REQUEST FOR QUALIFICATIONS
MEMBRANE FILTRATION MODULE SUPPLIER
FOR
THE EAST COUNTY ADVANCED WATER PURIFICATION PROJECT

Request of Qualifications Issuance Date: January 9, 2020
Statement of Qualifications Due Date: February 11, 2020
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I. Introduction

A. Project Background

The East County Advanced Water Purification (ECAWP) Project is a potable reuse project in East San Diego County (East County) and is a collaborative effort among Padre Dam Municipal Water District (Padre Dam), the San Diego County Sanitation District (County), the City of El Cajon (El Cajon), and Helix Water District (Helix). The ECAWP Project is governed by the ECAWP JPA (JPA), which is composed of the three East County wastewater agencies (Padre Dam, the County, and El Cajon).

Currently, a majority of the East County wastewater flow is discharged into the San Diego regional collection system for treatment and disposed of into the Pacific Ocean. Additionally, almost all of the drinking water in the East County is provided by imported water from northern California and the Colorado River. The ECAWP Project will treat the East County’s wastewater locally and implement potable reuse by producing advanced treated water from an advanced water purification (AWP) Facility (purified water), which will be pumped to Lake Jennings, for surface water augmentation (SWA) with other water owned by Helix. After SWA, the water will be sent to Helix’s R.M. Levy Water Treatment Plant for treatment to become potable water.

The ECAWP Project’s goal is to improve local and regional water supply reliability by reusing East County wastewater flows to create a new source of local, safe, reliable, and drought-proof water supply reducing reliance on less reliable imported water. The ECAWP Project is intended to ultimately produce up to 30% of East San Diego County’s potable water supply, thereby increasing water supply resilience and financial certainty related to imported water supply costs and wastewater treatment costs.

The ECAWP Project is expected to be among the first facilities in both California and the United States to implement potable reuse through SWA in adherence with the State of California’s SWA regulations. Design and construction of the ECAWP Project must meet the requirements under Title 22 of the California Code of Regulations applicable to SWA.

The ECAWP Project is anticipated to come online in 2025. Once online, the ECAWP Project is anticipated to treat the combined 2025 wastewater flow of approximately 15 million gallons per day (MGD) and produce up to 12,880 acre-feet per year (AFY), or 11.5 MGD, of new, safe, reliable, and locally controlled potable water supply.

The ECAWP Project is envisioned to be delivered through three progressive design build packages. Package #1 is anticipated to include design, construction, testing, commissioning, and transitional operations of the following components:

- New 16 MGD (average annual treatment capacity) WRF to include headworks, odor control, primary clarifiers, equalization basin, bioreactors for full nitrification and denitrification, secondary clarifiers, tertiary filters, and chlorine contact basin

- New 11.5 MGD (annual average production capacity) AWP Facility to include microfiltration/ultrafiltration, reverse osmosis, brine minimization, ultraviolet light
disinfection, advanced oxidation, free chlorination, and post treatment stabilization processes

- New Product Water Pump Station to convey AWP Facility treated water to Lake Jennings
- New Solids Handling Facility for treatment of solids (to Class B biosolids) generated from wastewater treatment and provisions for future energy recovery

The purpose of this Request for Qualifications (RFQ) is to solicit Statement of Qualifications (SOQs) from qualified Membrane Filtration (MF) Module Suppliers to provide the JPA with the necessary information to prequalify MF Modules for the full-scale AWP Facility. The term "MF Module" for the purpose of this RFQ is defined as a microfiltration or ultrafiltration membranes.

All interested parties are invited to respond to this RFQ. Each Respondent’s SOQ will be evaluated according to the criteria published herein, and it is the JPA’s intent to prequalify three (3) qualified Respondents to be shortlisted in the Request of Proposal for Package #1, where the full-scale AWP Facility design and construction is covered. Without exception, only prequalified MF Module Suppliers will be eligible for submitting bids to the selected Design-Build Contractor. The pre-qualified MF Module Suppliers, if selected by the Design-Build Contractor for Package #1, must comply with all specification requirements developed by the Design-Build Contractor.

