop a Landfill Gas-to-Energy (LFGE) project and related facilities for commercial and beneficial use purposes of the landfill gas collected at the LRF and to make payments to the Authority in exchange for receiving landfill gas. The Authority shall consider Proposals outlining technically and financially feasible beneficial uses of the LFG, including electrical power generation, direct-use by industrial users as medium-BTU fuel, production of renewable natural gas (RNG), or other suitable technologies.

For the purposes of this RFP, the scope of work requested by the Authority includes, but is not limited to, planning, permitting, financing, design, construction, operation, maintenance, and environmental monitoring services for facilities associated with the beneficial use of landfill gas. In addition, the scope of work includes marketing, sale and distribution of the full market value of the landfill gas, including all forms of energy and environmental attributes, tax credits, and tax incentives.

Sealed proposals will be received by the Authority at the Region 2000 Services Authority, 361 Livestock Road, Rustburg, VA 24588, until **Thursday, December 19, 2019 at 4:00, PM EST** for furnishing landfill gas-to-energy project development services for landfill gas collected at the Livestock Road Facility. The Authority requests 5 paper copies and 1 electronic copy of the Proposal from each prospective Proposer.

The Authority reserves the right to postpone or discontinue future phases of this procurement contingent on responses to the Request for Proposals (RFP) or for any other reason. Proposals received after the specified date and time above will not be accepted. The time of receipt shall be determined by the clock in the lobby of the Authority's Office at the address above. The sealed envelope containing the proposal shall be marked on the exterior "Proposal for Landfill Gas-to-Energy Development Project for the Region 2000 Regional Landfill - Livestock Road Facility", and with the name and address of the Proposer. The sealed envelope shall be addressed to The Region 2000 Services Authority, 361 Livestock Road, Rustburg, VA 24588, attention Mr. Clarke Gibson.

A mandatory Pre-Proposal Conference will be held on **Thursday, November 14, 2019 at 10:00 AM EST** at the Region 2000 Services Authority, 361 Livestock Road, Rustburg, VA 24588

The RFP includes the following sections:

- SECTION 1 – GENERAL INFORMATION
- SECTION 2 – FORECAST OF LANDFILL GAS RESERVES
- SECTION 3 – SCOPE OF SERVICES
- SECTION 4 – SUBMITTAL REQUIREMENTS
- SECTION 5 - SELECTION PROCESS
- FORM A – PROPOSAL SUBMITTAL FORM

- FORM B – PROPOSAL CERTIFICATION AND NON-COLLUSION AFFIDAVIT
- FORM C – LANDFILL GAS PAYMENT FORM

SECTION 1 – GENERAL INFORMATION

RFP OBJECTIVE

The objective of this RFP is to solicit proposals for the development of a project for Landfill Gas-to-Energy at the Region 2000 Regional Landfill - Livestock Road Landfill (LRF). The Region 2000 Services Authority (Authority) as the owner and operator of the LRF intends to enter into an agreement with the successful respondent, herein referred to as “the Company” including the following general provisions:

- Conveying the landfill gas, associated environmental attributes, and tax credits to the Company for an initial term of **20** years, including:
 - The landfill gas (LFG) produced, collected by the Authority-owned LFG collection system, and made available;
 - The environmental attributes including greenhouse gas credits associated with destruction of the methane, any environmental attributes associated with the generation of electricity (Renewable Energy Credits and/or greenhouse gas credits for offsetting other forms of electrical generation), any Renewable Identification Number (RIN) assigned to a batch of biofuel for the purpose of tracking its production, use, and trading as required by the United States Environmental Protection Agency's Renewable Fuel Standard (RFS), and any other environmental attributes existing or yet to be conceived; and,
 - Applicable tax credits and tax incentives associated with LFGE and Greenhouse Gas Emissions Reduction projects.
- The Authority expects to be compensated for: 1) conveying the LFG to the Company at a determined point of delivery, 2) environmental attributes, and 3) the beneficial use of the landfill gas. The Authority desires to receive such compensation expressed in unit prices and annual payments as stipulated on the Landfill Gas Payments Form.

Proposals that present technically and financially -feasible alternatives to the approach and specifics contained in this RFP will be accepted and considered. Several circumstances that Proposers should make note of when considering development of a LFGE Project at LRF are as follows:

- The Authority intends to operate the existing and future LFG collection system in a manner that prioritizes odor mitigation and will continue to establish operational practices and protocols that minimize the potential for fugitive LFG emissions that may contribute to potential odors at the LRF and within surrounding communities;
- The Authority will be responsible for the permitting, design, construction, operation, and financing of the LFG collection and control system and intends to operate the existing and future LFG collection system in a manner that prioritizes compliance with applicable regulations; and,
- The Authority does not exert control of the composition or quantities of waste that are delivered to the LRF and, thus, cannot warranty or guarantee the quantity or quality of the LFG recovered at LRF.

PROPOSAL SUBMISSION

Proposals will be accepted until **Thursday, December 19, 2019 at 4:00, PM EST** local time. Five (5) paper copies and one (1) electronic copy of the Proposal, and all required forms, must be submitted in order for a Proposer's proposal to be considered responsive to the requirements of the RFP. No facsimile or e-mail submissions will be accepted.

The requirements for Proposal submittals are set forth in this RFP. Any addendum to this RFP, should they be necessary, will be placed on the Authority website at the following location:

<https://www.region2000servicesauthority.org/procurements.html>

CONTACT PERSON/ADDITIONAL INFORMATION

The Authority will appoint a Selection Committee comprised of appropriate staff and external consultants representing a variety of disciplines along with some representatives of member municipalities within the Authority to review the RFP submittals and to make recommendations to the Director. Respondents are requested to refrain from contact with the Selection Committee members. All questions regarding the RFP, and the proposal submittal requirements, should be submitted in writing directed to the Director of the Region 2000 Services Authority:

Region 2000 Services Authority
c/o Clarke Gibson
361 Livestock Road
Rustburg, VA 24588
cgibson@region2000.org
434-455-6079

OVERVIEW OF PROCUREMENT AND IMPLEMENTATION PROCESS

The proposed procurement process for development of a project for Landfill Gas-to-Energy at the Region 2000 Regional Landfill – Livestock Road Facility is as follows:

1. Mandatory Pre-Proposal Conference – **Thursday, November 14, 2019 at 10:00 AM EST**
2. Last Day for Receipt of Questions on RFP – **Friday, November 22, 2019 at 5:00 PM EST**
3. Last Day the Authority will issue written responses to questions – **Friday, December 6, 2019 at 5:00 PM EST**
4. Proposals Due – **Thursday, December 19, 2019 at 4:00, PM EST**
5. Selection Committee to present recommendation to Board of Directors – **Wednesday, January 22, 2020**
6. Complete Final Contract Negotiations with Selected Respondent – **TBD**
7. Issue Notice to Proceed for Landfill Gas-to-Energy Project Development – **TBD**

RIGHTS OF THE AUTHORITY

All responses, inquiries, or correspondence relating to this RFP will become the property of the Authority when received and will become subject to all appropriate public disclosure laws of the Commonwealth of Virginia.

COST INCURRED BY RESPONDENTS

Any cost incurred by respondents in preparing or submitting a Proposal in response to this RFP shall be the Respondent's sole responsibility.

RIGHTS OF THE SELECTION COMMITTEE

This RFP constitutes an invitation to submit proposals to the Authority. This RFP does not obligate the Authority to procure or contract for any of the scopes of services set forth in this RFP. All responses, inquiries, or correspondence relating to this RFP will become the property of the Authority when received and will become subject to all appropriate public disclosure laws of the Commonwealth of Virginia. The Authority and the Selection Committee reserve and hold at its sole discretion, various rights and options, including without limitation, the following:

- a) To waive any minor informalities in the RFP
- b) To prepare and issue addenda to the RFP prior to the receipt of the proposals that may expand, restrict, or cancel any portion or all work described in this RFP
- c) To receive questions from Respondents and to provide such answers as it deems appropriate
- d) To reject any and all proposals
- e) To change the date for receipt of proposals or any deadlines and dates specified in this RFP
- f) To conduct investigations with respect to the information provided by each Respondent and to request additional information to support such Respondent's responses and submittals
- g) To be granted a visit of facility(s) referenced in the Respondent's proposal at a convenient time during the procurement process upon request
- h) To seek clarification of proposals from Respondents
- i) To cancel this procurement process with or without substitution of another RFP

PROPOSALS TO REMAIN OPEN

All proposals shall remain open for 120 days beyond the proposal date. The Authority may, at its sole discretion, release any proposals and return the proposal security prior to that date.

