

**Contract # 1078 – 11/13/2015**

REQUEST FOR QUALIFICATIONS FOR PROFESSIONAL ENGINEERING SERVICES  
FOR PREPARATION OF A FACILITIES EVALUATION  
FOR THE TOWN OF VERNON'S WATER POLLUTION CONTROL FACILITY

GENERAL INFORMATION

The Town of Vernon, Connecticut, acting through its Water Pollution Control Authority, is requesting submittal of a Statement of Qualifications from engineering firms for services for the preparation of a Facilities Evaluation of the Town's Wastewater Treatment Facility (WWTF). It is the Town's desire to hire an engineering firm with significant wastewater treatment facility evaluation, design, and construction project experience. A Selection Committee will review the Statement of Qualifications of each firm and intends to interview some or all of the firms to further clarify the proposer's qualifications, project understanding and approach. The Town reserves the right to reject any and all submittals if it is determined to be in the best interest of the Town.

SITE TOUR

As part of the preparation of Statement of Qualifications, a site tour of the WWTF will be conducted for interested parties at **10:00 A.M. on Tuesday October 20, 2015**. This is not mandatory. In order to limit interruptions to the facilities operations staff, this will be the sole opportunity for interested parties to tour the facility.

PROJECT BACKGROUND AND SCOPE

The Vernon WWTF serves the Town of Vernon and portions of Ellington, Tolland, Manchester, and South Windsor. The WWTF was constructed in stages and has been treating wastewater at the same site since 1898. Wastewater flows have historically included a significant amount of colored industrial wastewater from dye factories as well as sanitary wastewater. In order to effectively remove color from the effluent, Vernon installed the first full-scale powdered activated carbon treatment (PACT) process, which was manufactured by Zimpro (now Siemens Water Solutions). The process has been in operation at Vernon's WWTF since 1978. A facility plan was developed in the late 1980's to address the need to reduce effluent ammonia, the facility was upgraded in the mid 1990's to provide nitrification.

The current treatment process includes wastewater screening, grit removal, primary settling, the activated sludge PACT process, effluent filtration and disinfection. Treated effluent is then discharged to the Hockanum River. Thickened primary sludge is hauled off site for ultimate disposal. Waste activated sludge is oxidized and the carbon is regenerated on site through a wet air regeneration system. The existing plant has a design average daily flow design capacity of 7.1 million gallons per day (mgd) with current average flows of approximately 4 mgd.

A draft NPDES permit has been issued and is expected to be finalized in the near future. The current draft permit includes the following effluent phosphorous limits that must be met within 4 years from the date of the adoption of this permit. Those limits are:

Average Monthly Limit	0.22 mg/L
Maximum Daily Limit	0.44 mg/L
Average Daily Load	4.56 lbs/day
Total Seasonal Load	976 lbs/season

As part of the compliance schedule for this permit the Town is required to retain a qualified consultant to meet these effluent goals in the time required. For this reason and to assess the best method to address updating and/or replacement of the plant's aging equipment and processes, the Town is undertaking this Facilities Evaluation.

While the actual scope of services will be negotiated with the successful proposer, it is expected that the facilities evaluation will address these major areas:

1. Evaluation of current and future flows to the wastewater treatment facility for the 20-year planning period.
2. Review of the current Water Pollution Control Plan and Sewer Service Area Map and identification of updates, as needed, to accommodate future sewer extensions and the most recent State of CT Plan of Conservation and development.
3. Assessment of needs and the development of recommendations for updating and/or replacing equipment, processes, and structures needed to provide reliable, cost-effective service for a twenty-year planning period.
4. Evaluation of the viability of re-used equipment and structures for the 20 year planning period.
5. Evaluation of the PACT process for continued operation and impact on nutrient limits.
6. Evaluation of energy conservation and efficiency.
7. Evaluation of upgrades to meet the NPDES permit limit for phosphorous, metals (Cu, Zn, Pb, Al, Fe) and general permit for nitrogen removal.
8. Assessment of needs and the development of recommendations for updating control systems and instrumentation for plant processes, SCADA and HVAC.
9. Consideration of performing an I/I study on the Vernon collection system funded in part by the Vernon WPCA.