B. Project Location

The ECAWP Project is located in east San Diego County. The Package #1 components, including the full-scale AWP Facility, are intended to be located adjacent to the existing Ray Stoyer Water Recycling Facility (Ray Stoyer WRF), which is owned and operated by Padre Dam and located at 12001 Fanita Parkway, Santee, California, 92071.

C. Source Water to Membrane Filtration System

The source water for the AWP Facility will be tertiary filtered wastewater effluent from the new WRF. The AWP facility source water will not include effluent from the existing Ray Stoyer WRF. The new WRF will consist of a 4-stage Bardenpho process as the secondary biological treatment to achieve effluent nitrogen objectives, with the capability to dose ferric chloride in the secondary process for phosphorus removal. The secondary effluent will then pass through granular media filters prior to feeding the AWP Facility.

The treatment train to produce potable reuse water for SWA at Lake Jennings consists of MF System using either micro- or ultrafiltration membranes, RO, ultraviolet light (UV) with an advanced oxidation process (AOP), post-stabilization, chlorine disinfection through the product water pipeline, and dechlorination just prior to discharge. The AWP Facility is expected to be operated much like a drinking water facility with rigorous monitoring and integrity testing, including direct integrity testing and continuous indirect integrity monitoring of each operating MF rack.
Table 1 shows the expected MF influent water flow and quality for the full-scale project, based on a combination of past data from the existing AWP Demonstration Facility and projected data for future WRF operations from ongoing preliminary design efforts.

Table 1: MF Influent Criteria

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Min</th>
<th>Average</th>
<th>Max</th>
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<tbody>
<tr>
<td>Flow</td>
<td>mgd</td>
<td>13.6</td>
<td>14.2</td>
<td>15.0</td>
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<tr>
<td><strong>Water Quality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>0.1</td>
<td>1.1</td>
<td>4.8</td>
</tr>
<tr>
<td>Turbidity</td>
<td>NTU</td>
<td>0.1</td>
<td>0.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>mg/L</td>
<td>6.5</td>
<td>7.3</td>
<td>8.6</td>
</tr>
</tbody>
</table>

The required minimum pathogen removal values for the candidate MF System at the full-scale AWP Facility is 4 logs of *Giardia* cysts and 4 logs of *Cryptosporidium* oocysts.

II. Statement of Qualification Requirements

SOQ should be concise, well organized and demonstrate the Respondent’s qualifications related to the following:

- Ability to provide MF Modules that meet the minimum requirements described in Section A.
- Company qualification and experience in supplying MF Modules in similar applications. Company information and reference project experience questionnaire shall be completed as described in Sections B and C. The SOQ must address the information identified herein.

Emphasis should be on completeness and clarity of content with sufficient detail to allow for accurate and comparative evaluation. The SOQ shall not exceed a total of the equivalent of 15 single-sided, 8.5” x 11” pages (excluding appendices). The minimum font size for the SOQ is 12-point. The 15-page limit does not include the cover letter, dividers, appendices, front cover or back cover that may be included in the SOQ. Supporting documents including certifications and approvals may be included in appendices.

At a minimum, the SOQ shall include the following sections:

- Cover letter
- Minimum qualifications
- Company qualifications and experience
- Respondent’s MF module operating experience
A. Cover Letter

This letter shall be a brief formal letter from the Respondent that provides information regarding the Company and its ability to perform the requirements of this solicitation. This letter must include the following information:

- Complete legal company name (as it should appear in a contract)
- Company address
- Contact person, telephone number, and email address
- Identify all materials and enclosures being forwarded in response to this solicitation
- The letter must be signed by an individual authorized to submit the SOQ on behalf of the Company.

Address the cover letter as follows:

ATTN: Seval Sen, P.E.
AWP Engineering Manager
Padre Dam Municipal Water District

B. Minimum Qualifications (Pass/Fail)

In order to be considered, Respondents must meet certain minimum requirements, which are summarized below.

1. The Respondents shall have a permanent place of business located in the United States of America. Provide the primary address.

2. The Respondent’s proposed membrane module shall have California Division of Drinking Water (DDW) certification letter indicating conditional acceptance of the proposed membrane modules as an acceptable alternative filtration technology under the California Surface Water Treatment Rule.