GENERAL CONDITIONS FOR INSURANCE, INDEMNIFICATION, AND PERFORMANCE GUARANTEES

Any potential agreement resulting out of a negotiations phase following this RFP process will include specific contract terms pertaining to site use, financing, operations, compensation, ownership,

security, insurance, indemnification, warranties, performance guarantees, and other appropriate provisions. It is anticipated that such agreement will contain terms and conditions which reflect the unique nature of a Landfill Gas-to-Energy Project to be developed by the Company. Respondents should outline any specific terms and conditions they want the Authority to consider in their proposals. The Authority reserves the right to include terms and conditions specific to a Landfill Gas-to-Energy Project in any potential agreement.

DEFINITIONS

The following terms used in herein are defined below for the purposes of this RFP.

Landfill Gas Agreement: The legal agreement between the Region 2000 Services Authority and the Company that includes sale of Landfill Gas to the Company at the point of delivery, the construction, operation and maintenance of the Landfill Gas-to-Energy Facilities by the Company and includes payment to the Authority for the Landfill Gas.

Landfill Gas Collection Facilities The network of landfill gas collection and control system equipment appurtenances including, but not limited to, gas collection wells, horizontal collectors, leachate cleanout connections, collection header and lateral piping, interconnecting pipes, valves, dewatering liquid and condensate management features, monitoring and measuring equipment, blowers, landfill gas utility flare, telemetry and controls, filters, and other related equipment that will be planned, permitted, designed and installed by the Authority and used in the extraction and collection of Landfill Gas at the LRF. The Authority maintains Landfill Gas Collection Facilities over the Phase III and Phase IV, and plans to construct additional LFG Collection Facilities over the Phase V waste disposal unit following its future construction.

Landfill Gas Point of Delivery: The location between the Authority-owned Landfill Gas Collection Facilities and the Project Facilities. It is the location where Landfill Gas collected and measured by the Authority's Collection Facilities is transferred to and sold to the Company.

Project Facilities: The infrastructure, system components, and controls that are furnished, constructed, maintained, and managed by the Company and within the Company land lease area in agreement with the Authority for purposes of operating and maintaining a Landfill Gas-to-Energy Project to beneficially utilize the LFG for energy.

Project: The overall planning, permitting, financing, design, construction, operation, maintenance, and environmental monitoring services associated with the facilities installed for the beneficial use of landfill gas. In addition, the Project includes marketing, sale and distribution of the full market value of the landfill gas, including all environmental attributes, tax credits, and tax incentives.

Project Site: The area of land owned by the Authority, whereby the Authority shall grant usage to the Company for purposes of operating Landfill Gas-to-Energy Facilities per the Agreement. The area of land may include easements, right-of-way, or land leases.

The Company: The entity that enters into an agreement with the Authority to complete the scope of services for a Landfill Gas to Energy Project using Landfill Gas generated from Phase III, Phase IV and Phase V of the Livestock Road Facility. The Authority agrees to sell Landfill Gas generated from these Phases of the LRF to, or to participate in some revenue-sharing arrangement with, the Company as described in the Landfill Gas Agreement. The Company is responsible for completing the scope of work outlined in the agreement.

SECTION 2 – FORECAST OF LANDFILL GAS RESERVES

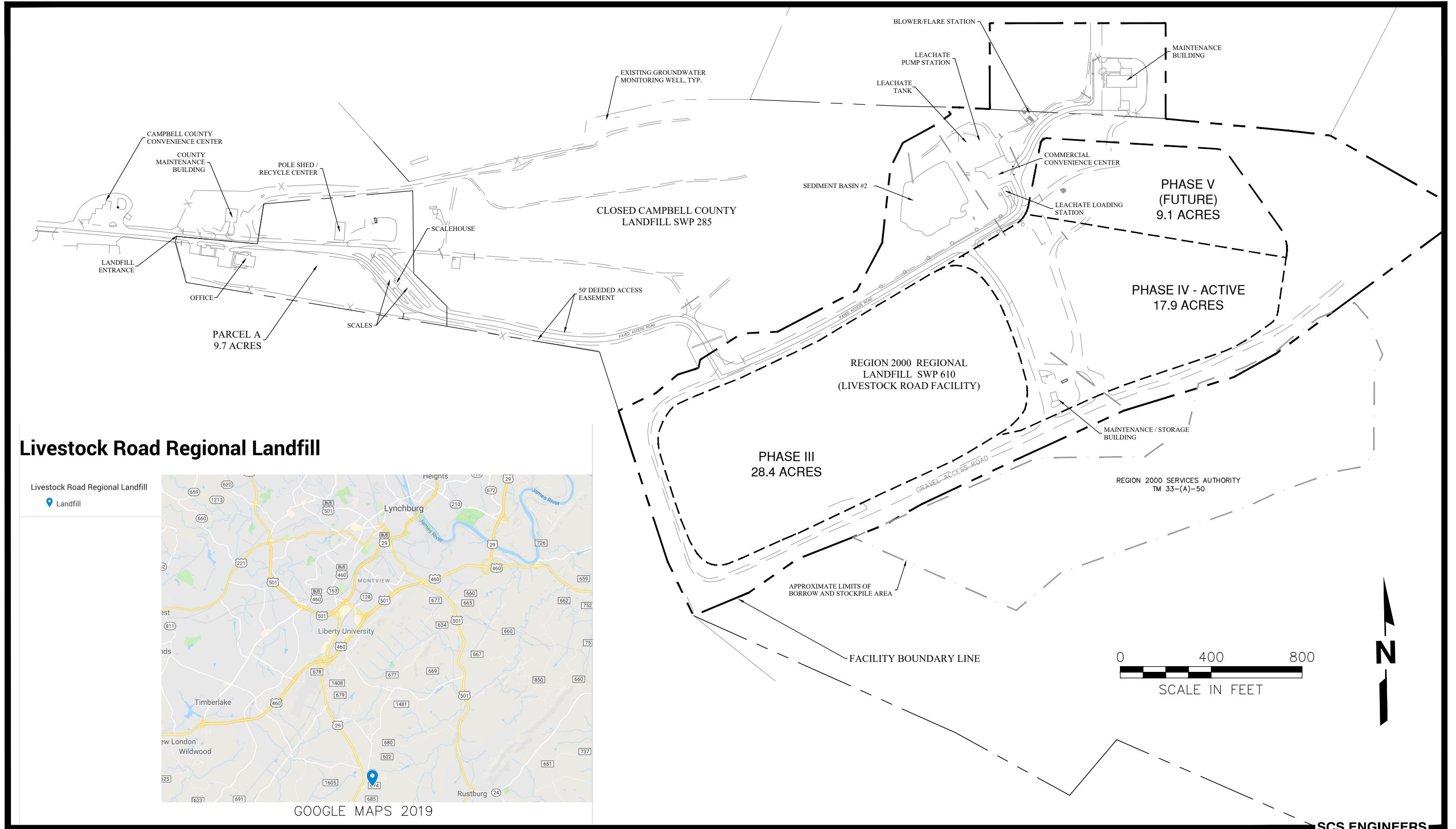
LIVESTOCK ROAD FACILITY (SWP 610)

The Region 2000 Regional Landfill - Livestock Road Facility (LRF) is a municipal solid waste (MSW) management facility located east of U.S Route 29, at the end of State Route 674, approximately five miles south of Lynchburg, in Campbell County, Virginia. The LRF is owned and operated by the Region 2000 Services Authority (Authority). The LRF is comprised of three permitted waste disposal units Phases III, IV and V, of which Phase IV is the current active unit. The Authority was issued a Solid Waste Permit (No. 610) in March 15, 2012 for operations of the Phase III landfill, which is currently filled and partially capped. The Authority began operations of the current landfill unit, Phase IV, on April 18, 2017. The Authority operates landfill gas collection generated in Phase III, IV and intends to capture landfill gas from the future disposal unit Phase V.

Upon completion of all phases, the permitted LRF is anticipated to have a total footprint of 55 acres (refer to Exhibit 1 – Site Map) and a maximum capacity of approximately 4.7 million cubic yards of solid waste as shown in Table 1. During 2018, the LRF disposed of over 197,000 tons of waste and is expected to receive over 200,000 tons by the end of 2019. Based on the anticipated waste acceptance rates, the LRF is expected to operate until around 2031. The LRF accepts municipal solid waste (MSW) consisting primarily of household and commercial wastes from the City of Lynchburg and the counties of Appomattox, Campbell and Nelson. The LRF does not accept significant quantities of construction and demolition (C&D) or industrial wastes. Table 1 describes the anticipated Phase, Current Condition, Life Span and Waste Volume in Million Cubic Yards (MCY) for the LRF.

