Water and Sewer Authority of Cabarrus County

Incinerator Differential Pressure Equipment Study and Preliminary Engineering Report

Request for Qualifications

RFQ Announced: November 16, 2023

SOQ Due: January 11, 2024

The Water and Sewer Authority of Cabarrus County (hereinafter called "WSACC", or "Owner") invites engineering consulting firms (hereinafter called "Consultant") having sufficient experience in providing consulting services as related to the evaluation of the Rocky River Regional Wastewater Treatment Plant (RRRWWTP) differential pressure equipment and development of an associated preliminary engineering report (PER). WSACC is currently permitted under the North Carolina Department of Environmental Quality (NCDEQ) Division of Air Quality (DAQ) Air Permit No. 04475T22 to operate a sewage sludge multiple hearth incinerator (MHI).

In October 2022, WSACC retained the services of Hazen and Sawyer (Hazen) to investigate the requirements of the recently renewed air quality permit and the operation of the incinerator emissions control devices. The Hazen study included evaluation of controlling pressure drop for the Packed Tower Scrubber and Quench/Conditioning System. This Request for Qualifications (RFQ), and the anticipated associated project, is for the evaluation of the recommendations and potential solutions to the differential pressure requirements presented in the Technical Memorandum (TM) submitted by Hazen in April 2023, along with development of an associated PER for any recommended improvements.

Scope of Work

WSACC owns and operates the RRRWWTP, Muddy Creek WWTP (MCWWTP), several associated pump stations, and an extensive network of larger-diameter collection system lines. The RRRWWTP is currently permitted for a monthly average flow up to 26.5 million gallons per day (mgd), with expansions in progress to take the RRRWWTP to a permitted monthly average flow up to 34 MGD. The MCWWTP is currently permitted for a monthly average flow up to 300,000 gallons per day (gpd). Biosolids from both plants are brought to the MHI located at RRRWWTP. The MHI is 22.25 feet in diameter, with a maximum average permitted charging rate of 21,200 wet pounds per hour. The unit is fired by twelve (12) No. 2 fuel oil/ recycled No. 2 fuel oil fired burners with a total heat input rating of 18.8 million BTU per hour. Air pollution control devices for the incinerator include a No. 2 fuel oil-fired afterburner with a maximum burner rating of 7.77 million BTU per hour (CD-03), a Quench/Conditioning System consisting of a spray quencher and two-tray impingement cooler (CD-04), a Wet Electrostatic Precipitator (WESP) with 2,439 square feet of collector plate area (CD-02), and a Packed Tower Scrubber with a minimum liquid injection rate of 166 gallons per minute and minimum pH of 5.5 (CD-06).

WSACC is requesting statements of qualifications (SOQs) from qualified firms interested in providing an evaluation of the potential options presented by Hazen to address differential pressure requirements (from the April 2023 Hazen TM) and development of an associated PER. This effort will include review of the current MHI system, review of current state and federal

regulations governing the operation of the MHI, evaluation of the TM previously presented to WSACC by Hazen, any associated additional field testing, and development of preliminary design for any improvements with a PER.

One signed SOQ and six copies, all bound, in addition to one electronic copy in searchable PDF format (provided on CD or flash drive), are to be submitted per the instructions outlined within the RFQ. Please review them carefully.

The project scope includes, but is not limited to, evaluation of the current operations of the MHI, review of regulations, analysis of previous recommendations, any additional field testing, and development of a PER for any improvements. WSACC will share the TM and associated data from the Hazen effort with the selected Consultant for this proposed effort.

WSACC currently anticipates that the scope will generally include the following elements, subject to further discussion and recommendations from the Consultant:

- 1. Introduction
- 2. Background and Current Operations Review
 - a. Review of current State and Federal Regulations
 - b. Current MHI Operation
- 3. Evaluation of Prior Recommendations (from Hazen TM)
- 4. Any Additional Field Testing (as needed)
- 5. Alternatives Evaluation and Preliminary Engineering Report

WSACC may also elect to include other related services in the scope of work. A decision on any additional related components will be made after selection, and WSACC will work with the selected firm on the additional scope item(s) at that time.