3. The Respondent’s proposed membrane system shall be National Sanitation Foundation (NSF)/American National Standards Institute (ANSI) Standard 61 (Drinking Water System Components - Health Effects) certified.

4. The Respondent’s proposed membrane module shall be polyvinylidene fluoride (PVDF).

5. The Respondent’s proposed membrane module shall be manufactured using the Thermally Induced Phased Separation (TIPS) method.

6. The Respondent’s proposed membrane shall employ membrane technology with membrane modules operating in an encased, outside-in pressure cartridge configuration.
7. The Respondent's proposed MF module shall be designed for both air scour, backwash, and chemical clean capabilities as part of the normal module operations.

8. The Respondent’s proposed MF module shall be installed on a universal rack that is capable of using at least two other modules from different membrane manufacturers.

9. The Respondent’s proposed MF module shall include, at a minimum, a 10-year warranty with a 2-year cliff.

10. The Respondent’s proposed membrane module shall have been in continuous operation at least two (2) reference installation facilities in a membrane system of at least 2.0 MGD of filtrate capacity treating secondary or tertiary effluent from a municipal wastewater treatment plant in California, USA.

Include the completed minimum qualifications questionnaire provided in Attachment A to the SOQ (may be included as an appendix). The answer must be “yes” to questions 1 through 10 in the questionnaire in order to pass the minimum requirements. Failure to provide a “yes” answer to any one of the 10 questions will result in the SOQ being considered non-responsive and ineligible for further consideration. Respondent should provide additional information as needed or requested.

C. Company Qualifications and Experience

Respondents shall provide the following relevant documents to evaluate their manufacturing qualifications and experience:

- Respondent’s company name (full legal name)
- Type of operation (individual, partnership, corporation)
- Respondent’s address, phone number, email address, and Business License #
- Respondent’s designated representative’s name, phone number, and email address
- Number of years Respondent has been engaged in design, manufacturing MF Modules and systems and brief history. Provide summary of MF Module and membrane manufacturing capabilities.
- Location of corporate headquarters and regional offices in United States
- Organization chart showing divisions of responsibility within the organization and listing key personnel (engineering, management, construction, quality control). Indicate total number of employees. Provide number and location of field support engineers and design support engineers for MF Modules and systems.
- Number and location of service centers in United States capable of servicing the membrane filtration equipment. Identify which office location will provide technical support for the full scale ECAWP Project. Identify the size and capabilities of the staff that will provide support. Provide expected response time for responding to requests for phone support and for field support.
• Summary of Respondent’s experience in MF Systems. Provide a list of installed pressurized MF Modules for municipal secondary or tertiary effluent in the past ten years in United States, and in the State of California. Include project information, location, application, size, membrane type, installation year, number of years in service, and owner agency name and location.

• A complete copy of a MF Module standard warranty and warranty conditions.

• Information describing if the prospective Respondent has been the subject of any administrative action or legal action initiated by any federal, state, or local government agency having safety, health, or environmental responsibilities or functions during the last five years. If so, describe how such actions were or are being resolved.

• Information on any claims or lawsuits filed on projects within the last five years. Include description of issue, dollar amount and current status of claim/lawsuit.

D. Respondent’s MF Module Operating Experience

Respondents must provide the following relevant documents for no less than two (2) operating reference installations that meet the requirements listed under the minimum qualifications in Section A. The reference installations shall have the following characteristics:

• A full-scale and currently operating facility treating secondary or tertiary municipal wastewater

• Pressurized MF System with a minimum MF treatment capacity of 2.0 MGD

• California facility permitted by the California State Water Board to produce recycled water per the Title 22 Code of Regulations

Include the following with each reference installation claimed for demonstrating the required experience:

• Facility name and location

• Owner name, location, contact name (including Plant Superintendent or Plant Process Engineer), address, phone number, and email

• Brief narrative description of project

• Application details, influent quality (i.e., Title 22 recycled water, potable reuse, etc.)

