

January 18, 2008

Request for Qualifications

**Des Moines Wastewater Reclamation Authority
Professional Engineering Services for Wastewater Reclamation Facility
Digester Improvements
01-2008-018**

The Des Moines Metropolitan Wastewater Reclamation Authority (WRA) is seeking qualified consulting firms to perform professional engineering services for the design and construction of the Wastewater Reclamation Facility Digester Improvements. A copy of this Request for Qualifications (RFQ) is being sent to various consulting engineering firms and is being placed on the WRA (www.dmmwra.org) and City of Des Moines (www.dmgov.org) websites.

The Des Moines Regional Wastewater Reclamation Facility is an activated sludge secondary treatment facility with nitrification capability, located southeast of Des Moines on the north bank of the Des Moines River. Rated as a 136-mgd plant, it is currently taking flows averaging 50 mgd. Primary sludge is drawn from six 130-foot diameter primary clarifiers. Primary effluent is then routed to six 4-pass aeration basins, where it is mixed with return activated sludge from twelve 140-foot diameter final clarifiers. Waste activated sludge is drawn from the excess activated sludge generated in the activated sludge system and is thickened by rotary drum thickeners. The primary and thickened waste activated sludge are blended and pumped to six anaerobic digesters, each having a capacity of 2.9 million gallons, for reduction of volatiles, solids, and pathogens. Gas generated in the digestion process is used to generate electrical power for use within the plant, and used as a boiler fuel for heat. The digested sludge produced by this process is pumped to three 3-meter belt filter presses for dewatering, and then transported to a storage facility on the plant property prior to eventual disposition by land application. The final sludge is Class B.

On average, approximately 130,000 gallons of primary sludge, at approximately 5.6 percent solids concentration, is produced daily. At normal flows, activated sludge is returned at 22,000 gpm. Of this, 250 gpm is wasted, and is thickened to about 8 percent solids before blending with primary sludge for digestion.

The WRF currently accepts septic and industrial wastes delivered to the plant by private operators. Industrial wastes include, but are not limited to, whey and cleaning wastes from dairies, food, meat, and wastes from chemical processing industries that contain high concentration of biodegradable matter.

In addition to utilizing digester gas for co-generation and heating the WRF is currently selling digester gas to the Cargill Oilseed Processing Facility for use in process boilers. A gas delivery system was completed in 2007 that includes a chiller for conditioning. The WRF will continue to provide digester gas to Cargill and may be in a position to increase the level of delivery.

The WRF is currently involved in a full scale pilot test of Microsludge©. Results of the pilot test will be evaluated to determine if the Microsludge© system will be beneficial as a pretreatment prior to anaerobic digestion. This evaluation will be based on an economic analysis of the Microsludge© system and its performance during the pilot test.

Items that will need to be evaluated as part of this project are:

- Covers
- Mixing
- Gas Collection System
- Gas Production and Use
- Temperature regulation
- Foam control
- Feed control

The WRF has set the following goals for the project:

- Higher gas and lower solids production
- Lower Solids Retention Time
- Pipe primary scum and grease to digesters after pretreatment
- Greater flexibility in configuration of feed piping and sludge withdrawal
- Consideration of Class A biosolids as a current or future product
- Mitigation of struvite problems
- Instrumentation changes for increased accuracy in determining liquid level, liquid flow and gas flow
- Improvements that will simplify maintenance activities, i.e., removal from service, cleaning and inspection of digesters, sludge and gas lines
- Blower improvements to provide flexibility and reduce operational costs
- Develop gas utilization guidelines for economic use of digester gas
- Evaluate standby power alternatives for uninterrupted service
- Significantly reduce emissions from the digesters

The consultant for the WRF Digester Improvements shall be responsible for the necessary State and Federal permits and State Revolving Loans including a planning and design loan.

