Operation of Waste Water Treatment Plants

RFP 867 - Verification of Availability

Find attached the "Scopes of Work" and "Special Requirements" for an upcoming Request For Proposals (RFP). Please review to determine if you would be able to satisfy the requirements (as applicable), and interested in responding; if so, please check the appropriate areas below and respond to this email confirming the same. Please pay "CLOSE" attention to the various sections and the "SPECIAL & MINIMUM Requirements", being specified, and confirm your ability and availability to satisfy "ALL" sections/scopes.

2.1 Background

Miami-Dade County, hereinafter referred to as the County, as represented by the Miami-Dade County Public Works and Waste Management (PWWM) Department, is soliciting proposals from firms that are capable, qualified and experienced in operating and maintaining wastewater treatment plants and associated groundwater extraction and injection well fields on behalf of the County.

PWWM owns two Sequencing Batch Reactor (SBR) facilities used to treat wastewater in the County. The SBR facilities are located at the South Dade Landfill and the Old South Dade Landfill. The SBR at the South Dade Landfill is designed to pre-treat leachate to meet the General Pretreatment Standards for sewer discharges contained in Chapter 24-42.4 of the Miami-Dade County Code. The SBR at the Old South Dade Landfill is designed to treat ammonia contaminated groundwater as required by the Florida Department of Environmental Protection (FDEP) Permit EI-13-0138315-001. Additionally, there are groundwater extraction and injection well fields associated with the SBRs at the South Dade Landfill and the Old South Dade Landfill that are part of this solicitation and shall hereby be referred to as the SBR System(s).

2.2 <u>Minimum Qualification Requirement</u>

The minimum qualification requirement for this Solicitation is that the Proposer shall have on staff individuals who will supervise plant operations. Those individuals must possess a "Class A" wastewater treatment plant license issued by the Florida Department of Environmental Protection. A subcontractor cannot fulfill this requirement. A copy of the license must be provided with the proposal.

Do you have above stated license consistent with this RFP? YES _ NO _

2.3 Preferred Qualification

Proposer shall have a minimum of five years' experience operating a waste water treatment plant or remediation system involving biological treatment.

Do you have prior experience consistent with the above stated requirements for this RFP? YES ___ NO _

Please pay very close attention to all Sections listed, and the requirements of each. (While you are <u>not</u> proposing at this time, be mindful your response strongly influences SBD's determination as it relates to a potential **SBE Measure**). So please be diligent in your review of the information and respond accordingly, based on your ability to meet <u>ALL</u> the applicable requirements.

Are you able to meet the " <u>Selec</u>	ted Proposer's Responsibilities" of Section 2.6?
YES_ NO_	
	pling, Reporting and Other Requirements" to be
performed as detailed in Section	on 2.9?
YES_ NO_	
Do you have prior experience o	consistent with the requirements of this RFP?
YESNO	,
I am "NOT" interested in t	his solicitation.
Name of Firm:	SBE Exp. Date:
Owner's Name:	Signature:

Please respond by 12:00pm, Thursday June 6, 2013.

Any questions, feel free to contact me at the number below.

(Respond to the "Verification "whether you are interested or not (choosing "Yes" or "No" as applicable); this helps SBD in the determination of measures).

Vivian O. Walters, Jr.

Contract Development Specialist II
Regulatory and Economic Resources Department
Small Business Development Division
111 NW 1st Street #19 Floor, Miami, Fl 33128
walterv@miamidade.gov

Confice (305) 375-3138 | Fax (305) 375-3160

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2.0 Scope of Services

2.1 Background

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PWWM owns two Sequencing Batch Reactor (SBR) facilities used to treat wastewater in the County. The SBR facilities are located at the South Dade Landfill and the Old South Dade Landfill. The SBR at the South Dade Landfill is designed to pre-treat leachate to meet the General Pretreatment Standards for sewer discharges contained in Chapter 24-42.4 of the Miami-Dade County Code. The SBR at the Old South Dade Landfill is designed to treat ammonia contaminated groundwater as required by the Florida Department of Environmental Protection (FDEP) Permit El-13-0138315-001. Additionally, there are groundwater extraction and injection well fields associated with the SBRs at the South Dade Landfill and the Old South Dade Landfill that are part of this solicitation and shall hereby be referred to as the SBR System(s).

2.2 <u>Minimum Qualification Requirement</u>

The minimum qualification requirement for this Solicitation is that the Proposer shall have on staff individuals who will supervise plant operations. Those individuals must possess a "Class A" wastewater treatment plant license issued by the Florida Department of Environmental Protection. A subcontractor cannot fulfill this requirement. A copy of the license must be provided with the proposal.