Table 1. Livestock Road Facility Cell Phase and Volumes

Filling Phase	Current Fill Condition	Total Life Span (years)	Remaining Life Span (years)	Waste Volume (Million CY)
Phase III	Completed	19	NA	2.0
Phase IV	Active	7.6	5.6	1.5
Phase V	Future	6.0	6.0	1.2
Totals		32.6	11.6	4.7



SCS ENGINEERS

EXHIBIT 1. SITE MAP

REGULATORY STATUS

Currently, the LRF is equipped with an active landfill gas (LFG) collection and control system within the Phase III and Phase IV areas. A combustion unit (i.e., flare station) is operated on the north side between Phase III and Phase IV.

The LRF is subject to the New Source Performance Standards (NSPS) for municipal solid waste landfills under 40 CFR 60 Subpart XXX, and other provisions of the Clean Air Act, and the LRF has been issued a Stationary Source Air Permit and a Title V Air Operating Permit (No. 21547). However, the LRF has demonstrated that the projected annual emissions rate of non-methane organic compounds (NMOCs) through 2021 is less than the regulatory applicability threshold that requires installation and operation of a mandatory LFG collection and control system. Thus, the existing active LFG system is considered voluntary with respect to the Clean Air Act provisions.

The Authority plans to continue conducting design and installation of the expansion of the active LFG collection and control system in advance of the regulatory requirements to achieve various objectives, such as odor mitigation and abatement, as well as to allow for the sale and beneficial use of the LFG for energy recovery purposes. The Authority continues to coordinate with the Virginia Department of Environmental Quality (VDEQ) regarding regulatory permitting and compliance requirements.

The Authority's primary goals are to operate the LFG collection and control system in a manner that prioritizes odor mitigation, abatement, and control, as well as to accomplish compliance with the applicable Clean Air Act and Solid Waste regulations. The LFG System operations include the control of LFG emissions from the site via the active LFG collection and control system, which currently includes the utility flare station. The Authority's goal is to operate the LFG Collection Facilities in a manner to reduce nuisance odors to the surrounding community. It is therefore the Authority's goal to extract landfill gas in a manner that produces the greatest wellfield zone-of-influence. The Authority does not plan to operate the LFG Collection Facilities with the goal of producing higher quality (i.e., high methane, low oxygen) gas in a manner that would most likely reduce the volume of landfill gas recovered.

LANDFILL GAS RECOVERY MODELING

The Authority has commissioned a detailed analysis of the expected LFG recovery potential from the LRF. LFG models were developed for two potential scenarios related to the frequency of LFG system expansion. Scenario A projections include infrequent landfill gas wellfield expansions, assuming that the LFG system is expanded at a time frame close to the end of a fill cycle in each waste unit (approximately every 6 years). Under this Scenario, LFG system coverage gradually declines between landfill expansion projects as the amount of waste in place increases, and spikes in the years corresponding to expansion projects.

Scenario B projections include frequent LFG system expansions to parallel waste placement rates. Under this scenario, LFG system coverage remains steady with increases corresponding to installation of final cap. Both LFG recovery projection models show an increase to 85% LFG system coverage in the year following final waste placement, coinciding with the installation of final cap over the final portion of the landfill. The model inputs include the maximum waste capacity of the site, 4,724,550 tons, and the average annual precipitation of 41.62 inches per year for the area. For both models, a decay rate constant (k) of 0.072/yr and an ultimate methane recovery rate (L_0) of 3,030 cubic feet/ton are used. The historical waste placement rates are known inputs with breakdowns of waste by type into two categories: 1) municipal solid waste (MSW) and 2)

construction and demolition (C&D) waste. This categorical data is recorded in annual Solid Waste Information and Assessment Program (SWIA) Reports from 2012 through 2018. Based on historical waste composition information, the C&D percent of total waste prior to 2019 is estimated to be approximately 7% and the projected C&D percent of total waste from 2019 through the life of the landfill is projected to be approximately 8%. The amount of waste placed in 2019 is estimated to be 200,000 tons with a projected annual increase of 2,500 tons through the life of the landfill. The forecasted landfill gas recovery for the LRF under Scenarios A and B are presented in Tables 2 and 3, respectively.

Based on the modeling results for Scenario A, LFG recovery from the existing and planned systems is projected to oscillate from an average of 846 standard cubic feet per minute (scfm) in 2020 to 1,160 scfm in 2025 and to 1,090 scfm in 2030. Based on the modeling results for Scenario B, LFG recovery from the existing and planned systems is projected to increase from an average of 883 scfm in 2020 to 1,243 scfm in 2025 and to 1,486 scfm in 2030. The expected cessation of operations and initiation of final cap construction and fulfillment of the total design capacity is anticipated to occur in or around 2031. As such, both models anticipate a maximum recovery rate of 1,755 scfm in 2032. The models predict that the LFG recovery rate decreases to just below 1,400 scfm by 2035. A graph depicting the LFG recovery projections are shown in Exhibit 2.

LANDFILL GAS FORECAST DISCLAIMER

The LFG recovery estimates are normalized to cubic feet per minute at 50 percent methane content. The heat rate represented by the LFG fuel reserves in units of MMBtu/hr is calculated using the heat value of methane equal to 1,012 Btu/cf.

The Authority offers no guarantee of minimum gas quantities available or minimal methane content of LFG generated from the LRF. This data is provided in this RFP for the purposes of providing information upon which bidders may submit proposals for the services requested.

The LFG recovery forecasts presented in this RFP have been prepared in accordance with the care and skill generally exercised by reputable LFG professionals, under similar circumstances, in this or similar localities. No other warranty, express or implied, is made as to the professional opinions presented herein. Changes in the landfill property use and conditions (for example, variations in rainfall, water levels, landfill operations, waste composition, final cover systems, or other factors) may affect future gas recovery at the landfill.

Table 2. Landfill Gas Recovery Projection – Scenario A: Infrequent Wellfield Expansions

Year	Annual Total Waste Disposal	Total Waste In Place	LFG Recovery Potential			LFG System Coverage	LFG Recovery from Existing/Planned System		
	(tons/yr)	(tons)	(scfm)	(mmcf/day)	(mmBtu/yr)	(%)	(scfm)	(mmcf/day)	(mmBtu/yr)
2015*	205,357	1,376,609	684	0.98	181,822	10%	68	0.10	18,182
2016*	197,672	1,574,281	828	1.19	220,294	20%	166	0.24	44,059
2017	187,550	1,761,831	948	1.37	252,206	85%	806	1.16	214,375
2018	197,641	1,959,472	1,052	1.52	279,854	70%	737	1.06	195,898
2019	200,000	2,159,472	1,146	1.65	304,875	71%	814	1.17	216,461
2020	202,500	2,361,972	1,244	1.79	330,750	68%	846	1.22	224,910
2021	205,000	2,566,972	1,336	1.92	355,189	65%	868	1.25	230,873
2022	207,500	2,774,472	1,422	2.05	378,306	62%	882	1.27	234,550
2023	210,000	2,984,472	1,505	2.17	400,210	59%	888	1.28	236,124
2024	212,500	3,196,972	1,583	2.28	420,997	56%	886	1.28	235,758
2025	215,000	3,411,972	1,657	2.39	440,759	70%	1,160	1.67	308,532
2026	217,500	3,629,472	1,728	2.49	459,579	67%	1,158	1.67	307,918
2027	220,000	3,849,472	1,796	2.59	477,533	64%	1,149	1.65	305,621
2028	222,500	4,071,972	1,860	2.68	494,690	61%	1,135	1.63	301,761
2029	225,000	4,296,972	1,922	2.77	511,116	58%	1,115	1.61	296,447
2030	227,500	4,524,472	1,981	2.85	526,869	55%	1,090	1.57	289,778
2031	200,078	4,724,550	2,038	2.93	542,003	70%	1,427	2.05	379,402
2032	0	4,724,550	2,065	2.97	549,064	85%	1,755	2.53	466,704
2033	0	4,724,550	1,900	2.74	505,393	85%	1,615	2.33	429,584
2034	0	4,724,550	1,749	2.52	465,245	85%	1,487	2.14	395,458
2035	0	4,724,550	1,611	2.32	428,334	85%	1,369	1.97	364,084
2036	0	4,724,550	1,483	2.14	394,397	85%	1,261	1.82	335,238
2037	0	4,724,550	1,366	1.97	363,194	85%	1,161	1.67	308,715
2038	0	4,724,550	1,258	1.81	334,502	85%	1,069	1.54	284,326
2039	0	4,724,550	1,159	1.67	308,117	85%	985	1.42	261,900
2040	0	4,724,550	1,067	1.54	283,854	85%	907	1.31	241,276

