Department of Purchasing and Contracting
NON-COMPETITIVE PROCUREMENT REQUEST FORM

Requesting Department: Sanitation
Department Contact Person: Tina Phan Telephone: 404-294-2708
Email: tphan@dekalbcountyga.gov

Requisition Number: TBD Suggested Supplier: Perennial Energy
Estimated Amount of Purchase: $ 270,361.00
Detailed Description of the Goods or Services to be purchased:
To upgrade the control system for the landfill methane gas including equipment and installation.

☐ **Emergency** (For Emergency Requests, Please check this box and answer **all** questions below.)

1. Date and Time of Emergency Occurrence: _____
2. Please state the nature of the emergency posing a risk to public health, welfare, safety or resources:
3. State how the Estimated Amount was determined to be Fair and Reasonable (attach supporting documentation):

☑ **Sole Source** (Please check box and answer all of the following completely.)

1. Provide and explanation why the product, service or supplier requested is the only method that can satisfy the requirements. Please explain why alternatives are unacceptable. Be specific with regard to specification, features, characteristics, requirements, capabilities and compatibility. (Attach additional documents, if necessary):
   This is an upgrade to an existing control system that were installed and being maintenance by Perennial Energy. The landfill gas have intense operating systems and are copyrighted.
2. Will this purchase obligate us to a particular vendor for future purchases? (Either in terms of maintenance that only this vendor will be able to perform and/or if we purchase this item, will we need more "like" items in the future to match this one?) Explain in detail.
   It is possible.
3. Explain the impact to the County or Public if this request is not approved.
   The landfill methane gas burner system must be contained within EPD guidelines. This upgrade is important to remain in compliance with the EPD regulations and public health.

I hereby request that this non-competitive procurement request be approved for the purchase of the above stated work, material, equipment, commodity, or service.

Department Director (Typed/Printed Name) Tracy A. Hutchinson Signature: Tracy Hutchinson Date: 8/10/22

Do Not Write Below – for the Department of Purchasing and Contracting Use Only

Procurement Agent (Typed/Printed Name) Saharah N. Allen Signature: Saharah Allen Date: 08/22/2022

Procurement Manager (Typed/Printed Name) Phyllis A. Head Signature: Phyllis A. Head Digitally signed by Phyllis A. Head Date: 2022.08.22 13:02:05 -04'00' Date:

☑ Approved ☐ Not Approved

Signature: Cathryn Horner Digitally signed by Cathryn Horner Date: 2022.08.23 11:54:36 -04'00', Director, Department of Purchasing and Contracting Date: _____

P&C Rev. 12/13/2018

Print Form

DeKalb County
GEORGIA

Public Notice of Proposed Award of Sole Source Procurement

Section A – Description of Proposed Sole Source Procurement

Description of Supplies/Services: Upgrading of the Control System for the Seminole Landfill by Perennial Energy.

Demonstration of Contractor's Unique Qualifications: Seminole Landfill needs an upgrade to an existing control system that was installed and can only be maintained by Perennial Energy, LLC.

Section B – To Be Completed by the Department of Purchasing and Contracting

Market Survey Results

Date Public Notice posted on website: 8/15/2022

Date Public Notice closed: 08/22/2022

Review of Offers

Were any offers received (Yes/No): No

Number of offers received: 0

Responders: None

Purchasing Agent review and recommendation: Recommend the award to Perennial Energy the Amount Not To Exceed $270,361.00. Perennial Energy, LLC is the only vendor who has the capability of upgrading to the existing control system that they installed at the Seminole Landfill. The Seminole Landfill methane gas burner system must be contained within EPD guidelines. This upgrade is important to remain in compliance with the EPD regulations and public health.