STATEMENT OF QUALIFICATION

The WRA is contacting several consulting firms to determine their interest and capabilities in performing the prescribed work. Your firm may submit a Statement of Qualification for the study, analysis and design for the WRF Digester Improvements. As a courtesy, please respond by accepting, or declining this invitation. Statement of Qualifications must be received by 4:00 PM on February 15, 2008. All Respondents to this RFQ will be considered for future RFQ mailing lists. The Statement of Qualification shall be a document of no more than ten (10) double-sided

pages or twenty (20) single-sided pages between covers. Any Statement of Qualifications with excess pages will not be considered. Respondent's submittals will be reviewed by a selection committee. The committee will select firms that will be interviewed. Emphasis should be placed upon providing information concerning your level of staff availability, your experience with similar projects, and your approach to completing the proposed project. The Statement of Qualifications should include the following information:

Major digester improvement projects your firm has completed
Other major wastewater treatment projects that may be relevant

Evaluation factors used by the selection committee will include, but are not limited to the following:

Staffing (including sub-consultants):

1. Expertise consistent with project needs.
2. Current and anticipated workload and time constraints.

Firm's experience in the following areas (including sub-consultants):

1. Experience in digester facilities.
2. Expertise in designing wastewater treatment facilities.

All Statement of Qualification requirements must be met, or be capable of being met, by the responding firm or the submittal will be disqualified as being non-responsive. An officer of the firm empowered to bind the firm in a contract shall sign the Statement of Qualification and written responses to the WRA requesting additional information. During proposal evaluation, the WRA reserves the right to request additional written information to assist in the evaluation of the Statement of Qualifications. The WRA also reserves the right to reject, for any reason that seems sufficient, any or all Statement of Qualifications in whole or in part and to waive irregularities in the Statement of Qualifications received. All firms submitting Statement of Qualifications will receive a written response from the WRA as to which firm or firms the WRA selected for final interviews.

Award of contract, if any, will be to the consultant deemed best qualified by the WRA, in accordance with the evaluation factors, to perform the services outlined in this RFQ. The form of contract shall be the WRA standard hourly with a not to exceed maximum amount professional services agreement with the WRA standard professional services-major Insurance & Indemnification Requirements. Samples of these forms are included as an attachment to this RFQ. The form of agreement and the insurance requirements are available on the WRA website at [www.dmmwra.org/Request for Qualifications](http://www.dmmwra.org/Request_for_Qualifications). Any firm submitting a Statement of Qualification in response to this request wishing to make exceptions to that standard form of agreement should list those exceptions with their Statement of Qualification together with reasons for their exception.

Schedule

The following is an approximate schedule for the project:

RFQ sent out and posted to website	January 18, 2008
Publication in DM register	January 23, 2008
SOQ's due	February 15, 2008
Firms selected for interview	February 18-22, 2008
Interviews	February 25-29, 2008
Firms notified of results	March 3, 2008
Negotiation with successful consultant	March 10-28, 2008
Agreement Review	March 31-April 4, 2008
Technical Committee recommends approval	April 8, 2008
WRA Board approves agreement	April 15, 2008

Six (6) copies of the Statement of Qualification must be received by 4:00 P.M., Friday, February 15, 2008. Late Statement of Qualifications will not be accepted; they will be returned unopened to the consultant. We anticipate consultant selection by March 3, 2008. Please submit Statement of Qualifications to:

William G. Stowe
WRA Director
3000 Vandalia Road
Des Moines, IA 50317

Upon receipt, the Statement of Qualifications shall become the property of the WRA, without compensation to the responding firms for disposition or usage by the WRA at its discretion and will not be returned. The particulars of the Statement of Qualifications will remain confidential.

Information relevant to this Request for Qualifications will be posted to the WRA website.

If you have any questions concerning this letter or other technical questions, please submit your requests to Mike Hall at 323-8135 dmhall@dmgov.org.

Sincerely,



William G. Stowe
Director, Wastewater Reclamation Authority

Attachment