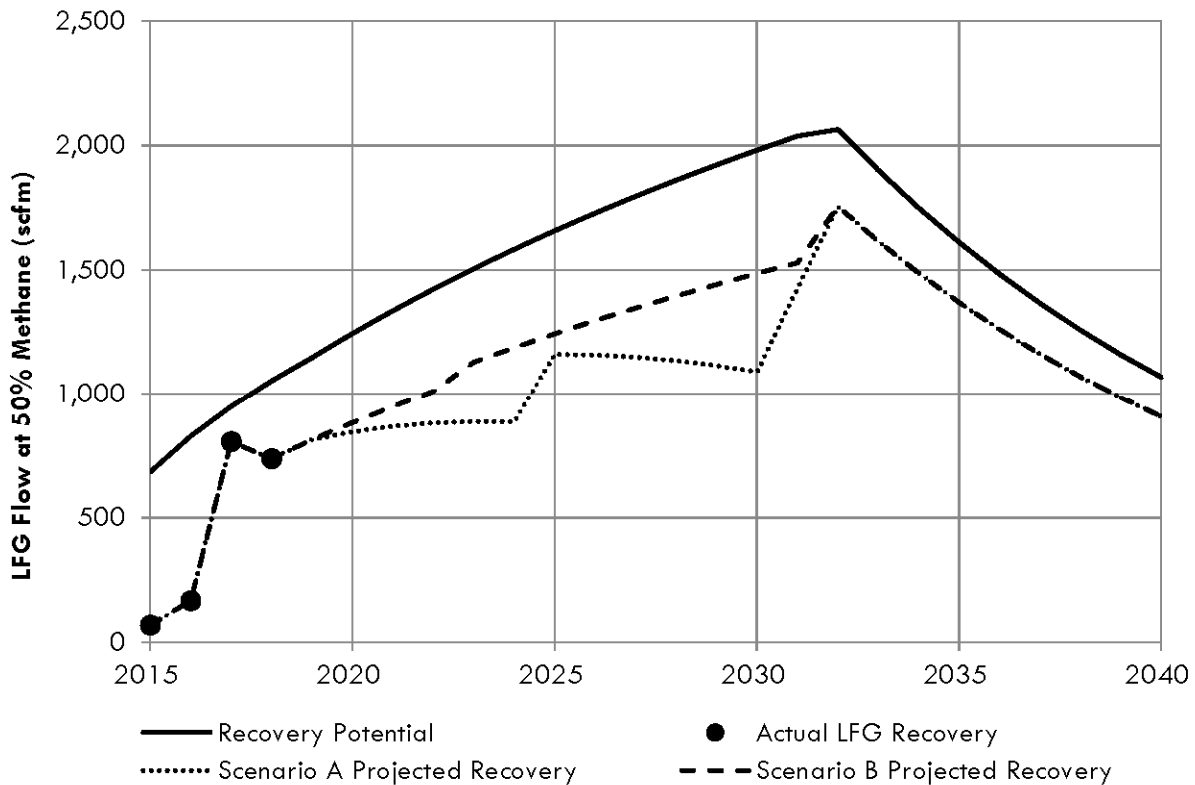
*LFG System Coverage in 2015 and 2016 is low due to LFG collection from leachate cleanout components as opposed to the current, more-comprehensive LFG collection and control system which began operating in November 2016.

Table 3. Landfill Gas Recovery Projection – Scenario B: Frequent Wellfield Expansions

Year	Annual Total Waste Disposal	Total Waste In Place	LFG Recovery Potential			LFG System Coverage	LFG Recovery from Existing/Planned System		
	(tons/yr)	(tons)	(scfm)	(mmcf/day)	(mmBtu/yr)	(%)	(scfm)	(mmcf/day)	(mmBtu/yr)
2015*	205,357	1,376,609	684	0.98	181,822	10%	68	0.10	18,182
2016*	197,672	1,574,281	828	1.19	220,294	20%	166	0.24	44,059
2017	187,550	1,761,831	948	1.37	252,206	85%	806	1.16	214,375
2018	197,641	1,959,472	1,052	1.52	279,854	70%	737	1.06	195,898
2019	200,000	2,159,472	1,146	1.65	304,875	71%	814	1.17	216,461
2020	202,500	2,361,972	1,244	1.79	330,750	71%	883	1.27	234,833
2021	205,000	2,566,972	1,336	1.92	355,189	71%	948	1.37	252,184
2022	207,500	2,774,472	1,422	2.05	378,306	71%	1,010	1.45	268,597
2023	210,000	2,984,472	1,505	2.17	400,210	75%	1,129	1.63	300,157
2024	212,500	3,196,972	1,583	2.28	420,997	75%	1,187	1.71	315,748
2025	215,000	3,411,972	1,657	2.39	440,759	75%	1,243	1.79	330,570
2026	217,500	3,629,472	1,728	2.49	459,579	75%	1,296	1.87	344,684
2027	220,000	3,849,472	1,796	2.59	477,533	75%	1,347	1.94	358,150
2028	222,500	4,071,972	1,860	2.68	494,690	75%	1,395	2.01	371,018
2029	225,000	4,296,972	1,922	2.77	511,116	75%	1,441	2.08	383,337
2030	227,500	4,524,472	1,981	2.85	526,869	75%	1,486	2.14	395,151
2031	200,078	4,724,550	2,038	2.93	542,003	75%	1,528	2.20	406,502
2032	0	4,724,550	2,065	2.97	549,064	85%	1,755	2.53	466,704
2033	0	4,724,550	1,900	2.74	505,393	85%	1,615	2.33	429,584
2034	0	4,724,550	1,749	2.52	465,245	85%	1,487	2.14	395,458
2035	0	4,724,550	1,611	2.32	428,334	85%	1,369	1.97	364,084
2036	0	4,724,550	1,483	2.14	394,397	85%	1,261	1.82	335,238
2037	0	4,724,550	1,366	1.97	363,194	85%	1,161	1.67	308,715
2038	0	4,724,550	1,258	1.81	334,502	85%	1,069	1.54	284,326
2039	0	4,724,550	1,159	1.67	308,117	85%	985	1.42	261,900
2040	0	4,724,550	1,067	1.54	283,854	85%	907	1.31	241,276

*LFG System Coverage in 2015 and 2016 is low due to LFG collection from leachate cleanout components as opposed to the current, more-comprehensive LFG collection and control system which began operating in November 2016.

Exhibit 2. Landfill Gas Recovery Projections – Scenarios A and B



MEASURED LANDFILL GAS METHANE CONTENT

The Authority currently measures real-time methane content (% CH₄) of the landfill gas collected at the flare station via a methane analyzer. Based on available data measured over the last twelve months, the average monthly methane concentration of the landfill gas ranges from 39.4% to 48.5%, with an average of 43.3%. The average monthly methane concentrations measured from September 2018 through September 2019 are presented below in Exhibit 3.

MEASURED LANDFILL GAS COLLECTION RATE

The Authority measures real-time flow of landfill gas collected at the flare station. The current average LFG collection rate is over 1,000 scfm. Landfill gas collection prior to April 2019 included only the Phase III landfill unit. Gas collection from Phase IV began in April 2019 and is currently in operation along with Phase III. The average LFG collection rates measured from September 2018 through September 2019 are presented below in Exhibit 4.