Saharah Allen — Agent Signature

08/22/2022 — Date

Phyllis A. Head — Digitally signed by Phyllis A. Head Date: 2022.08.22 13:02:25 -04'00'

Procurement Manager Signature

Date

DeKalb County
Department of Purchasing and Contracting

Cathryn Horner, CPPB, Chief Procurement Officer

AMOUNT SPENT TO DATE ON SOLE SOURCE

Vendor Name: Perennial Energy, LLC

Amount Spent to Date: $0

August 18th, 2022

Seminole Road Landfill
Dekalb County Georgia
4203 Clevemont Road
Ellenwood, GA 30294

Re: Dekalb County Gas Handling System and Candlestick Flare

Phyllis Head,

The Gas Handling system installed at the Seminole Road Landfill in Ellenwood Georgia was manufactured in 2015 by Perennial Energy, LLC. The Gas Handling System includes a knockout, multistage centrifugal blowers, piping, instrumentation, and a control panel. The system operates automatically via a programable logic controller (PLC) and a human machine interface (HMI) located in the control panel. The system was designed and packaged at our facility in West Plains, Missouri. Due to the complexity of the package and the proprietary information of the system, Perennial Energy needs to complete any modifications or additions to the system, such as adding a candlestick flare to the system in which the controls of the candlestick will need to added to the existing PLC and HMI.

Respectfully,
David Mathews

Application Sales Engineer
Perennial Energy, LLC
1375 CR 8690
West Plains, MO 65775

Rev 8 June 2nd, 2022
Rev 7 June 1st, 2022
Rev 5 March 4th, 2022; Rev 4, November 11th, 2011; Rev 3 August 26th, 2021;
Rev 2, August 24th, 2021; Rev 1, August 17th, 2021; August 16th, 2021

Dekalb County

Re: Dekalb County Candlestick Flare

Per your request, following and attached please find our **quotation** to supply the described products and services relative to your project requirements. We appreciate the opportunity to furnish this proposal.

Perennial Energy proposes to provide a unitized, modular, candlestick flare, with off-loading and installation by others. The candlestick flare shall be sized per the specification to accept 2100 SCFM of **30% to 50% methane content** landfill gas. The inlet pressure will need a minimum of 10" WC at the inlet of the fuel train. Vacuum/Flow control feature is accomplished with VFD blower control. The existing three-phase, 480 VAC power panel and the single-phase load distribution panel from PEI Project 1761 will be modified in order to control the new candlestick flare.

Included in this proposal are the following:

- Candlestick Flare (CSF)
- The Fuel Train (PIP)
- Modifications to the existing control panel (CP)

Not included in this proposal are the following:

- Site Civil, Electrical, or Structural Engineering
- Off-loading or Installation
- Bonds or liquidated damages
- Taxes, permits, fees, etc.
- Spare Parts

Exceptions and Clarifications in this proposal are the following:

- The existing Low NOx flare will be decommissioned by others and this candlestick flare will be installed in its place by others.
- The existing fuel train for the Low NOx Flare is a 6" fuel train and is too small for a 10" Candlestick Flare. A 10" fuel train is being quoted to replace the existing fuel train.
- Decommissioning and Installation is not included.
- The existing control panel will be modified to control the new candlestick flare.
- Wiring inside the control panel is included in the startup and training trip.
- Thermal calculations on the power lines are not included.

1375 County Road 8690 West Plains, MO 65775
Phone (417) 256-2002 Fax (417) 256-2801
www.PerennialEnergy.com sales@PerennialEnergy.com

- A heat flux for the quoted flare is attached. The heat flux assumed 100 Btu/hr-ft^2 solar radiation contribution and also the max allowable solar radiation contribution of 550 Btu/hr-ft^2. If these are not good assumptions, please advise on the correct variables.
- Perennial is capable of controlling the existing candlestick flare systems with the existing Perennial Energy control panel. As there are several variables that would affect hardware and software, please contact Perennial once the final control scheme is decided and Perennial will advise if there is anything that impact scope and costs.
- A Fleet Zoom Auto Dialer and Yokogawa Chart Recorder are not included and are supplied by others. Wiring/programming additional I/O to these devices are included.

The Candlestick Flare shall include:

- 10" Candlestick flare assembly for **210 to 2100** SCFM of LFG
- 10" schedule 40 carbon steel lower mast
- 10" schedule 10 stainless steel upper mast assembly
- Stainless steel burner nozzle assembly
- Stainless steel flare shroud assembly w/ operator adjustable air inlet dampers.
- Propane or Natural Gas pilot system, includes
  - Gas line with solenoid, shutoff valve, and pressure gauge
  - Pilot ignition transformer mounted on flare
  - Interrupted pilot, rated for 40,000 Btu/hr
- Type "K" pilot monitoring thermocouple assembly
- Type "K" flame monitoring thermocouple assembly
- Approximate flare height is 29' tall.
- All "on flare" flare wiring pre-installed and pre-conduited to **NEMA 4** junction boxes. Will require field connection of numbered terminals in junction box to existing control panel. Perennial to land connects in existing control panel.
- All carbon steel surfaces sand blasted to SSPC SP-6 standards, primed and painted to Perennial Energy standard paint specs.