The Facilities Evaluation will evaluate technical and economic feasibility and develop recommendations for upgrades to the existing treatment facilities to provide treatment capacity for the next 20 years. Recommendations will include a proposed project implementation plan, schedule, and an assessment of environmental impacts.

The results of the evaluation will be summarized in a draft report to the Town which will also be submitted to the Connecticut Department of Energy and Environmental Protection for review and approval. The contract awarded under this request for qualifications is expected to be funded in part by the State of Connecticut, Department of Energy and Environmental Protection, subject to the requirements contained in Section 22a-482-4(h), (i), and (o) of the regulations of Connecticut State Agencies, including MBE (3%) and WBE (5%) participation. The State of Connecticut will not be a party to this request for qualifications or any resulting contract.

## PROPOSER QUALIFICATIONS

The Statement of Qualifications should demonstrate the following capabilities:

- Overview of the firm and any sub consultants that it proposes to include on its team. Provide an organizational chart and identify the roles of each member of the team.
- Experience in the evaluation, design, and construction of upgrades of municipal wastewater treatment facilities.
- Demonstrate the ability to perform plant retrofits and upgrades while maintaining the present level of treatment and provide enough detail to show evidence that the firm understands the wastewater collection and treatment needs of the Town.
- Demonstrate knowledge and understanding of Vernon's wastewater treatment system and process.
- Ability and resources to complete a facilities evaluation with key engineering disciplines (Structural, Mechanical, Instrumentation, Electrical, and Geotechnical). Clearly identify and define subcontractor's roles in specific study areas.
- Provide a Principal and Project Manager who possess current registration as Professional Engineers.
- Provide a Principal and Project manager with a minimum of 10 years of experience with the evaluation, design, and construction of wastewater treatment facilities.
- Experience with the CT DEEP Clean Water Fund application and administration process.
- Provide a minimum of 3 client references for which the consultant has provided similar services
- Provide a description of any claims, litigation, and findings of any court, Arbitrator, Mediator or jury, and total settlement payments by all parties made during the past 5 years

Responses are limited to 30 pages excluding resumes. Resumes are limited to two pages each. A Qualification Based Selection (QBS) will be utilized in the selection of the Consultant in accordance with Connecticut DEEP requirements.

## SUBMISSION OF QUALIFICATION STATEMENTS

Please provide one (1) original, six (6) written copies, and one (1) electronic copy of the Statement of Qualifications, clearly identified as *Vernon WWTF Facilities Evaluation Project – Statement of Qualifications*. Statement of Qualifications shall be submitted to:

John D. Ward  
Town Administrator  
Town of Vernon  
14 Park Place  
Vernon, CT 06066

Submissions in response to this RFQ must be received at this location no later than 11:00 A.M. local time, on Friday November 13, 2015 at which time bids will be opened and read aloud. **Email, faxed or late bids will not be accepted.**

All questions about this RFQ should be directed to Robert Grasis, Director Vernon WCPA by e-mail at [rgrasis@vernon-ct.gov](mailto:rgrasis@vernon-ct.gov), no later than 3:30 p.m. on **Thursday October 29, 2015**. Answers will be provided in a written addendum with both inquiries and answers, without stating the source of the inquiry by **Friday November 6, 2015** on the Town's website under the bid section at <http://www.vernon-ct.gov/legal-notices> with the Contract #**1078 11/13/2015**.

The selected firm must meet all municipal, state and federal AA and EEO practices and requirements. MBEs/WBEs/SBEs are encouraged to apply. The Town reserves the right to reject any or all proposals in whole or part, to award any one service or group of services or all services, to negotiate with any or all companies submitting proposals, and to enter into an agreement with any company for any services mentioned in this RFP; if it is deemed to be in the best interest of the Town.

The Town of Vernon is an Equal Opportunity / Affirmative Employer