DANE COUNTY DEPARTMENT of PUBLIC WORKS, HIGHWAY and TRANSPORTATION

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Commissioner / Director
Gerald J. Mandli

April 22, 2009

ATTENTION ALL REQUEST FOR PROPOSAL (RFP) HOLDERS

RFP NO. 309002 - ADDENDUM NO. 1

MANURE DIGESTER SYSTEM

PROPOSALS DUE: THURSDAY, APRIL 30, 2009, 2:00 PM CST. DUE DATE AND TIME ARE NOT CHANGED BY THIS ADDENDUM.

This Addendum is issued to modify, explain or clarify the original Request for Proposal (RFP) and is hereby made a part of the RFP.

Please attach this Addendum to your Proposal or otherwise acknowledge it in your Proposal.

PLEASE MAKE THE FOLLOWING CHANGES:

A. FACILITY DESIGN CAPACITIES

After speaking further with the farmers, the design capacities have recently changed. System must be designed to process manure from 4350 animal units (AU) at startup, and it must be expandable on site to handle manure from 6600 AU two years after facility startup. Each of these design capacities includes a 25% reserve capacity. For example, the farmers have indicated that they will send manure from 5280 AUs to the expanded facility. However, with the County-required 25% reserve capacity, the facility must be designed to handle manure from 6600 AUs.

B. SITE SELECTION

Dane County will be entering into land agreements with the farmers to secure the use of Site C, as shown on Figure 2.02-4 of the 2009 Facilities Plan Report, for this project.

C. PREQUALIFICATION REQUIREMENTS

As listed on page RSBI-7 of the RFP, experience and personnel are a large component of the selection criteria. Expertise and experience are extremely important to this project's success, but the prequalification requirements listed on the RFP Cover Letter will not be

used to automatically disqualify a proposer. Instead, the goal of the prequalification requirements is to ensure that Proposers have sufficient expertise and experience to provide a successful system. With this goal in mind, Proposals should include a detailed description of Proposer qualifications, as outlined in Section 2 of the Requested Services and Business Information (RSBI) Section of the RFP. In this section, be sure to list any and all relevant experience that the proposer and/or its team members may have. This description of previous project experience will then be used to score the "experience and personnel" section of the selection criteria.

D. EQUAL PARTNER BENEFITS

To reiterate what is stated in the RFP, for all assembly and construction work done on site, successful Proposer must comply with all Dane County requirements, including, but not limited to, Dane County Ordinance Chapter 25.016, which pertains to domestic partnership benefits and Chapter 40 of the Dane County Ordinances, which pertains to Public Works projects. For more information regarding these requirements, please contact John Welch, Project Manager.

E. MANURE CHARACTERISTICS

Unless the Proposer clearly explains why other values were used in the Proposal, the Proposer should use the flow chart on Figure 2.04-1 of the 2009 Facilities Plan Report to calculate the assumed manure characteristics listed below.

1. Amount of manure produced per A.U. per day.
2. Percent total manure assumed liquid (80 – 90% liquid)
3. Percent of total manure assumed solid.
4. Weight or percent nutrients (N, P2O5, K2O) assumed per gallon of manure.

F. POLYMERS AND CHEMICALS FOR PHOSPHOROUS REMOVAL

Proposer must clearly define what polymers/chemicals are proposed and how much of each polymer/chemical will be used for phosphorous removal purposes. The facility Owner will then be responsible for obtaining all necessary permits to use the polymers/chemicals in these quantities.

G. TS AND VS

A question was raised regarding the Total Solids (TS) and Volatile Solids (VS) of the manure coming into the system. Figure 2.04-1 of the 2009 Facilities Plan Report shows the TS content of the manure at various stages of the system. As a correlation of the VS, Figure 2.04-1 also shows the estimated amount of methane that would be produced in the system with no substrates. More testing will need to be done before successful Proposer completes final system design, but these numbers are based upon industry-accepted values for manure.

H. ELECTRICAL BUYBACK RATE

Dane County is just beginning negotiations with local utilities, so a final buyback rate has not been determined yet. However, Alliant Energy has been approved to offer the PSCW approved Advance Renewable Tariff of $.12 kWh on-peak and $.0735 kWh off-peak, which works out to be approximately $0.0924/kWh (average).

I. USE OF BIOGAS

This RFP has assumed that the biogas will be used to generate electricity. However, Proposers are encouraged to propose using the biogas for other uses if Proposers determine that this would be economical.

J. SAND SEPARATION EQUIPMENT SIZING

For Section 8 of the RSBI, Proposer should assume that manure from Farm 48 comes from sand beds after expanding the facility in two years. Proposer should also assume that the entire County-required 25% additional capacity of the digester is filled with manure from neighboring farms that bed their cattle on sand. Finally, Proposer should assume that Farm 32 continues to bed on sand and process its manure with its own sand separator. Therefore, if addition sand must be removed from this manure in order to comply with the proposed system's requirements, this farm's manure should be included when sizing the on-site sand separator.

K. DISCHARGE WATER USES

For Section 10 of the RSBI, Proposer should list possible alternative uses for the clean water that would otherwise be discharged. For example, explain whether this water could be used for sand separation purposes or for barn flushing.