Exhibit 3. Average Methane Concentration of Landfill Gas – Flare Station Data

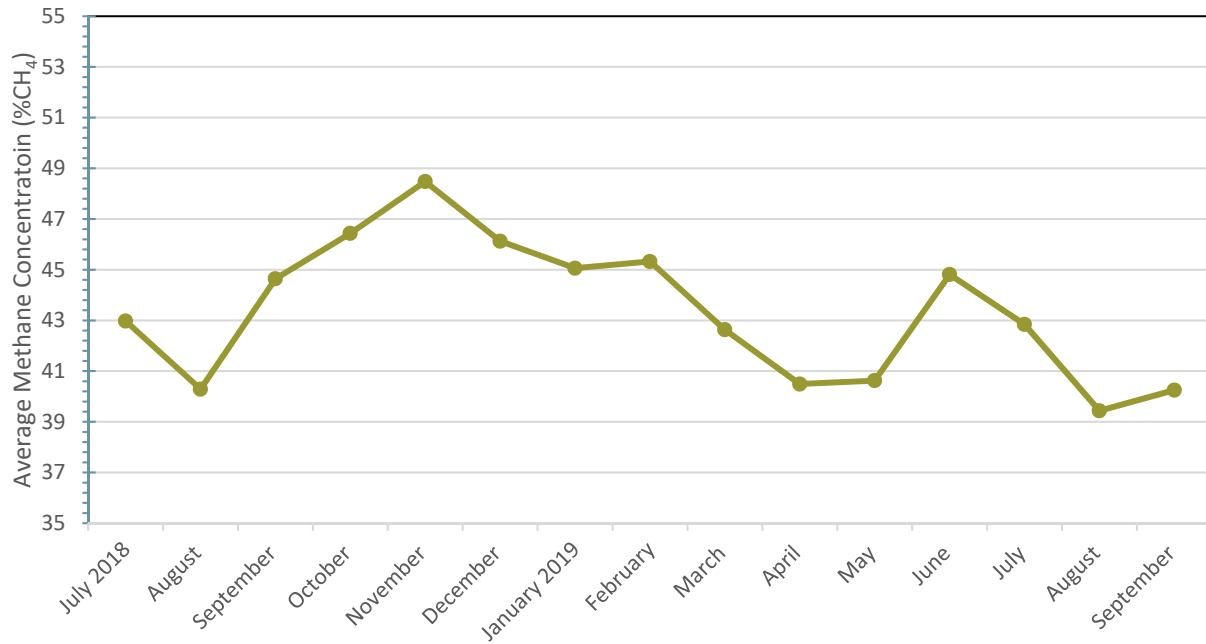
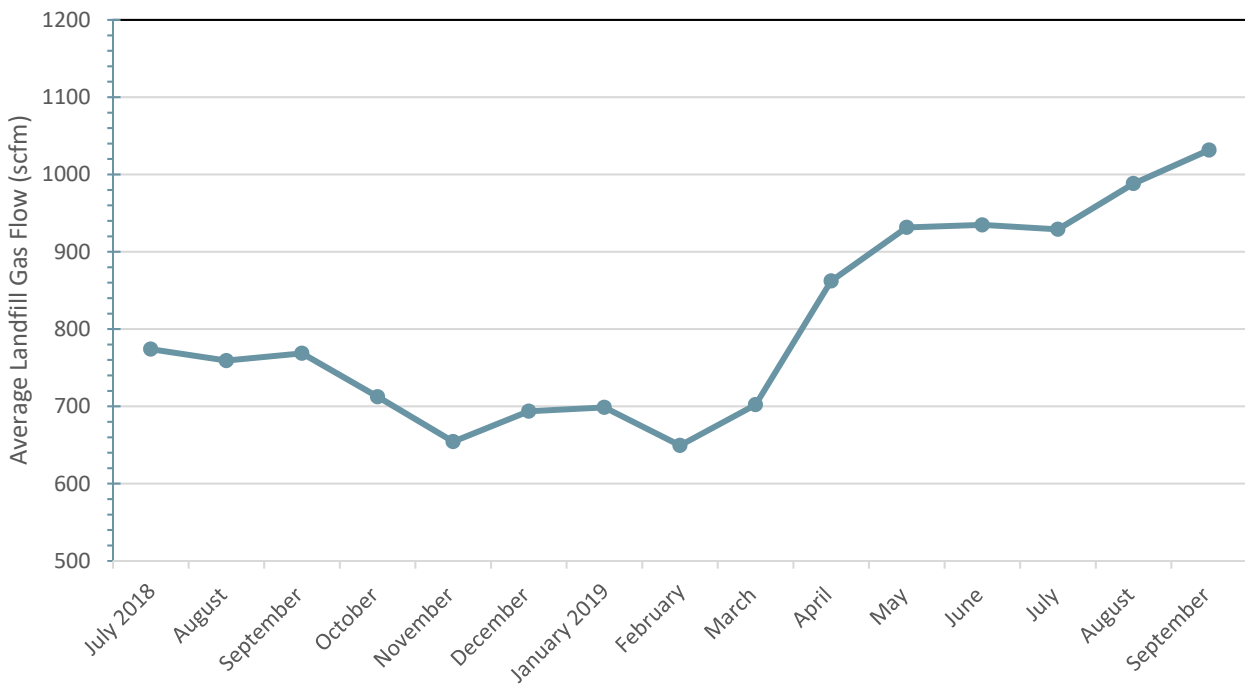


Exhibit 4. Average Landfill Gas Collection Rate – Flare Station Data



SECTION 3 – SCOPE OF SERVICES

GENERAL

For the purposes of this RFP, the scope of services requested by the Authority includes, but is not limited to, planning, permitting, financing, design, construction, operation, maintenance, and environmental monitoring services for facilities associated with the beneficial use of landfill gas. In addition, the scope of services includes marketing, sale and distribution of the full market value of the landfill gas, including all forms of energy, environmental attributes, tax credits, and tax incentives.

In exchange for granting a Company the right to receive the landfill gas at the LRF for commercial energy production purposes, the Company will agree to make payments to the Authority based either on metered quantities and measured quality of gas delivered or based on some mutually agreed upon revenue-sharing arrangement.

Term of Agreement. The initial term of the Agreement shall be for twenty (20) years, and the Authority shall have the option to extend the Term for additional five (5) year periods through the life of commercial gas availability at the LRF.

RIGHTS AND RESPONSIBILITIES OF REGION 2000 SERVICES AUTHORITY

The proposed rights and responsibilities of the Authority shall be as follows:

Landfill Gas Collection Facilities. The Authority shall continue to exercise responsibility to plan, permit, design, finance, construct, install, operate, and maintain all existing and future Landfill Gas Collection Facilities over the Phase III, IV and V waste disposal units.

Licenses and Permits. The Authority will make application for, obtain, and maintain all applicable licenses and permits required for the construction and operation of the Landfill Gas Collection Facilities.

Review of Permit Applications and Construction Documents. At all times, the Authority reserves the right to review permit applications prepared by the Company prior to the permit applications being submitted to the regulatory agencies. In addition, at all times, the Authority reserves the right to review construction documents prepared by the Company prior to the Company soliciting for construction or equipment bids. The Authority will complete its review of permit applications and construction documents within 10 working days of receipt, and shall notify the Company in writing of any comments, concerns, problems, or perceived non-compliance with applicable law, environmental compliance requirements, or landfill operations.

Access and Property Lease. The Authority hereby grants to the Company access to the Project Site on a twenty-four (24) hour per day, seven (7) days per week basis for the purposes of enabling the Company to complete its responsibilities. The Authority will also lease up to 2 acres of property at \$1/year to the Company for their facilities, not including pipelines and/or powerlines to take energy offsite.

Landfill Gas Metering and Billing. The Authority shall install landfill gas meters at a designated delivery point to monitor the quality and quantity of gas delivered to the Company from the Authority's Landfill Gas Collection Facilities. The Authority shall assume all responsibility for installing, maintaining and calibrating the landfill gas meters. In addition, the Authority shall be

responsible for reading the landfill gas meters on at least a monthly basis and preparing invoices for submittal to the Company.

Landfill Operations. The Authority cannot guarantee the quantities or composition of the future waste to be disposed of at the active LRF. The Authority shall not operate the Landfill in such a manner that could unnecessarily or unreasonably diminish the quality and quantity of Landfill Gas generated from the LRF to the extent practicable. In addition, the Authority shall make reasonable efforts to perform its operations at the LRF such that it will not unreasonably interfere with the operations of the LFG Project Facility. The Authority will repair or replace any and all components of the Project Facilities that the Authority or any of its employees, contractors, agents or other persons under its control may damage.

Landfill Gas Collection Facilities Operations. The Authority will be responsible for the operations, maintenance, monitoring, and reporting associated with the Landfill Gas Collection Facilities. The Authority may contract with a third-party to perform such duties, and such third-party may be the Company. If the Authority contracts with the Company for operations of the Landfill Gas Collection Facilities, specific provisions governing the duties will be negotiated at a future date.

Landfill Gas Delivery Point. The Authority and the Company will designate a LFG Delivery Point in the landfill gas agreement. It is anticipated that the LFG Delivery Point will be a marked location within the piping downstream of the Authority-owned blower/flare station and the monitoring and measuring equipment.

Future Projects. If, in the Authority's sole and reasonable discretion, the Authority observes a significant flow of landfill gas generated from the LRF being directed to the flare for an extended duration, the Authority shall have the right to initiate one, or more, landfill gas projects to use the excess landfill gas for a more advantageous use than flaring.

Right to Terminate Agreement. At all times, the Authority retains the right to terminate the landfill gas agreement with the Company for failure to perform as required. Default of the Company can include, but not be limited to, (a) failure to operate and maintain the Project Facilities in full compliance with all applicable law and environmental compliance requirements; (b) operating the Project Facilities in a manner that creates a non-compliance event for the Authority's landfill facilities, (c) operating the Project Facilities in a manner that creates a nuisance condition, (d) failure to make timely and full payments to the Authority for the landfill gas, and (e) failure to operate the Project Facilities in a manner that maximizes the beneficial use of the landfill gas.

If the Company utilizes less than 50 percent of LFG quantities made available by the Authority, as measured on a 12-month rolling average, the Authority retains the right to either sell excess landfill gas to another entity (excess to be defined as the average quantity of LFG not utilized over the 12-month period), or if revised terms cannot be negotiated with the Company, terminate the agreement.