2.3 Preferred Qualification

Proposer shall have a minimum of five years' experience operating a waste water treatment plant or remediation system involving biological treatment.

2.4 Description of Facilities and Design Capabilities

 Old South Dade Landfill SBR: The Old South Dade Landfill SBR plant is located south of the intersection of S.W. 97 Avenue and S.W. 248 Street, and has been in operation since February 2001. The SBR was designed by U S Filter, Metcalf & Eddy. The plant's capacity is 1.2 million gallons per day.

The Old South Dade Landfill SBR groundwater treatment system includes a series of groundwater extraction and injection wells and; the associated piping, pumps and pump stations, generators and; groundwater monitoring gauges, wells and; influent and effluent sampling ports, flow meters and; storm water control structures, grates drains and screens, berms, liners and; all other associated structures and appurtenances are covered by the requirements of this Solicitation.

Influent to this SBR consists of ammonia contaminated groundwater from a series of extraction wells. A carbon source (Methanol) is added to the influent to facilitate treatment. Influent data for the past year is included in Attachment A. The contaminated groundwater is processed through the SBR and the effluent is then disposed in a series of injection wells on-site. Clean storm water is also disposed of in these injection wells. Effluent shall at all times meet the design specifications, and shall comply with all regulatory agency requirements, including requirements contained in FDEP Permit No. EI-13-0138315-001, Chapter 62.520, Florida Administrative Code and Chapter 24-42.4 of the Miami-Dade County Code. Storm water control structures and containment berms are to be inspected and maintenance performed as required to ensure proper flow. The selected Proposer shall report all problems to the County's Project Manager. The SBR System may be modified in the future to accept groundwater from the groundwater extraction well field located at the South Dade Landfill. This change is not anticipated to significantly upset, change, or add costs to the operation of the Old South Dade Landfill SBR System.

2. **South Dade Landfill SBR:** The South Dade Landfill SBR plant is located at, 23707 S.W. 97 Avenue and has been operational since March 2001. The SBR was designed by Fluidyne IT Corporation. The plant's

capacity is 0.32 million gallons per day. The South Dade Landfill SBR leachate treatment system includes the associated piping, and pumps monitoring gauges, berms and liners and a series of fifteen low volume groundwater extraction wells, monitoring gauges, and other associated structures and appurtenances are also covered by the requirements of this Solicitation. Influent for this SBR is raw leachate emanating from the South Dade Landfill. Once the leachate is pretreated, the effluent is discharged to sanitary sewer. Leachate data for the past year appears on Attachment B. Effluent shall at all times meet the design specifications, and shall at all times meet the Miami-Dade County Sewer Discharge Standards contained in Chapter 24-42.4 2of the Miami-Dade County Code. The South Dade Landfill SBR System also includes fifteen (15) low volume wells whose maintenance and monitoring are also part of this Solicitation.

2.5 Services To Be Provided

The selected Proposer shall provide the following Services, and shall consider all such work part of the standard services and operating expenses:

The selected Proposer shall:

- Provide consultation and recommendations to the County and serve as the County's representative to regulatory agencies and Miami-Dade residents in matters related to the operation of the SBR Systems, including written reports and presentations that may be requested by PWWM.
- 2. Conduct and oversee all regulatory, compliance, and financial transactions pertaining to the operation of the SBR Systems with all local, state, and federal regulatory requirements including those stipulated in this solicitation.
- 3. Maintain staff on-site 16 hours per day seven days per week.
- 4. Hold and maintain, for all personnel staffing the SBR facilities, 40 Hour OSHA HAZWOPER certification and the staff shall be trained in lock-out and tag-out and confined space entry procedures contained in 29CFR 1910.
- 5. Arrange and maintain records for the SBR Systems, and pay for the transportation and disposal of sludge residue, and all other wastes from the operation of both SBR Systems.
- 6. Provide technical and analytical services as requested and in conjunction with routine day-to-day operations and samplings specified in Section 2.8, including the monitoring and preparation of all reports. Routine samples for process control can be self-performed by the selected Proposer. Routine analysis of process control samples of all effluent and influent are to be performed at least twice daily and at a minimum include: ammonia, nitrate, pH, and temperature. When sampling for regulatory compliance a laboratory certified by the National Environmental Laboratory Accreditation Conference (NELAC) shall be used. Said water quality sampling shall be supervised and paid for by the selected Proposer utilizing the services of the County's contract laboratory.
- 7. Provide security and maintenance for the SBR facilities' building, immediate grounds and landscaping. The SBR facilities shall remain locked and secured when unattended. Fences, gates, and locks shall be maintained in good working order. Landscaping shall be neatly maintained and the grounds shall be clean, neat and litter free at all times. Buildings, wells, tanks, and all other associated structures are to be maintained, cleaned, and all interior and exterior paintable surfaces are to be re-painted as needed, or at least once during the term of any agreement executed as a result of this Solicitation.
- 8. Provide janitorial services for all areas of the building located at the Old South Dade Landfill SBR facility as well as pest control services at both SBR facilities. Additionally, the selected Proposer shall provide maintenance of the Heating, Ventilation and Air Conditioning (HVAC) system at the Old South Dade Landfill SBR building.

