



MEMORANDUM

TO: RFP Recipients

FROM: Amanda Moore *AM*

DATE: January 5, 2010

SUBJECT: Addendum No. 2 to the Request for Proposals to Design, Construct and Operate a Landfill Gas to Electricity Facility in Anne Arundel County, Maryland, dated November 20, 2009.

As an addendum to the Request for Proposals to design, construct and operate a landfill gas to electricity facility in Anne Arundel County, MD, the Northeast Maryland Waste Disposal Authority is answering questions submitted by proposers, providing the most recent Davis-Bacon Wage Decision, and revising the insurance requirements in Exhibit A.

1. Please provide a gas sample analysis indicating methane, sulfur and siloxane content.

The landfill gas sampling and analysis conducted by SCS Engineers and dated April 13, 2005 is available on the Authority's website for proposers to download and use. This data is the most recent sampling data for the Millersville Landfill. The site will be made available to any proposer who wants to perform their own sampling and analysis prior to the proposal due date. Contact Chandra Chithaluru (410-222-6108) to schedule a sampling event. In addition, the successful proposer shall be required to perform sampling and analysis of the landfill gas prior to design and on an annual basis during construction and operation. Pre-design samples shall be taken from four locations (main header pipes to the flare station (3 each) and the main header pipe between the blowers and flare). At a minimum, analysis shall include total gaseous non-methane organic (TGNMO) compounds, fixed gases, sulfur compounds and siloxanes. The successful proposer shall submit a sampling and analysis plan for annual (post design) sampling. All data shall be provided to the Authority and County as part of standard operation and maintenance activities.

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Comprehensive Waste Management Through Recycling, Reuse, Resource Recovery and Landfill

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2. The RFP states that the entire landfill has a capacity of approximately 23 million cubic yards. How does this equate into tons of waste?

Please refer to Exhibit D, the table entitled “MLFRRF Waste Data 1975 to Present” provides waste (tonnage) received for Cells 1 through 7 and Cell 8 (through 2008). The table entitled “Millersville Landfill and Resource Recovery Facility- Landfill Gas Management System- July 2009” provides volume of each cell in cubic yards. The volume of Cell 8 used through 2008 is 4,462,692 CY (REF: 2008 Annual Report).

Future tonnage is calculated as follows, based on the most recent landfill utilization rate of 1,178 lbs waste/cy of air space (REF: 2008 Annual Report):

Remainder of Cell 8: $(5,633,000 \text{ CY} - 4,462,692 \text{ CY}) \times (1178/2000) = 689,000 \text{ tons}$;

Future Cell 9: $8,523,000 \text{ CY} \times (1178/2000) = 5,020,000 \text{ tons}$

3. The RFP states that the landfill handles 100,000 tons of MSW/year and is diverting the majority of the county’s waste. How much of the 100,000 tons of MSW are being landfilled each year?

There is a total of 100,000 tons of MSW landfilled each year.

4. On page 14 of the RFP it states that “over 10 years, 60% of tons disposed at the MLFRRF are construction and demolition debris and bulky waste” Is this meant to be for the last ten years? And is this C&D/bulky waste in addition to the 100,000 tons/year? Historically, what percentage of the waste landfilled is comprised of MSW, C&D, or other wastes?

Yes, for the last 10 years, 60% of the yearly 100,000 tons landfilled has been C&D/bulky waste.

5. Regarding the MLFRRF Waste Data in Appendix C, does the 2,781,278 tons of waste received in Cell 8 include the waste relocated from Cells 1W and 3?

Yes, the 2,781,278 tons of waste in Cell 8 include the waste relocated from other cells.

6. Is the actual LFG flow rate data available from 1996 through 2005?

Please refer to Exhibit D of the RFP. The Table entitled “MLFRRF LFG Data” provides flow data for years 2005 through 2008. The most recent 5 years of data has been provided. Flow data for prior years 1996 through 2004 are also available for review on-site at the MLFRRF. Contact Chandra Chithaluru (410-222-6108) to schedule a review.