L. TERMS OF SOLIDS TO FARMERS

For Section 11 and Section 12 of the RSBI, Proposer must clearly list all terms of agreements for the farms to use digested solids. This includes, but is not limited to, quantities available to the farms, cost, length of agreement, and first rights to buy.

M. QUESTIONS ABOUT COUNTY AND PROPOSER SCOPES OF WORK

a. Dane County will provide the following:
   1. Equipment pads, footings, and buildings for the system, including the pump/controls building, the solids separation building, water purification building, and the electric generation building. This work includes all excavation, footings, and backfill for the equipment pads and buildings. Proposer must specify how many buildings are included in the proposal and provide the County's Architect / Engineer with enough information (such as equipment loads) to design the buildings accordingly.
   2. Utilities, including, but not limited to water, natural gas, and electric up to the system. Proposer must define the system's required utilities.
   3. Piping and pumps needed to get the manure to the manure collection tank.
   4. Lagoons, access roads, general site grading.

b. Exception to County's Civil site work: the manure collection and digester tanks, the slab beneath the tanks, and all associated excavation, backfilling, insulation, and other work are included in Proposer's scope of work.

c. The primary switchgear, transformer, and metering, as well as the main feeder from the metering to equipment distribution panels, will be provided by Dane County. Proposer is responsible for distribution panels and all electrical work beyond that point.

d. The shunt trip relay/transfer switch is included in Proposer's scope of work. This may be located on the generator feeders, but all electrical work must comply with chapter PSC 119 of the Wisconsin Administrative Code and the DG Interconnection Guidelines. These can both be found here: http://psc.wi.gov/utilityinfo/electric/distributedGeneration/interconnectionProcedure.htm.

e. Proposer should base their system design on the fact that the electrical work will be configured for a two-meter installation.

f. All interconnecting wiring between the motor control center (MCC) and the field equipment and all process piping internal to the system (this includes all interconnection wiring, controls wiring, and process piping between buildings and system components) is included in the Proposer's scope. Proposer's scope also includes all trenching for this work.

g. The manure collection tank and its associated dry well, pumps, and process piping to get the manure from the collection tank to the digester are included in Proposer's scope of work.

h. Dane County will provide natural gas to the site for heating the tanks and back-up. As an optional alternate proposal, Proposer may provide the additional cost required to make the generators capable of running on digester gas or natural gas.

i. Given the option to add up 20% substrates, as described in RSBI Section 9, Proposers should assume Dane County will receive an exemption to the current 10% limitation on substrates in digesters.

N. FARM DETAILS

a. Farm 4
   1. Footbath has copper during the winter and formaldehyde during the summer. Farmers put in either 80 pounds of copper or 8 gallons of formaldehyde each day Monday – Thursday.
   2. Currently bedding on rice hulls. May be interested in using solids from the digester for bedding, but would need to see evidence that it is safe.

b. Farm 150
   1. Farmers put 3 gallons of formaldehyde in the footbath 3-4 days per week. They use less in the winter because of freezing.
   2. Currently bedding on sand, but they would stop this practice if the digester is built. They would like to use the solids from the digester for bedding. If this becomes a biosecurity issue, they would switch to mats or other beds.

c. Farm 32
   1. Farmers put about 40 gallons of formaldehyde in the footbath per week, but they usually use about 30 gallons per week in the winter.
   2. Currently bedding on sand, and they have recently installed a Parkson sand separator. They have no plans to stop using sand, unless they see really positive results from the other farms using the digester solids for bedding. They are hoping to eventually get 90-95% of the sand, but they are currently only getting 50-60% removal. However, they have only been operating the

sand separator since January 20, 2009, and they are using their farm's grey water with no chemicals in the separator instead of clean water.
3. This farm is a CAFO, so the leachate from the farm also goes to the lagoons.
4. They spread manure on 1800 acres, but much of that is not owned by the farm. They currently use hoses to irrigate approximately 130 acres. If they tried, they could probably arrange to irrigate approximately 650-750 acres by hose.

d. Farm 181
   1. Farmer uses about 20 gallons each of formaldehyde and copper sulfate in the footbath per week. He stated that it would tough for him to separate these.
   2. He hauls manure mainly on his own crops, and he hauls on approximately 1000 acres. Most of his acreage is close to the home farm, but some of it is up to 15 miles away.
   3. Farm consists of one barn with rice hull beds and a lagoon, one barn with sand beds and a small pit, and a new slatted barn with rice hull beds and storage beneath it. For this project, it has been assumed that manure will be brought to the digester only from the older barn that beds on rice hulls. The farmer said that this could increase, and he also said that he would consider switching to organic bedding in the barn that currently uses sand.

e. Farm 48
   1. Currently bedding on sand. Is fairly interested in using solids from the digester for bedding, but would need to see evidence that it is safe first. Interested in testing the digested solids in one bay of his barn. For this reason, the manure from this farm is not included in the initial design capacity, but it is included in the future expansion design capacity.

If any additional information about this Addendum or this RFP is needed, please contact John Welch at 608/516-4154 or welch@co.dane.wi.us.

Sincerely,
John Welch
Project Manager

Enclosures:
Revised Proposer List
Revised Subcontractor / Equipment Supplier List

List of Potential Proposers

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