9. Perform maintenance in accordance with the SBR Preventative Maintenance Schedule, (Table 1), to assure proper operation of each facility and compliance with all local, State and Federal guidelines and regulations. The selected Proposer may revise the schedule, if needed, but any revision shall be approved by the County's Project Manager. All repairs under \$10,000 (individually not in aggregate) are the responsibility of the selected Proposer.

2.6 Selected Proposer's Responsibilities

The selected Proposer shall:

- Furnish all labor, materials, parts, equipment, chemicals, transportation, and supervision necessary to
 provide the services required under this Solicitation. Services may include, but are not limited to: daily
 operations, maintenance of both of the SBR facilities and any associated groundwater extraction and
 injection well fields, regulatory testing and reporting, equipment upgrades, repairs, and rehabilitation of
 the SBR Systems, and any operational needs as requested by the County.
- 2. Assume responsibility for all expenses incurred in the operation and maintenance of the SBR System, including chemicals (except for Methanol), parts, and all supplies. The selected Proposer shall also provide all necessary staffing and equipment required to provide these services, including vehicles, personnel, preventive and corrective maintenance including those listed in Table 1, contracted services, procurement of materials and supplies including the replacement of parts attributable to normal wear and tear, the disposal of sludge, residue, and all other wastes generated by the SBR Systems. All such costs shall be considered part of the standard services and operating expenses.
- 3. After an initial site visit, provide a proposal with any equipment upgrades, replacements and repairs, except for those already noted below, required for a smooth transition, to effectively assume the operation of the SBR Systems. The County may provide a one-time reimbursement to the selected Proposer for expenditures for equipment (with prior written approval by the County) involving Proposer's suggested corrective repairs prior to the selected Proposer assuming the responsibilities required herein.
- 4. Provide the County's Project Manager with an initial inventory of spare parts, materials and chemicals (except for Methanol) for review and approval. The County, on a one time only basis, will reimburse the selected Proposer for such additional costs including spare parts, material, and chemicals (except for Methanol) not-to-exceed \$25,000 to complete the approved inventory. The Selected Proposer shall be responsible for maintaining all inventories and supplies for the SBR Systems as described herein and shall maintain a spare parts inventory in the original quantity and condition. All costs for restocking of the inventory shall then be considered part of the selected Proposers standard services and operating expenses.
- 5. At all times, when presented with valid identification, provide supervised access to the SBR facilities for approved County personnel, County authorized agent's consultants, guests, and employees.
- 6. Provide supervised access to the SBR facilities for regulatory agency officials conducting inspections or any duties required by law or permit condition.
- 7. Provide all SBR System's operating manuals, specification booklets, reports, records, data, software and information including, but not limited to operation reports, treatment system performance reports, reports required by this Solicitation, regulatory agency inspection reports. Laboratory data, budgetary and financial information shall be maintained in good order by the selected Proposer, and shall remain the property of the County. All site-specific operating procedure guidelines, preventive maintenance and safety programs, and plant evaluation reports and data shall remain the property of the County.
- 8. Assign staff to be on call 24 hours per day, seven days a week in case of an emergency. In the event of such an emergency affecting the safety of persons or property, respond in accordance with its best professional judgment, to prevent threatened damage, injury or loss. Such actions, including any

financial expenditure, shall be immediately communicated to the County's Project Manager with a written follow-up report issued within 24 hours. Compensation for any action taken in response to the emergency will be covered as additional work.

2.7 Regulatory Noncompliance

The selected Proposer shall pay for all penalties or fines imposed on the County as a result or consequence of the selected Proposer's failure to meet any and all reporting and record keeping requirements and violations of permit discharge limits unless the violations are attributable to the following:

- 1. Influent flows and pollutants which are not within the design capabilities of the SBR Systems, including but not limited to soluble oil, heavy metals, other toxic substances, excessive suspended solids, and excessive organic loading unless conditions were caused through the actions of the selected Proposer, its employees, subcontractors, suppliers, or material man.
- 2. The malfunction or failure(s) of equipment giving rise to a violation, which is not the causation of the selected Proposer.