7. Table C-1 (in Appendix C), projected LFG, NMOC and VOC generation rates indicates the LFG projection was passed on a decay rate constant of 0.02 (site specific volume). Can the Authority provide any insight as to why this value was selected?

The LFG modeling coefficient of 0.02 that was used for the decay rate- the AP-42 default value is 0.04/yr for MSW landfills receiving more than 25 inches of rain annually; the AP-42 default value is 0.02/yr for MSW landfills that receive less than 25 inches of rain annually.

Just looking at the default criteria, MLFRRF is in a region that receives more than 25 inches of rain per year historically. The factor of 0.02/year was integrated into the gas modeling at the landfill based on several considerations, including (1) upon installation of gas wells on Cell 567 in the mid-1990s, the waste removed was found to be very dry, (2) Cell 8 has received a significant portion of C&D waste which would be expected to decay more slowly than typical MSW (though EPA does not have a published value of k for C&D waste) and (3) at the time the 0.02/yr factor was more representative of actual gas recovery rates at the flare station.

8. Please provide a drawing that shows the permit boundary (to determine noise requirements).

The county's Refuse Disposal Permit #2007-WMF-0240 does not define a "permit boundary"; rather it defines the MLFRRF as encompassing 269 acres of fill area on a 567.66 acre site. Therefore, the property boundary is essentially the permit boundary. Please see the additional drawings (Millersville Landfill Administrative Plat, Dated August 1997) posted on the Authority's website.

9. Provide the preferred location of the facility.

Please refer to the site map (topographic map dated 12/30/08) and Location Map showing the blower/flare station (blow-up of topographic map 1"=50' scale), which are posted on the Authority's website. Note: The successful proposer is responsible for determining the layout and area requirements for the facility.

10. Is an electrical one-line diagram available for the facilities at the site?

There is no composite site-wide one-line electrical diagram for the site. Since the facilities were constructed under several different projects and at different times, several sets of construction drawings exist, some of which include as-built information. Copies of all available and relevant information pertaining to existing site facilities will be provided to the successful proposer. These drawings are available for review on-site at the MLFRRF. Contact Chandra Chithaluru (410-222-6108) to schedule a review.

11. Where is an acceptable leachate drain connection to the system at the blower station?

The RFP provides two options for condensate management:

Option 1- provide an onsite dual containment storage/truck hauling facility.

Option 2- provide a pumping/dual containment piping system for direct discharge into the County's existing leachate collection system, with the dual containment storage/truck hauling system used as a backup.

For option 2- the successful proposer will need to evaluate the most appropriate locations for condensate line tie-in. We expect the tie-in to be at one of the Cell 8 subcell riser station manholes or other proposed locations along Cell 8 leachate conveyance piping. The existing condensate piping from the blower/flare station shall NOT be used as the tie-in location. We require the new condensate piping system to be dual containment.

Under both options, the tank is intended to provide some condensate storage capacity prior to hauling and/or for periods of time when the leachate collection system cannot accept condensate from the facility (i.e., down due to emergency or system maintenance).

12. The RFP mentions two scenarios based on waste disposal rate scenarios potentially changing in 2013. Can proposers assume that, through 2013 the waste composition will remain as described on page 14 (60% of the waste is C&D and bulky)? Will the waste composition also change back to typical MSW after 2013?

Through 2013, the waste composition will remain at approximately 60% C&D and bulky wastes. If the County ceases diverting some of the MSW after 2013, then the waste composition disposed at the MLFRRF will most likely be primarily MSW.