The Fuel Train Shall Include:

The existing Low NOx flare has a 6" fuel train which is too small for the existing Candlestick Flare. A new 10" fuel train is included and includes a 12" to 10" reducer. The elevations and interconnect piping length will need to be confirmed during the submittal phase. The v-port ball valve will be removed as this was required for the low NOx flare and not be necessary for the candlestick flare. The blowers will be changed to operate in vacuum/flow control via Blower VFD speed.

- 10" Eccentric flame arrester with aluminum housing and aluminum element.

- Upstream and downstream pressure / differential pressure indication across the flame arrester

- 10" Butterfly valve w/ SS disc & stem and Viton seat w/ pneumatically controlled safety shutoff actuator w/spring assisted shutoff. Dry instrument quality compressed (80-120 psig) air or nitrogen supplied by others.

- Thermal Mass flow meter, 120 VAC power, 4 – 20 mA output, NEMA 4 enclosure, monitors flow to the flare
  - Includes 21' of interconnecting piping (length includes components)
  - Includes a 12" to 10" reducer
  - The existing 12" tee will be removed

- 1 each Pressure Transmitter with matching Dwyer Capsuhelic Gauge, (Flare Inlet Pressure)

- 2 each Thermocouple with matching Temperature Indicators (Flare Inlet Temperature, Flare Flashback Temperature)

- Interconnecting Conduit and wiring provided, ship loose, installed by others. Interconnecting conduit and wiring will require to be fitted on-site once the equipment installed and is not a plug and play setup.

The Candlestick Flare Station MCC/Control System shall include:

- 2 each, 50 HP ABB Variable Frequency Drive, for existing landfill gas blowers, controlled via PID loops to maintain biogas vacuum or biogas flow.

- Replace the existing Air Conditioner with a new Air Conditioner, sized for heating load and ambient conditions at Ellenwood, GA
  - 12,000 Btu/hr, NEMA 12, 230 VAC, with low ambient package

- Upgrades to the existing Automation Direct PLC software

- Additional required I/O modules for adding the candlestick flare

- Upgrades to the existing C-More Touchscreen
  - All temperatures, pressures, flows, and other analog data displayed
  - All timers, setpoints, PID loops, and other system operator inputs available
  - Alarms and shutdowns with history log

- Landing of wires in the existing control panel from the new flare. Wires to be interconnected into the existing control panel by others.

The Ship Loose Items shall include:

- 1 each actuator for existing Gas Handling System recirculation valve, mounts to existing recirculation valve

General Notes:

- System is priced on an **FCA Jobsite, Ellenwood, GA basis.**
- 1 trip, 3 days (quantity 3, 10-hour days) of on-site start-up & training services by a factory field services technician/engineer are included.
  - It is estimated that 1 trip of 3 days of on-site service will be required. If additional days are required, they are $1950/day.
  - Weekends and holidays are subject to additional fees.
- 1 digital copy of engineering submittals on modified equipment is included.
- 1 digital copy and 2 hard copies of "as-built" Operation & Maintenance Manuals on modified equipment is included.
- The system is designed for an unclassified area. If the system is to be installed in a hazardous area, please contact Perennial for additional cost adders.
- Failure to ship unit within 30 days of notice to ship may result in storage and refurbishing fees.
- Due to current material and component pricing volatility, the project price is subject to review and change at time of order and at time of submittal approval (release for manufacturing).