Right of First Refusal. If, at any time, the Company receives a bona fide offer ("Offer") to sell the Project Facilities to a third party purchaser, and the Company decides to sell the Project Facilities pursuant to such Offer, the Authority shall have the first right to purchase the Project Facilities before the Company may sell the Project to a third party purchaser. The Company shall provide to the Authority a notice ("Offer Notice") of such Offer within ten (10) business days after receiving it. The Offer Notice shall include the pricing and the purchase terms included in the Offer.

Upon receiving the Offer Notice from the Company, the Authority will solicit proposals from independent appraisers to estimate the value of the assets offered for sale by the Company. The

Authority shall select an independent appraiser that is mutually agreeable to the Company and the Authority. Upon completion of the appraisal, the Authority may elect to purchase the Company's Project Facilities at the value estimated by the independent appraiser.

If, within fifteen (15) business days after receiving estimated value from the independent appraiser, the Authority does not provide to the Company notice of Authority's intent to purchase the Project Facilities ("Intent to Purchase Notice") at the value estimated by the independent appraiser, then the Company may proceed with the sale of the Project Facilities to the said third party purchaser. If the Authority provides to the Company a timely Intent to Purchase Notice, the Authority shall purchase the Project Facilities at the value estimated by the independent appraiser.

RIGHTS AND RESPONSIBILITIES OF THE COMPANY

The proposed rights and responsibilities of the Company shall include, but not be limited, to the following:

Landfill Gas Marketing and Sales. The Company assumes all responsibility for the marketing and sale of landfill gas, including all forms of energy, environmental attributes, tax credits and tax incentives. The Company shall assume all responsibility for developing, negotiating and executing agreements with other parties for landfill gas sales, electrical power sales, steam sales, renewable natural gas sales, and any other beneficial uses that provide a revenue source to the Company.

Customer Service. The Company shall assume all responsibility for providing customer service to landfill gas customers including, but not limited to, emergency response for equipment failures, power outages, landfill gas quantity and quality, monthly meter reading and billing, and service requests for equipment.

Monthly Payments for Gas. On a monthly basis, the Authority shall submit an invoice to the Company for landfill gas quantities delivered to the Company during the previous month or reflecting some mutually agreed upon revenue-sharing arrangement. The Company shall make payment to the Authority within 30 days of receipt of invoice.

Financing. The Company shall be responsible for the financing of all of the planning, permitting, design, construction, operations, maintenance, repair, replacement, rehabilitation and environmental compliance monitoring and reporting associated with the Landfill Gas-to-Energy Project that consist of infrastructure separate from the Authority's existing and future Landfill Gas Collection Facilities, including the blower/flare station. The Company will not be compensated by the Authority for any work related to the Project Facilities. It is understood that payments to the Authority by the Company for the quantity of landfill gas or in accordance with some mutually agreed upon revenue-sharing arrangement, will be paid from the compensation received by the Company through a variety of sources. The compensation to be received by the Company for the Project Facilities may include, but will not be limited to, the sale of landfill gas, renewable natural gas, steam, electricity, carbon credits, tax credits, renewable identification numbers, and other material and marketable features of landfill gas. The Company shall not encumber or otherwise pledge or grant a security interest in the Landfill Gas-to-Energy Facilities.

Use of Licensed Professionals. The Company shall undertake, perform and complete all required planning, permitting, design and construction of Project Facilities using professional engineers licensed to practice in the Commonwealth of Virginia.

Staffing. The Company shall staff the Project Facilities with qualified personnel who meet the licensing and certification requirements of the State. The Company shall manage, administer, coordinate and schedule in an orderly manner all work done by Company's officers, employees, and Subcontractors. Company, Company's officers, employees, and Subcontractors shall perform every act or service required in a skillful and competent manner in accordance with the highest standards of the landfill gas utilization industry. The Company shall furnish evidence of the skill and qualifications of its officers, employees, Subcontractors and agents on the request of the Authority. The Company shall take appropriate action with respect to any employee of the Company or any Subcontractor engaging in unlawful, unruly or objectionable conduct.

Resident Landfill Gas Superintendent. The Company shall appoint a Resident Landfill Gas Superintendent who shall be trained, experienced and proficient in the management and operation of Landfill Gas to Energy Facilities, and whose sole employment responsibility shall be managing the Company's Project Facilities at the LRF. The primary residence of the Resident Landfill Gas Superintendent shall be within a one hundred (100) mile radius of the Authority's landfill facilities. The Superintendent shall be the Company's point-of-contact for the Facility responsible for coordination with the Authority.

Landfill Gas to Energy Facilities. The Company shall, at its sole expense, purchase, design, modify, install, permit, construct, expand, operate and maintain (including preventative and routine maintenance and replacement of worn equipment) the Landfill Gas-to-Energy Facilities, all in accordance with applicable laws and environmental compliance requirements, and as may be necessary to effectively use landfill gas onsite or offsite for renewable natural gas production, steam production, electrical power production or and any other beneficial uses that provide a revenue source to the Company.

Landfill Gas to Energy Facilities Operations. The Company will be responsible for the operations, maintenance, monitoring, and reporting associated with the Landfill Gas-to-Energy Facilities. The Company shall not operate the Landfill Gas-to-Energy Facilities in a manner that interferes with the Authority's operations of the Livestock Road Facility.

Landfill Gas Pipelines. The Company shall, at its sole expense, purchase, design, install, permit, construct, operate and maintain (including preventative and routine maintenance and replacement of worn materials) landfill gas pipelines from the specified Landfill Gas Delivery Point, all in accordance with applicable laws and environmental compliance requirements, and as may be necessary to transport the landfill gas to onsite or offsite facilities for renewable natural gas production, steam production, electrical power production or and any other beneficial uses that provide a revenue source to the Company. Any interconnect requirements (including LFG quality) with existing natural gas pipelines is the sole responsibility of the Company.

Renewable Natural Gas or Steam Production Facilities. If, in the Company's sole and reasonable discretion, the Company determines that there is sufficient landfill gas to warrant it, the Company shall, at its sole expense, purchase, design, modify, install, permit, construct, expand, operate and maintain (including preventative and routine maintenance and replacement of worn equipment) renewable natural gas or steam production facilities onsite or offsite, all in accordance with applicable law and environmental compliance requirements.

Power Production Facilities. If, in the Company's sole and reasonable discretion, the Company determines that there is sufficient landfill gas to warrant it, the Company may, at its sole expense, purchase, design, modify, install, permit, construct, expand, operate and maintain (including preventative and routine maintenance and replacement of worn equipment) power production

facilities onsite or offsite, all in accordance with applicable law and environmental compliance requirements. Any interconnect requirements with the existing electrical power distribution grid is the sole responsibility of the Company. Any upgrades, expansions, or alterations to the existing grid required by the electrical utility are the responsibility of the Company.

Environmental Compliance Requirements. The Company shall be responsible for operating all Project Facilities in a manner to at all times maintain compliance with all applicable law and environmental compliance requirements. In addition, the Company shall assume all responsibilities for environmental compliance monitoring and reporting to appropriate federal, state and local agencies. Environmental compliance requirements shall include, but shall not be limited to, the Clean Air Act; the federal Water Pollution Control Act; the Safe Drinking Water Act; the Toxic Substances Control Act; the Comprehensive Environmental Response, Compensation and Liability Act, as amended by the Superfund Amendments and Reauthorization Act of 1986; the Resource Conservation and Recovery Act, as amended by the Solid and Hazardous Waste Amendments of 1984; the Occupational Safety and Health Act; the Hazardous Materials Transportation Act; the Oil Pollution Act of 1990; and any similar federal, state or local statutes and regulations.

Fines, Penalties and Remediation. If at any time the Company fails to comply with all applicable law or environmental compliance requirements, the Company shall, without limiting any other remedy available to the Authority upon such an occurrence: (1) immediately correct such failure and resume compliance with applicable law or environmental compliance requirements (2) bear all loss-and-expense of the Company and the Authority resulting there from; (3) pay any resulting damages, fines, assessments, levies, impositions, penalties or other charges; (4) make all capital modifications and changes in operating and management practices which are necessary to assure that the failure of compliance with applicable law or environmental compliance requirements will not recur; and (5) comply with any corrective action plan filed with or mandated by any federal, state or local agency in order to remedy a failure of the Company to comply with applicable law or environmental compliance requirements.

No Nuisance. The Company shall at all times operate and maintain the Project Facilities in a good, environmentally sound, reliable, safe, neat, clean and substantially litter-free manner so as to not create any odor, litter, noise, or other adverse environmental effects constituting, with respect to each of the foregoing, a nuisance condition under applicable law or environmental compliance requirement. Should any such nuisance condition occur, the Company shall expeditiously remedy the condition, make all changes in operating and management practices necessary to prevent a recurrence of the nuisance condition, and indemnify and hold harmless the Authority from any loss-and-expense relating thereto. The Company shall be responsible for the permitting, design, construction, operation, and monitoring of any odor abatement system or noise attenuation features at the Project Facilities that the Authority deems necessary to maintain good relations with the surrounding communities.