Key Success Factors

- 1. Effective, consistent, and thorough communications with employees throughout the WSACC organization, WSACC member jurisdictions, the WSACC Board, State regulators, and others as needed.
- 2. Well-developed scope and schedule
- 3. Project completion on-schedule
- 4. Establishing a recommended path forward to cost-effectively address differential pressure requirements
- 5. Well-documented project milestones and well-documented project changes (as needed).

Selection Process

Pursuant to North Carolina General Statute 143-64.31, WSACC is conducting a "qualificationsbased" selection process without regard to fee.

WSACC will conduct a fair and impartial evaluation of all SOQs that are received in accordance with the provisions of this RFQ. WSACC will appoint a selection committee to perform the evaluation. WSACC reserves the right to obtain clarification of any point in a firm's / team's qualification package or to obtain additional information. All firms / teams who submit qualification packages will be notified of the selection committee's choice. Final approval of any selected firm / team is subject to the action of the WSACC Board.

SOQ Submittal

SOQs should include the following sections:

- Project Team
 - Proposed Subconsultants (if any)
 - Brief Biographies for Key Team Members
- Experience and Approach

No "new work product" for the project may be part of the SOQs and/or presentation, and no "new work product" will be considered in the interview presentation or selection process.

The last day for questions on the RFQ is January 4, 2024. Questions must be submitted via email to Chad VonCannon at <u>cvoncannon@wsacc.org</u>.

SOQs shall be in a letter proposal format, and shall be submitted in sealed, clearly marked envelopes. The SOQ shall be submitted to the Water and Sewer Authority of Cabarrus County located at 232 Davidson Highway, Concord, N.C., 28027, before 2:00 p.m. January 11, 2024. Submittal envelope should be marked:

Statement of Qualifications – 'Incinerator Differential Pressure Equipment Study and Preliminary Engineering Report'

Attention: Chad VonCannon

Firms may change or withdraw their SOQs at any time prior to the due date by providing clear and concise written notice via email to WSACC. Withdrawal of a SOQ will not preclude a Consultant from submitting a new SOQ, provided that the new SOQ is properly submitted and received prior to the SOQ due date identified above.

Negotiations and Modification of Contract Documents

WSACC reserves the right to conduct negotiations with the Consultant regarding any remaining issues provided that the general work scope remains the same and that the field of competition does not change as a result of material changes to the requirements stated in the RFQ. If, in WSACC's sole discretion, it determines that the highest qualified Consultant is not responsive to the negotiation process, or that the parties will be unable to reach a mutually-acceptable Contract, WSACC may terminate negotiations with the Consultant. WSACC will then continue the process of negotiation with the next highest qualified Consultant until WSACC either successfully negotiates with a Consultant or cancels the procurement.

Conditions and Reservations

WSACC reserves the right to request substitutions of subconsultants. WSACC reserves the right to contact any Consultant if such is deemed desirable by WSACC to obtain any additional information including but not limited to experience, qualifications, abilities, and financial standing. WSACC reserves the right to conduct investigations with respect to the qualifications and experience of any Consultant. WSACC reserves the right to contact any firm/team to negotiate if such is deemed desirable by WSACC. WSACC reserves the right to reject any or all responses to the RFQ, to advertise for new RFQ responses, or to accept any RFQ response deemed to be in the best interest of WSACC. WSACC reserves the right to waive technicalities and informalities.

A response to this RFQ should not be construed as a contract, nor indicate a commitment of any kind. No binding contract, obligation to negotiate, or any other obligation shall be created on the part of WSACC unless WSACC and a firm jointly execute a contract.

Cost of SOQ Preparation

WSACC accepts no liability for the costs and expenses incurred by Consultants responding to this RFQ, in preparing responses for clarification, in attending interviews, participating in contract development sessions, or in attending meetings and presentations required for the contract approval process. Each Consultant that enters into the procurement process shall prepare the required materials and SOQ at its own expense and with the express understanding that the Consultant cannot make any claims whatsoever for reimbursement from WSACC for the costs and expenses associated with the procurement process. The RFQ does not commit WSACC to pay for costs incurred in the submission of a response to this RFQ or for any cost incurred prior to the execution of a final contract.