2.8 County's Responsibility

The County will:

- 1. Evaluate recommendations, and approve, or disapprove, or approve with amendment the initial inventory and recommendations stipulated above in Section 2.5 (3) and (4). The approval, disapproval or approval with amendment decision of the County's Project Manager shall be considered final.
- 2. Reimburse the selected Proposer for expenditures for equipment (with prior written approval by the County) over \$10,000 (individually not in aggregate) involving corrective repairs and replacements, except in the case of misuse, negligent acts, errors, or intentional or unintentional omissions by the selected Proposer. The selected Proposer shall provide justification, as required by the County's Project Manager, and review of the related factors for such expenditures. Any repairs or replacements required as the result of an OSHA inspection or other regulatory agency inspection or consultation shall be implemented immediately provided the selected Proposer has received prior written authorization from the County. All such work shall be considered additional work not part of the routine operation and maintenance work.
- 3. Pay for all utilities at both SBR facilities.
- 4. At its discretion, provide the selected Proposer, its agents and employees access to the SBR facilities and any structure and appurtenances associated with the SBR Systems.
- 5. Provide the selected Proposer use of all existing equipment at the SBR facilities necessary for the operation and maintenance of the SBR.
- 6. Maintain and repair all water services, distribution mains, pump stations, and other appurtenances not constituting but connecting to the SBR facilities.
- 7. Provide prompt written notice to the selected Proposer whenever it observes or becomes aware of any development that affects the scope or timing of selected Proposer's services or any failure of selected Proposer to perform in accordance with the terms and conditions of any Agreement resulting from this Solicitation.

2.9 Sampling, Reporting and Other Requirements

The selected Proposer shall:

- 1. Prepare all reports required by the County, local, state and federal agencies. All reports are to be provided to the County as hard copies and in electronic format.
- 2. Maintain all records deemed useful by County to monitor and control the operation of the SBR System.

Unless otherwise indicated above, the selected Proposer shall consider all such Work part of the standard services and operating expenses. A penalty will be imposed for each late report, including revisions, on the monthly invoice for the month during which a report was due (See Penalty Fee).

A. Reporting Schedule:

Task	Report Types	Report Description	Due Dates
A.	Annual Operating Maintenance and Repair Report	The selected Proposer shall provide an Annual Operating Report for each SBR System. Report information shall include, but not be limited to, facility maintenance issues and the quantity and quality of the effluent. This report shall include at a minimum: number of gallons treated per day, per year, and effluent quality; any interruption in the operation of a facility and the reason for the interruption; a narrative discussing plant operation and maintenance, detailed maintenance records or tables including all dispersals from a facility's inventory and date and reason for dispersal, and replacement date of the items in a facility's inventory.	January 31 of each year.
B.	Quarterly Inspection Reports for OSDLF	This report shall include information of the Old South Dade Landfill storm water management system including all swales, berms, basins, and wells that shall be inspected on a weekly basis, and after any rain that totals more than 0.5 inches. This report shall also include information on all drains, gratings and the pump station associated with the disposal wells. The disposal wells shall be inspected on a weekly basis and after any rain that totals more than 0.5 inches, and such structures shall be kept clean and in working order. This report shall include structural inspection reports of the pump station associated with the disposal wells, the disposal wells, and checking the calibration of control elevations at the pump station. The written Inspection Report addressing the status of all such structures and steps taken to care for and maintain them including copies of the weekly Storm Inspection Reports shall be submitted to the County's Project Manager.	Within thirty days after the end of each calendar quarter.
C.	Quarterly Extraction Well Performance Report	Two measures of Extraction Well performance are required. Sediment levels in the system shall be measured by weekly Rossum Sand Sampler in the discharge pipe. Additionally, all intake and discharge pipes and fittings shall be inspected daily.	Within thirty days after the end of each calendar quarter.