13. Please provide separate flow data for Cell 8.

Gas flow data is automatically recorded electronically from the following: 1) Cells 1,2,4 header pipe; 2) Cells 5,6,7 header pipe; 3) Cell 8 header pipe; and 4) total flow, using a Yokogawa DAQStation Model DX100. Electronic data exists from this recorder from 12/13/02 through present. Prior to 12/13/02, flow data was recorded on circular charts. Due to size of the electronic files and chart records, this data is available for review on-site at the MLFRRF. Contact Chandra Chithaluru 410-222-6108 to schedule review.

14. On page 14, it is noted that gas quantity is estimated to increase after Cell 8 is closed and capped. What is the basis for this estimation? Is this based on an assumed increase in efficiency? Is this based on the County's current schedule for planned gas system expansion?

The estimation is based on an assumed increase in efficiency due to the cap.

15. When does the County anticipate closing Cell 8? Is the schedule impacted by the 2 scenarios on Page 20?

At the current fill rate, cell 8 is expected to be near capacity in 2014. However, the county may not go to final grade or cap for several years afterwards. It is not expected that the scenarios on page 14 will impact this schedule.

16. Figure 1 in Appendix D shows the Cell 8 gas system (existing and planned). Does the County have an estimated schedule for installing the planned additional wells?

It is expected that the gas wells will be installed either just prior or just after the cap is installed. In regards to schedule for the wells, see answer to #15 above. We are currently evaluating installation of horizontal collectors in subcell 8.7 and 8.8.

17. Is there an existing underground telephone/fiber network continuous to the flare station-through manholes?

There is no underground telephone or fiber network to the flare station. There is a single underground communication line from the flare station to the leachate pretreatment plant. This line connects the flare station to the County SCADA system. The SCADA system's main control panel for landfill systems is housed in the pretreatment plant.

It is noted that the flare SCADA alarms include: 1) flare shut down; 2) pilot failure; 3) blower failure; 4) flare station power outage; 5) flare fail after 2 restarts; 6) header valve closed; 7) flare I/O fault. The SCADA system is also tied into an auto dialer, which is set up to notify the County's landfill gas system operation and maintenance (O&M) consultant.

18. Who is the local telephone service provider?

The local telephone service provider is Verizon.

19. Will the existing 480V service to the flare station remain intact, with minimal control communication between the existing flare facility and the LFGE facility? (i.e. Will the LFGE facility be used to directly power the flare station or other existing facilities onsite- behind the meter generation)

The County does not want to depend upon the LFGE facility to power the flare station; therefore, the existing electrical service will remain intact.

20. What size are the conductors that make up the medium voltage from the point BGE's line goes underground from the pole at the facility entrance back to the flare station? Are the conductors the same size throughout?

Refer to attached drawings. AACO DPW Utility Operator, Millersville Landfill - New Underground Electric Service, BGE, November 1995 (3 sheets). Since 1996, several upgrades were made to the landfill gas collection system and flare station under several different projects and at different times. Several sets of construction drawings and O&M Manuals exist for the landfill gas system, some of which include as-built information. Copies of all available and relevant information pertaining to the landfill gas system and flare station will be provided to the Successful Proposer. These drawings are available for review on-site at the MLFRRF. Contact Chandra Chithaluru 410-222-6108 to schedule review.

21. Do all buildings onsite have individual meters?

Electric meters are located at the following locations:

- 1) Maintenance Shop- fuel pump side Tag# 6280313*
- 2) Warehouse-3 meters- inside building-tag# 4777268/4777261/4777255*
- 3) Scale House-top of entire ramp-tag# 5494598*
- 4) Leachate Pretreatment Plant-side of stone building- tag#5893427*
- 5) Flare Station- back of control panel- tag# 42991333*
- 6) Cardboard Building- compactor side- tag#6393198*
- 7) Admin. Building- Burns Crossing Road side - tag# 4000992*

The BGE tag number is what BGE uses to read the meter.