Documents Storage at Site. At all times, the Company shall maintain at the Authority's Landfill Office, clean reproducible record copies of all construction drawings, specifications, operations and maintenance manuals, manufacturer maintenance and inspection recommendations for equipment, logic diagrams for instrumentation and control systems, graphic or written instructions, interpretations and clarifications, and all other documents related to the planning, permitting, design and construction of the Project Facilities. These documents shall be provided to the Authority for reference, copying and use, and a complete set thereof shall be delivered to the Authority upon completion of the Project Facilities projects.

Design Reviews. All construction drawings, plans, construction specifications, equipment specifications, site plans, construction schedules, startup and operational procedures, and permit applications must be reviewed by and approved by the Authority prior to implementation or application. Such approval by the Authority will not be unduly withheld without cause and justification.

Other Clarifications, Agreements and Statements. The Company acknowledges that additional certifications, agreements, and statements may be required under any contract that may be awarded based on their proposal. The Company's execution of Affirmative Action, Non-Discrimination Agreements and Drug-Free Workplace Certifications; and other Federal, State, and local governmental requirements may be required inclusions in such contract.

SECTION 4 – SUBMITTAL REQUIREMENTS

ORGANIZATION OF PROPOSAL

All Prospective Proposers shall submit 5 paper copies of their Proposal along with an electronic copy of the Proposal in the form of a PDF file. All Proposals shall be submitted on 8.5" x 11" paper, double-sided print, with dividers for each Proposal section. The Proposal shall be segregated into the sections listed below using labeled dividers.

Letter of Interest. Should identify all firms proposed for the team, including the organizational and contractual relationship between the firms. Briefly describe the scope of work to be assigned to each firm or group, including staff to be assigned.

Proposal Submittal Form. Include a completed, signed copy of Form A – Proposal Submittal Form included in this RFP.

Proposal Sections. The Proposal shall contain the following sections listed below and described further in this section:

Table of Contents

1. Parent Company Confirmation
2. Qualifications and Experience
3. Notice of Violations and Actions
4. Proposal Certification and Non-Collusion Affidavit (Form B)
5. Proposal Security
6. Scope of Services Assumptions
7. Capital Improvement Plan
8. Landfill Gas Payment Form (Form C)
9. Environmental Permits and Documentation Requirements
10. Other Innovative Proposals

Addenda. The Proposal shall contain an acknowledgement of receipt of Addenda, if any are posted by the Authority.

1. Parent Company Confirmation

The Authority is seeking guaranteed long term landfill gas beneficial use options. As such, Prospective Proposers that are wholly or partially owned by another corporation or other entity shall submit a Parent Company Confirmation to certify that any potential contract with the Prospective Proposer resulting from this RFP process will be co-signed by the Prospective Proposer's parent company. Prospective Proposers that do not fall into this category shall note that in their proposal.

2. Qualifications and Experience

Each Prospective Proposer shall provide a project profile as well as contact information of the landfill owner for at least three (3) currently operating Landfill Gas-to-Energy Facilities, where the Prospective Proposer served as the developer of the beneficial utilization and energy recovery project and currently serves as either the owner or operator of the Landfill Gas-to-Energy Facilities. To demonstrate qualifications, Prospective Proposers shall provide sufficient information for the three

(3) facilities to make evident that they have been in operation at least five (5) years and are of similar size and scale (500 scfm or greater) as the LRF. For each reference provided Prospective Proposers are required to provide the landfill owner's name, project location and contact information (name, title, address, telephone number).

Where possible, experience with Virginia landfills should be presented. In preparing information for this section, the text shall clearly distinguish and state which entity actually performed the work for which they are claiming experience. Where it is the experience of a parent, affiliate, subsidiary or subcontractor that is listed as a relevant qualification, this fact shall be explicitly noted and the relationship linking the experience to this project shall be described.

Resumes shall also be provided for the personnel needed to design, build, operate and maintain the Project Facilities.

3. Notice of Violations and Compliance Actions

Prospective Bidders must include a list of all Notice of Violations (NOVs) and Compliance Actions received at any Facilities owned and/or operated by the Prospective Bidder or its' affiliated companies in Virginia, North Carolina, South Carolina, Pennsylvania or Georgia from January 1, 2015 to October 1, 2019. The list shall include a description of the NOVs or Compliance Actions, the date received, the name of regulatory agency, the facility name and location, and the resolution. In addition, NOV and Compliance Action information shall be provided for parent companies with which the Prospective Bidder is associated in the event the Prospective Bidder is a wholly or partially owned by another corporation or other entity.

4. Proposal Certification and Non-Collusion Affidavit

All Prospective Proposers shall be required to include an appropriately completed and signed Proposal Certification and Non-Collusion Affidavit (**Form B**).

5. Proposal Security

A proposal bond or certified check in the amount of **\$30,000** shall accompany each proposal. Bonds or checks shall be made payable, without condition, to the Authority. The Authority reserves the right to retain proposal security of all reasonable proposals until 120 days after proposals are due. Proposal security for proposals deemed unreasonable shall be returned immediately. If a Prospective Proposer withdraws his proposal, fails to negotiate in good faith with the Authority, or if after the Authority and the Prospective Proposer agree on terms of a contract, the Prospective Bidder fails to sign a contract and provide the necessary bonds within 30 days after a copy of the contract has been presented to him, the entire amount of proposal security shall be forfeited to the Authority.

6. Project Approach and Scope of Services Assumptions

Proposals must provide a Project Approach that describes the intended process(es) for developing a Landfill Gas-to-Energy Project at the LRF. The Proposal shall describe the approach to the planning, permitting, design, construction, and operation of the associated LFGE facilities and infrastructure to assure the Authority's functional, aesthetic, and quality control requirements related to all aspects of the Authority's ownership, solid waste management facility operations, and monitoring of the LRF will be satisfactorily addressed by the Company.

The intent of this RFP is to receive and evaluate revenue potential for potential long-term landfill gas beneficial use options at the LRF. It is important for Prospective Proposers to note that Section 3

(Scope of Services), in many instances, provides general information regarding the expectation and requirements of the Authority with regard to Landfill Gas-to-Energy Facilities, rather than specific contract terms and specifications. In instances where the Prospective Proposer finds the Scope of Services language insufficient to reasonably estimate the Landfill Gas Payments to be made to the Authority, each Prospective Proposer should list their major assumptions.

By submitting a Proposal, Prospective Proposers warrant that they have read and fully understood and comprehended all of the terms and conditions within this RFP, especially those specified in Section 3 – Scope of Services. Prospective Proposers further warrant that the unit price quotes offered to the Authority in the Landfill Gas Payment Form presented in this RFP are based on a full and clear understanding of the Scope of Services and the work required to plan, permit, design, build, finance, operate, maintain, and conduct environmental compliance monitoring and reporting for the Project Facilities.

Where a Prospective Proposer takes exception to a specific term or condition of the Scope of Services, the Prospective Proposer must clearly identify and describe the proposed modification to the Scope of Services, and define the revenue impact, if any, to the Authority. If a proposed modification to the Scope of Services increase the revenue potential for the Authority, then the Prospective Proposer shall clearly describe and quantify the nature and scope of the revenue increase for the Authority.

7. Capital Improvement Plan

Each Prospective Proposer shall provide a proposed 20-year Capital Improvement Plan for constructing LFGE facilities, infrastructure, and controls based on the landfill gas production estimates presented in Tables 2 and 3 for the LRF. The Plan should identify if there are substantial additions or modifications to the LFG facilities that would potentially occur during the timeframe of future five-year contract extensions (total of 30-year CIP), in the event the Authority elected to invoke optional contract term extensions. The Capital Improvement Plan shall be developed in a manner that illustrates the Prospective Proposer plan for constructing or expanding LFGE Project Facilities over time as landfill gas production increases, as well as the plan for decommissioning and removal of LFGE Project Facilities over time as landfill gas production decreases after landfill closure (and upon ultimate cessation of LFGE Project operations). The Capital Improvement Plan should be developed to clearly demonstrate the Prospective Bidders approach to maximize the utilization of the landfill gas for the financial benefit of the Authority and minimize use of the landfill gas flare. Proposers must include a Project Schedule with specific information of expansion plans as part of this section.

By submitting a Proposal, Prospective Proposers warrant that Landfill Gas Payment Form, and the payments to be made to the Authority, accurately reflect all capital, operations, maintenance, administration and financing costs associated with Prospective Proposer's Capital Improvement Plan.

8. Landfill Gas Payment Form

The Scope of Services associated with this RFP (Section 3) includes, but is not limited to, planning, permitting, financing, design, construction, operation, maintenance, and environmental monitoring services for facilities associated with the beneficial use of landfill gas. In addition, the scope of services includes marketing, sale and distribution of the full market value of the landfill gas, including all forms of energy, environmental attributes, tax credits, and tax incentives.