D.	Quarterly Hydraulic Containment Report	Two measures of hydraulic containment are required. Extraction Well flow rates are to be continually monitored by an in-line flow meter on each well. Additionally, gauge Extraction Monitoring wells (EM), Shallow Piezometer and Deep Piezometer wells (SP and DP), and the L-31E. All Extraction Well Elevations shall be measured to: a) delineate the extent of hydraulic containment, b) to calculate the gradients, c) to show water table contours and d) to identify the capture zone.	Within thirty days after the end of each calendar quarter.
F.	Monthly Treatment System Performance and Water Quality Report for Old South Dade Landfill	Measures of the treatment system performance and water quality are required and include but are not limited to: Flow rates percentages and total flow (treatment), ammonia removal rates and totals, treatment efficiency, site ammonia levels, local rainfall, and inspection reports. Three way split samples {1)bench test 2) County's contract lab 3) outside contract lab} will be taken at a minimum of once per quarter and results included in the report	By the 10th of the following month.
G.	Monthly Monitoring of Groundwater Recovery at the South Dade Landfill Low Volume Wells	Each well has a flow meter to be read daily (seven days a week). Additionally, the totalizing flow meter is to be read daily (seven days a week). Total flow and per well flow is to be quantified and reported	By the 10th of the following month.
H.	Monthly Groundwater Level Monitoring and Reporting at the South Dade Landfill.	In selected wells, groundwater levels are to be taken weekly except during January and July. System wide January and July water levels will be provided by the PWWM. Weekly hydrographs are to be created and groundwater levels reported.	By the 10th of the following month.

B. <u>Sampling and Reporting Requirements:</u>

- 1. For Task F above for the Old South Dade Landfill, the influent (untreated groundwater) and effluent (treated groundwater) water, each individual extraction well, each individual injection, and each monitoring well cluster at the Old South Dade Landfill shall be sampled utilizing the services of the County's NELAC certified contract laboratory. The County at its sole discretion may request a three way split sample during any quarter. Sampling ports are provided in the respective manifolds, and samples shall be taken there. Effluent and influent samples shall be taken from their respective manifolds. All samples for laboratory analysis shall be tested in the field for pH (units), conductivity (umhos), and temperature (C). Laboratory analyses shall be for the following parameters:
 - a. Ammonia (mg/l)
 - b. Nitrate (mg/l)
 - c. Total Dissolved Solids (mg/l)
 - d. Chloride (mg/l)
 - e. Iron (mg/l)
 - f. Sodium (mg/l)
 - g. Thallium (mg/l)

All required reports shall clearly identify the facility name, ID Number, location of samples, date of sampling, date of recording, the operators' names, telephone numbers and type of data shown. The lead plant operator must sign and date each report. All reports must include a copy of the raw data from the reporting laboratory. The laboratory data must be in the FDEP format. Sample results elevated above background levels shall be noted and long and short-term trend analyses shall be included in each report. Short-term analyses shall be considered the previous 12 months. Long-term analyses shall be considered as all available data. Tables and graphics depicting performance of the injection wells, based on the data from the in-line pressure gauges, shall also be provided.

2. The Monthly Treatment System Performance and Water Quality Report (Task F. above) shall be clearly identified with the facility name, ID Number, location of sample, date of sampling, date of recording, the operators' names, telephone numbers and type of data shown. The lead plant operator must sign and date each report. All reports must include a copy of the raw data from the reporting laboratory. The laboratory data must be in the FDEP format. Sample results elevated above background levels shall be noted and long and short-term trend analyses shall be included in each report. Short-term analyses shall be considered the previous 12 months. Long-term analyses shall be considered as all available data. Tables and graphics depicting performance of the injection wells, based on the data from the in-line pressure gauges, shall also be provided.

2.10 Methanol

The Old South Dade Landfill SBR System uses Methanol as a carbon source for denitrification in the process to treat contaminated groundwater. At the current rates of treatment an estimated 100 gallons per day of Methanol is used. The selected Proposer shall, on a yearly basis, bid out the purchase of Methanol. The cost of the Methanol, based on the lowest bid received by the selected Proposer, will be a fixed price for the year. On a monthly basis, the County will reimburse the selected Proposer for the cost of the Methanol used in the process at the straight cost with no adder applied to the price. The selected Proposer shall provide the County all records of bidding out the Methanol.

2.11 Optional Services

At the County's sole discretion, the selected Proposer may be required to perform related optional services on an as needed basis, which may be required to address compliance, design or construction issues as may be needed or required by regulatory agencies and for continuous operation of the SBR Systems. Examples of such optional services would include: Engineering for capital replacement needs; assistance with permitting; any design or service change required by new or revised laws, rules, regulations or code requirements; new or amended orders of any public authority or court. At the County's request, the selected Proposer shall provide a formal written scope of work and price to be submitted for review and approval by the County's Project Manager. The County's written authorization shall precede commencement of any work.

3.0 RESPONSE REQUIREMENTS

3.1 Submittal Requirements

In response to this Solicitation, Proposer should **return the entire completed Proposal Submission Package** (see attached). Proposers should carefully follow the format and instructions outlined therein. All documents and information must be fully completed and signed as required.

The proposal shall be written in sufficient detail to permit the County to conduct a meaningful evaluation of the proposed services. However, overly elaborate responses are not requested or desired.