The system as described above and attached is provided as completely pre-packaged, pre-wired, and factory pre-tested as is possible. The system is offered **FCA Jobsite, Ellenwood, GA Basis.**

The pricing does not include any site civil or structural engineering, or site preparation work of any kind. Neither does the price include any local, state or federal taxes, or any permits, or tariffs of any kind. The system as quoted is to be off-loaded, set-in place, installed and interconnected by others. The system is designed for installation on equipment pad(s) installed at the same finished elevation. The system includes only the standard Perennial Energy warranty for 18 months from date of shipment or 12 months from date of first service, whichever occurs first. Please see copy of Perennial Energy warranty, attached. We are pleased to honor this quotation for 30 days from the date of this document. The pricing is dependent on receiving an approved order that would include industry standard commercial terms. Perennial Energy standard terms are:

10% with order
30% with approved submittals or release for manufacturing
30% upon receipt of major components
25% upon notification to customer of ready to ship
05% upon successful start-up, unless failure to achieve successful start-up is neither the fault nor cause of Perennial Energy, then net 60 days of shipment

10% order due upon Receipt of invoice. All other is Net 30 days of Invoice.

The system as described above is offered for..... **$137,061.00**

OPTIONS

Conduit Installation

- The above quote does not have Perennial installing conduit and wire from the new Candlestick Flare to the existing control panel. The above quote also does not have Perennial installing conduit and wire for the existing candlestick flare to the Perennial

Energy existing control panel. Perennial can install conduit and wire; however, additional man hours would be required.

- It is estimated that an additional service technician would be needed for a maximum of 2 days.
- Perennial Energy charges $1950/day/technician, travel days and on-site days, for on-site work.
- If more days are required, please add $1950/day/man, respectively.

Installing Conduit and Wire Estimated Costs **$6,755.00**
The above price is an additional 1 service tech, 2 days on site and 2 travel days.

Beneficial Use Valves

- 10" Butterfly valve w/ SS disc & stem and Viton seat w/ pneumatically controlled safety shutoff actuator w/spring assisted shutoff. Dry instrument quality compressed (80-120 psig) air or nitrogen supplied by others.

- 8" V-Port Ball Valve w/ SS body and ball, Teflon seat, includes pneumatically controlled modulating actuator, 4-20 mA position control. Dry instrument quality compressed (80-120 psig) air or nitrogen supplied by others.

Beneficial Use Valves Adder Price..... $26,965.00

Quarterly Maintenance Program

- On-site quarterly maintenance/inspection trip by a PEI Service Technician.

To exclude

~~**Quarterly Maintenance Program Adder Price.....$7,382.50/trip**~~
**Please Note: Pricing is good only if 4 trips/year are purchased. Less discount would be given with fewer trips.*

Blower Seal and Bearing Kit Replacement

- Blower seal and bearing rebuild for quantity 2 blowers
  - Seal kit for each bearing
  - New Inlet/Outlet Bearings
  - Replacement/Installation included
  - Estimated 2 days on-site for removal and installation of new seals and bearings

Blower Seal and Bearing Kit Adder Price $12,577.00

New blowers (existing motors and couplings will be re-used)

- 2 each NT88204 Multi-stage centrifugal blowers with cast-iron housings, aluminum impellers, heavy-duty carbon-steel shaft, and biogas seals, the internal cast iron parts are phenolic coated for corrosion protection.
  - Blowers should be identical to existing blowers and piping shouldn't need to be modified.
  - Removal/Installation is not included

New blowers adder price $72,003.00
(Estimated shipping cost.....$15,000.00)

We anticipate that submittals can be provided in **3 to 6 weeks** from receipt of an approved order. We anticipate that we could ship the system in **20 to 26 weeks** from receipt of approved submittals or other irrevocable release to order all materials. Actual submittal and shipping estimates will have to be given at time of order.

**Note: Lead times are estimated due to the volatility of the global supply chain.*

Thank you for your consideration of Perennial Energy landfill gas products and services. Should you have any questions, or require further information in this regard, please do not hesitate to call.

Respectfully,

David Mathews

David Mathews

Perennial Energy, LLC
West Plains, MO 65775

Attachments / Enclosures:

Warranty PE LLC.pdf
P21113 Heat Flux 0 mph.pdf
P21113 Heat Flux 20 mph.pdf

Sole Sources

Project Name	Rotor Fins for the Mammoth Rotor Body
Attachments	Sole Source Notice
Contact	sfbailey@dekalbcountyga.gov
Project Name	IT Alerting Standard
Attachments	Sole Source Notice
Contact	tinuumoru@dekalbcountyga.gov
Project Name	Perennial Energy -Upgrade and Installation Services
Attachments	Sole Source Notice
Contact	snallen@dekalbcountyga.gov