22. Flare station data that is available, please provide

*Refer to Blower/Flare System As-Built Drawings included in Exhibit D.
There are 3 blowers, each equipped with variable frequency drive motors.
-two are Lamson Model 513 (20 hp)
-one is a Lamson Model 854 (50 hp)
- Flare is an LFG Specialties Model EF940I12 (9' x 40' enclosed flare)*

The location of the connection for the LFGTE project is not specified. The Successful Proposer will determine the most appropriate location for tie-in to the existing system.

23. Identification of wetland areas onsite.

*Refer to attached drawing, Millersville Landfill Wetlands Investigation Map, April 1991.
Note: Wetlands delineation was completed in April 1991 and, therefore, is no longer valid for jurisdictional determination of wetlands. The successful proposer will be required to delineate wetlands in the vicinity of the project, as required, as part of the design and permitting*

activities. It is the County's intention that no wetlands are disturbed by this project; however, if required, the successful proposer will be required to complete wetland mitigation activities.

In addition, the successful proposer will be required to comply with County's forest conservation requirements for tree removal related to this project.

24. County's MBE requirement or percentage if select a scenario that does not utilize federal funds.

The County does not have specific percentage requirements for MBE, SBE or WBE participation. The County encourages, but does not require or define a specific goal for MBE, SBE or WBE participation.

25. Please provide the interconnection request submitted to PJM.

All of the information related to the interconnection submitted to PJM is posted on the Authority's website.

26. In the event the developer finances the project, is the developer entitled to retain the title to the RECs?

If the developer finances and owns the project, then the developer would hold all the rights to the RECs, electricity, etc. It would be expected the developer/owner would propose a REC and other revenue "sharing" situation. If the developer proposes to finance a portion of the project, and the Authority/County maintain ownership of the project, then the Authority/County would maintain ownership of the associated RECs, etc.

27. With regard to the pricing form that must be completed and submitted (page 8, 1.6 Submission Requirements), the form that was included in the RFP only specifies the performance and emissions guarantees. There is nothing regarding the pricing components.

Please refer to section 2.6 when structuring your proposals, there is no formal pricing form.

28. Section 2.6, in the Required Response and Alternate Proposal 1; please clarify "Proposer may request an incentive energy share not to exceed 5% of gross electricity revenues."

Section 2.6 discusses an incentive energy share, if the project is owned by the Authority/County; it is typical for proposers to propose a share of the project's revenue in addition to an operations and maintenance fee. The revenue share for the selected proposer may not exceed 5% of the total gross revenues from the project.

29. Section 2.6 - Will the Authority move forward with the project under the required response or the Alternate Proposal No. 1 if the federal funds are not received? Or under that scenario, will the Authority only consider Alternate Proposal No. 2-3?

In the event the federal funds are not received, the Authority will proceed with the project under Alternate Proposal number 3 and any additional scenarios proposers propose that do not utilize federal funds.

30. Does the Authority have a proposed O&M agreement they can provide?

At this time, there is no proposed O&M agreement available.

31. In the RFP, it is noted that the proposer is responsible for construction changes/expansions to the system. Who is responsible for the design? If the County will be preparing the design, are details for construction available for estimating construction costs?

Please note the selected proposer is NOT responsible for any construction, design, operation or maintenance on the collection and recovery system. The proposer is responsible for the design, construction, operation and maintenance of the LFGE facility, the interconnection, and the tie into the collection system, leachate disposal, etc.

32. The RFP mentions a 7% LFG decline rate. Is this intended to mean the LFG rate is expected to decline from 2008 levels annually at a consistent 7% rate?

The exact LFG decline rate is unknown. The 7% decline rate will be used for evaluation purposes, to put all proposals on a level "playing field". Proposers are welcome to include their assumed LFG decline rate in their submission.

33. Has a PJM Queue number been associated to the project? If so, what is the number?

The PJM Queue number for this project is V3-037.

34. Is there a primary contact at BGE who is familiar with the project that we may contact? Or can you coordinate a call of meeting with the perspective bidders and the BGE representative?

The primary BGE contact for this project is:

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