• Year installed/started-up and time in-service

• Membrane module number and membrane area per module

• Number of modules installed per rack

• Number of racks and description of redundancy

• Design and operating parameters for the installed MF System:
  • Net filtrate production
Flux
Recovery
Transmembrane pressure

- Description of integrity testing (direct and indirect) and pathogen removal credit achieved through the MF System, if applicable to the facility
- Description of backwash, maintenance and enhanced cleaning processes, including chemicals, air, flows, etc.
- Description of operational issues (i.e., fiber breaks, flux decline) and mitigation method

The JPA will conduct reference checks to evaluate the actual operating experience of the Respondent’s MF modules as it relates to meeting water quality targets, CIP interval, fiber breakage history, operational issues, integrity breaches, level of service and support received by the Respondent, service response time, ease of operation and maintenance, etc.

E. Submittal Requirements

The SOQ shall be submitted as follows:
- One (1) executed original, clearly marked on the cover
- Five (5) additional hard copies of the SOQ
- One (1) electronic form (on a USB flash-drive) containing the SOQ in Adobe PDF format with sections indexed.

SOQs are due at the following address no later than **4 PM, PST on February 11, 2020.** The date and time of receipt will be based on the JPA’s physical acceptance of the SOQ. Postmarked, facsimile, or electronic timestamps will not be determinative of the time of receipt. Respondents are solely responsible for the timeliness of their submissions. The JPA will accept SOQs at the Engineering Counter in Padre Dam’s Administration Office located at:

9300 Fanita Parkway  
Santee, CA 92071

Alternatively, SOQs may be mailed to the following address:

**Padre Dam Municipal Water District**  
P.O. Box 719003  
Santee, California 92072  
ATTN: Clara Cornelius

SOQs shall be submitted in sealed packages with the following information clearly marked on the outside of each package:

- Name of Respondent
- SOQ title: “STATEMENT OF QUALIFICATIONS FOR MEMBRANE FILTRATION MODULE SUPPLIER FOR THE EAST COUNTY ADVANCED WATER PURIFICATION PROJECT (JN 215011)”
Failure to comply with requirements of this RFQ will result in disqualification. SOQs and/or modifications received by the JPA subsequent to the hour and date specified above will not be considered. The JPA will not be liable for costs incurred by the respondents in preparing a SOQ.

All communications (including questions, comments and RFIs) must be submitted by email with a subject line that specifically references this RFQ. These communications should be directed to:

Seval Sen, P.E.
AWP Engineering Manager
Padre Dam Municipal Water District
Phone: (619) 258-4631
Email: ssen@padre.org

During the RFQ process, interested parties shall direct all questions via email to the JPA’s primary contact listed above. All questions and/or requests for clarification regarding this RFQ must be received in writing via email to the point of contact no later than January 23, 2020. Depending upon the content and scope of the question, responses to questions will be promptly prepared and provided via addenda available to Respondents that have an interest in responding to this RFQ.

III. Evaluation Criteria and Selection

A. Evaluation Criteria

The SOQs will be evaluated and ranked using the following criteria below. It is the JPA’s intent to prequalify the three (3) top scoring Respondents to be shortlisted in the Request of Proposal for Package #1.

1. Positive response to the criteria presented in the "Minimum Qualification Requirements" attachment (Pass/Fail).

2. Evaluation Criteria (100 points)
   a. Company Qualifications and Experience (20 points)
   b. Respondent’s Engineering and Support Service/Location (30 points)
   c. Respondents MF Module Operating Experience (20 points)
   d. Favorable References, Fiber Breakage, and Related History (30 points)

B. Selection Process and Schedule

The SOQs passing the minimum qualification requirements will be evaluated by an Evaluation Panel (Panel) including representatives from the JPA. The Panel will evaluate the SOQ’s based on the criteria established above. The three top-rated Respondents will be shortlisted. Each
Respondent will be notified in writing whether or not it has been selected as the successful proposer.