In exchange for delivering landfill gas collected from LRF to a Prospective Proposer for commercial energy recovery purposes, the Company will agree to make payments to the Authority based either on metered quantities and measured quality of gas delivered or based on some mutually agreed upon revenue-sharing arrangement.

Each Prospective Proposer's proposed schedule of payments to be paid to the Authority shall be submitted using the Landfill Gas Payment Form included within this RFP as **Form C**. Proposers may modify this Form as appropriate to best communicate the payment structure or revenue-sharing arrangement that is being proposed.

Each Prospective Proposer shall provide unit price rates and total annual payments to the Authority for each year listed in the Landfill Gas Payment Form based on the landfill gas production estimates stated for each year. For the purposes of this RFP, Prospective Bidders should provide unit price rates with the understanding that any eventual contract will include payment terms based either on landfill gas quality and quantity as measured at metering stations installed, maintained and calibrated by the Authority or based on some mutually agreed upon revenue-sharing arrangement. Based on the three LFG System expansions accomplished by the Authority since 2016, the Authority assumed the frequent LFG System expansion projected LFG recovery model scenario on the Landfill Gas Payment Form on **Form C**.

9. Environmental Permits and Documentation Requirements

Corresponding to the proposed Capital Improvement Plan, each Prospective Proposer shall provide a listing of all the environmental permits, land development permits, site plan approval requirements, and environmental documentation requirements associated with each task and phase of the LFGE project implementation and development of associated infrastructure and facilities identified in the Prospective Proposer's Capital Improvement Plan. In addition, each Prospective Proposer shall provide information regarding the review and approval requirements of the State Corporation Commission and/or other regulatory bodies having jurisdiction over any aspect of the Project associated with the specific landfill gas beneficial use projects outlined within the Proposal.

10. Other Innovative and Alternative Recommendations

As presented above, the Prospective Proposer may present technically and financially beneficial uses of the LFG including, but not limited to, electrical power generation, direct-use by industrial users as medium-BTU fuel, or production of renewable natural gas (RNG). This section of the Proposal is available to Prospective Proposers to present recommendations for modifying the scope of services, using innovative technologies, or implementing creative analytical tools and approaches to maximize the use of the landfill gas and the revenue potential for both the Prospective Proposer and the Authority.

SECTION 5 – SELECTION PROCESS

The Authority will appoint a Selection Committee comprised of appropriate staff and external consultants representing a variety of disciplines along with some representatives of member municipalities within the Authority. The process for the Project will involve three stages:

Stage I: Qualifications Proposal

The initial phase has commenced with the establishment of a Selection Committee with its members having been appointed by the Region 2000 Services Authority Director. A Request for Proposals will be placed on the Authority's Bids and Proposals website. Upon receipt of the packages from respondents, Selection Committee members will review and select ("short-list") for further consideration those Proposers which appear to be most favorable to provide services for the Project(s).

Stage II: Interviews (if necessary)

Separate interview sessions may be scheduled with the "short-listed" Proposer to permit Selection Committee members to further evaluate each Proposer's qualifications and proposal. Promptly after the interviews the Selection Committee will make their selection and forward written recommendations to the Director and Board of Directors for approval. If sufficient information is provided with the proposals, the Authority retains the right to make a selection without interviews.

Stage III: Contract Negotiations

Following the approval by the Director and Board of Directors with a specific Proposer, the Authority staff and counsel will be directed to begin contract negotiations with the Company. In the event negotiations of specific contract terms, conditions and fees prove unsuccessful with this Proposer, the Director will collaborate with the Selection Committee on selection of another Proposer with which to begin negotiations.

Evaluation Criteria

The following criteria will be the basis on which a LFGE Developer will be selected for further consideration:

1. Qualifications, Expertise and past performance of the Proposer on similar projects related to development, construction, and operation of Landfill Gas-to-Energy Facilities.
2. Project implementation and delivery methodology including characteristics of beneficial utilization of LFG, technical approach to design and construction of associated energy recovery infrastructure, integration of controls and coordination with Authority-owned LFG system infrastructure, and overall understanding of the scope of work and achievement of the Authority's objectives.
3. Capital Improvement Plan and Financial Package.
4. Project permitting requirements, involvement of external parties, and Project Implementation Schedule.
5. Proposer's Qualifications References.
6. Other factors that may be appropriate for the LFGE Project.



FORM A – PROPOSAL SUBMITTAL FORM

Landfill Gas-to-Energy Development Project for the Region 2000 Regional Landfill – Livestock Road Facility

In compliance with this Request for Proposals, which includes the attached Exhibits referenced therein, and subject to all the terms and conditions set forth herein, the undersigned offers and agrees to furnish the services described in the RFP cited above and submit this signed proposal which includes this completed and signed page, and other data as required by the RFP. It is understood that this proposal and the scope of services may be modified, by mutual agreement in subsequent negotiations.

Name and Address of Proposer:

FEI/FIN #: _____

Date: _____

By: _____
(signature in ink)

By: _____
(print or type name)

Title: _____

Phone: _____

Email: _____

FORM B – PROPOSAL CERTIFICATION AND NON-COLLUSION AFFIDAVIT

To Region 2000 Regional Services Authority, herein called the Authority, for the Proposals for beneficial use of landfill gas at the Livestock Road Facility.

The Undersigned, as Company, herein referred to as singular and masculine, declares as follows:

- a. The only parties interested in the PROPOSAL as Principals are named herein;
- b. This PROPOSAL is in all respects bona fide, fair, and made without collusion or fraud with any other person. As used herein, the word "person" shall mean any natural person, joint venture, partnership, corporation, organization, group of individuals, or other business or legal entity;
- c. He has carefully read and examined the Request for Proposals dated **November 4, 2019** as prepared by the Authority and understands the terms and provisions thereof;
- d. He has carefully examined the site of the Livestock Road Facility and has informed and satisfied himself as to the conditions there existing, the character of any necessary work to be carried out in successful execution of the PROPOSAL, the difficulties attendant upon its execution, and the accuracy of all technical information contained in the Request for Proposal.
- e. He understands that all proposals shall remain open for **120** calendar days after the actual date of the Proposal opening;
- f. He understands and agrees that any project arising out of a successful Proposal will be subject to the Authority's Equal Employment Opportunity, Anti-Discrimination, and Affirmative Action Programs.

My below signature certifies that the proposal as submitted complies with all Terms and Conditions as set forth in the Request for Proposal for Beneficial Use of Landfill Gas generated at the Region 2000 Services Authority Livestock Road Facility, Rustburg, Virginia. My signature also certifies that by submitting a proposal in response to this Request for Proposal, the Company represents that in the preparation and submission of this proposal, said Company did not, either directly or indirectly, enter into any combination or arrangement with any person, firm or corporation or enter into any agreement, participate in any collusion, or otherwise take any action in the restraint of free, competitive bidding in violation of the Sherman Act (15 U.S.C. section 1) and/or County, State and Federal laws, codes, rules and regulations.



I hereby certify that I am authorized to sign as a Representative for the Firm:

NAME OF FIRM: _____

ADDRESS: _____

FEDERAL TAX ID #:: _____

TELEPHONE: _____

EMAIL: _____

FAX: _____

SUBMITTED this _____ day of _____, 2019

(Name of Company)

(Signature of authorized representative)

(SEAL)

(SEAL)(Title)

(Business Address)

(City, State & Zip Code)

FORM C – LANDFILL GAS PAYMENT FORM

Assumes Landfill Gas Available Starting July 2020 (Authority fiscal years run from July 1 to June 30)

Year	Projected LFG Recovery Potential (scfm)	Anticipated SCFM to be USED by Project	Proposed Payment (\$/MMBTU)	Proposed Payment (\$/kWhr)	Projected Annual Total (\$)	Annual Amount from Gas sales (\$)	Amount from Power Sales (\$)	Annual REC's (\$)	Annual Carbon Credits (\$)	Other (Provide Description)
2020	883				\$ -					
2021	948				\$ -					
2022	1,010				\$ -					
2023	1,129				\$ -					
2024	1,187				\$ -					
2025	1,243				\$ -					
2026	1,296				\$ -					
2027	1,347				\$ -					
2028	1,395				\$ -					
2029	1,441				\$ -					
2030	1,486				\$ -					
2031	1,528				\$ -					
2032	1,755				\$ -					
2033	1,615				\$ -					
2034	1,487				\$ -					
2035	1,369				\$ -					
2036	1,261				\$ -					
2037	1,161				\$ -					
2038	1,069				\$ -					
2039	985				\$ -					
2040	907				\$ -					
Subtotal					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Totals										

Description of Other from above	
---------------------------------	--