



CITY OF TAMPA, FLORIDA  
c/o Contract Administration Department  
306 E. Jackson Street # 280A4N  
Tampa, FL 33602

## RFQ 12-D-00012; HFCAWTP Nitrification Reactor Air Distribution System Improvements Design

PUBLIC ANNOUNCEMENT IN COMPLIANCE WITH REQUIREMENTS OF CHAPTER 287.055, LAWS OF FLORIDA, CONSULTANTS COMPETITIVE NEGOTIATION ACT, AS AMENDED AND THE CITY OF TAMPA'S EQUAL BUSINESS OPPORTUNITY PROGRAM

**RFQ- 12-D-00012** - The City of Tampa Wastewater Department desires to obtain professional Engineering Services to complete a study and design to improve the air distribution system for (4) Nitrification Reactors within the Howard F. Curren Advanced Wastewater Treatment Plant located at 2700 Maritime Blvd.

The current Nitrification Reactors run in a plug flow operation with fine bubble disc diffusers. The diffusers are arranged in a tapered air flow configuration with the highest concentration of diffusers in chamber 1 (inlet) and the least in chamber 6 (outlet). Each reactor is divided into six zones, or chambers, separated by baffle walls. The current air distribution system has had many premature failures of the membrane disc diffusers. In addition, due to the current use of manual air valves on the air drop legs used to control air distribution, it is difficult to balance the distribution of air to match variations of flow. The system is also designed to be capable of providing Biological Nitrogen Removal (BNR), but with the current air distribution system, this type of treatment cannot be used. The original design of the reactors also provided several features such as step feed, mixing, high rate recycle and individual chamber air control that are not being used to their full potential.

The Wastewater Department seeks to improve the air distribution system, the operating efficiency of the reactors, and the ability of the system to provide other methods of treatment. The ideal system will be a proven, reliable design that is cost effective and requires minimal maintenance. The system improvements should provide process flexibility and utilize automated control equipment. The components selected for the system shall be capable of withstanding a corrosive environment and shall be resistant to UV degradation. The Project will be completed in two phases.

Phase 1 will include a study to evaluate the current air distribution system for the Nitrification Reactors. Study shall provide recommendations to improve the operating efficiency and the flexibility of the system to provide alternative methods of treatment. The study should also provide recommendations to improve the reliability of the air distribution system. The Study shall include, but not limited to, evaluations of various improvement options and the associated cost vs. benefit of each option, process optimization, required equipment, and related controls. The study should also include process modeling of the proposed system in a program such as BioWin or a compatible equivalent. A prioritized list of recommended improvements and associated cost should be generated along with any required construction phasing. A design scope of the recommended improvements shall be provided that will be implemented in Phase 2.

Phase 2 will include preparing detailed contract drawings and specifications for construction of the recommended improvements generated in Phase 1. The design should include, but not limited to, a

complete signed and sealed set of construction plans including electrical instrumentation and controls, specifications, final cost estimate of project, preparation of construction documents for bidding, submittal and tracking of all regulatory permit applications, shop drawing review, and associated activities required during construction.

One pre-submittal conference and site will be held at 3 P.M. Tuesday November 15, in the Administration Building at the Howard F. Curren Advanced Wastewater Treatment Plant located at 2700 Maritime Blvd. Attendance is not mandatory. Directions and special instructions for accessing the site are posted along with a link to additional reference material at: [http://www.tampagov.net/dept\\_contract\\_administration/programs\\_and\\_services/architectural\\_engineering\\_construction\\_and\\_related\\_rfgs/index.asp](http://www.tampagov.net/dept_contract_administration/programs_and_services/architectural_engineering_construction_and_related_rfgs/index.asp). Unless otherwise posted on that web site, no further data will be available before the deadline established for the submission of Letters-Of-Interest.

Questions may be directed to Jim Greiner, P.E., Contract Administration, City of Tampa DPW, 4th Floor North, 306 E. Jackson Street, Tampa, Florida 33602; Telephone (813) 274-8598, Fax (813) 274-8080, or E-Mail [Jim.Greiner@tampagov.net](mailto:Jim.Greiner@tampagov.net).

Firms desiring to provide these services to the City must submit **A Single Electronic File in Searchable PDF format, Smaller than 3MB**, that includes a Letter of Interest referring to RFQ 12-D-00012, Statement of Qualifications and any supplemental material allowing evaluation for further consideration based upon the following criteria/point system: Successful Comparable Project Experience, (35); Wastewater Treatment Process Project Experience, (35); Workload and Availability, (15); Past Performance/Low amount of City work, (5); Standard Form #330 or #254, (5); Planned City Certified SLBE and/or W/MBE Participation, (5).

The PDF file must be addressed to: Steve Daignault, P. E., Chairman, Consultants' Competitive Negotiation Committee, City of Tampa – c/o CAD - 4th Floor North, 306 E. Jackson Street, Tampa, Florida 33602, then

E-Mailed to  
[ContractAdministration@tampagov.net](mailto:ContractAdministration@tampagov.net)  
**BEFORE 2 P.M.,**  
**Thursday, December 8<sup>th</sup>, 2011.**