The JPA has established the tentative schedule for the selection process:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Preliminary Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertise RFQ</td>
<td>January 9, 2020</td>
</tr>
<tr>
<td>Deadline for Receipt of Written Questions</td>
<td>January 23, 2020</td>
</tr>
<tr>
<td>Responses to Questions Issued</td>
<td>January 29, 2020</td>
</tr>
<tr>
<td>Statement of Qualifications Submittal Date</td>
<td>February 11, 2020; 4:00 PM</td>
</tr>
<tr>
<td>Notification to MF Module Suppliers Prequalified</td>
<td>April, 2020</td>
</tr>
</tbody>
</table>

IV. Special Conditions

Reservations

The JPA makes no representation that any contract will be awarded to any Company responding to this RFQ. Nothing in this RFQ shall be construed to obligate the JPA to negotiate or enter into a contract with any particular firm. The issuance of this RFQ and the acceptance of any SOQ shall not constitute an agreement by the JPA that any contract will actually be entered into by the JPA. All costs of response and SOQ preparation shall be borne by the submitting Respondent. The JPA shall not be liable for any pre-contractual expenses incurred by the Respondent, including any time and costs associated with the preparation and submission of the SOQ. All SOQ’s shall become the property of the JPA. The JPA shall have the right to copy, reproduce, publicize, retain, or otherwise dispose of each SOQ.

Public Record

SOQs are a matter of public record and are open to inspection under the California Public Records Act. If any respondent claims any part of its SOQ is exempt from disclosure and copying, they shall so indicate in the transmittal letter. By responding to this RFQ, Respondents waive any challenge to the JPA’s decision in this regard. If any SOQ contains confidential information, the Respondent shall clearly label and stamp the specific portions that are to be kept confidential. The Respondent is urged to identify the truly confidential portions of the RFQ and not simply mark all or substantially all response as confidential. Notwithstanding the foregoing, Respondents recognize that the JPA will not be responsible or liable in any way for loses that the respondents may suffer from the disclosure of information or materials to third parties.

JPA Rights and Options

The JPA, at its sole discretion, reserves the following rights:

- To determine which Respondents, if any, shall be included on a short list of semifinalists based on the criteria set forth in the RFQ;
- To reject any, or all SOQs or information received pursuant to this RFQ;
• To supplement, amend, substitute or otherwise modify this RFQ at any time by means of written addendum;

• To extend the deadline for submission of the SOQ’s;

• To cancel this RFQ with or without the substitution of another RFQ or prequalification process;

• To request additional information and/or clarifications from any or all respondents to this RFQ;

• To verify the qualifications and experience of each Respondent;

• To require one or more Respondents to supplement, clarify or provide additional information in order for the JPA to evaluate SOQs submitted; and

• To waive any minor defect or technicality in any SOQ received.
Attachment A. Minimum Qualification Requirements Form
Minimum Product Requirements:

1. Does the Respondent have a permanent place of business located in the United States of America? Provide the primary address.
   □ Yes □ No

2. Does the Respondent’s proposed membrane module have California Division of Drinking Water (DDW) certification letter indicating conditional acceptance of the proposed membrane modules as an acceptable alternative filtration technology under the California Surface Water Treatment Rule? If so, submit with their SOQ a letter from DDW certifying that the Respondent’s proposed membrane module for this project complies with this alternative filtration technology requirement.
   □ Yes □ No

3. Does the Respondent’s proposed membrane module have National Sanitation Foundation (NSF)/American National Standards Institute (ANSI) Standard 61 (Drinking Water System Components - Health Effects) certified. If so, provide copy of the certifications.
   □ Yes □ No

4. Is the Respondent’s proposed membrane module polyvinylidene fluoride (PVDF)?
   □ Yes □ No

5. Is the Respondent’s proposed membrane module manufactured using the Thermally Induced Phased Separation (TIPS) method?
   □ Yes □ No

6. Does the Respondent’s proposed membrane employ membrane technology with membrane modules operating in an encased, outside-in pressure cartridge configuration?
   □ Yes □ No

7. Is the Respondent’s proposed MF module designed for both air scour, backwash, and chemical clean capabilities as part of the normal module operations?
   □ Yes □ No
8. Can the proposed MF module be installed on a universal rack that is capable of using at least two other modules from different membrane manufacturers?

☐ Yes  ☐ No

9. Will the Respondent’s proposed MF module include, at a minimum, a 10-year warranty with a 2-year cliff?

☐ Yes  ☐ No

10. Has the Respondent’s proposed membrane module been in continuous operation in at least two (2) reference installation facilities in a membrane system of at least 2.0 MGD of filtrate capacity treating secondary or tertiary effluent from a municipal wastewater treatment plant in California, USA?

☐ Yes  ☐ No