

**PURCHASING DEPARTMENT
101 EAST 11TH STREET
SUITE G13
CHATTANOOGA, TENNESSEE
37402**

Request for Proposals (RFP) for the City of Chattanooga

Proposals will be received at 101 East 11th Street, Suite G13, Chattanooga, TN 37402 until 4:00 P.M., on March 10, 2017

**Requisition No.: 146244
Department.: Waste Resources
Buyer & e-mail: Geoffrey Hipp ghipp@chattanooga.gov**

Project: Biosolids Data Management System

*****PROPOSALS MUST BE RECEIVED BY***
4:00 P.M., Eastern on March 10, 2017**

The City of Chattanooga reserves the right to reject any and/or all proposals, waive any informalities in the proposals received, and to accept any proposal which in its opinion may be for the best interest of the City.

The City of Chattanooga will be non-discriminatory in the purchase of all goods and services on the basis of race, color or national origin.

**The City's Standard Terms and Conditions may be found on website:
(www.chattanooga.gov/purchasing/standard-terms-and-conditions)**

Note: ALL PROPOSALS MUST BE SIGNED

All proposals received are subject to the terms and conditions contained herein. The undersigned Offeror acknowledges having received, reviewed, and agrees to be bound to these terms and conditions, unless specific written exceptions are otherwise stated.

PLEASE PROVIDE THE FOLLOWING INFORMATION:

Company Name: _____
Mailing Address: _____
City & Zip Code: _____
Phone/Toll Free No.: _____
Fax No.: _____
E-Mail Address: _____
Contact Person: _____
Company Title: _____
Signature: _____

Request for Proposal

Biosolids Data Management System

City of Chattanooga, Tennessee

February, 2017



Section 1

Introduction

REQUEST FOR PROPOSAL
BIOSOLIDS DATA MANAGEMENT SYSTEM
FOR
MOCCASIN BEND WWTP
CITY OF CHATTANOOGA, TENNESSEE
(2/1/2017)

1.0 INTRODUCTION

1.1 BACKGROUND

A. General

The City of Chattanooga Moccasin Bend Wastewater Treatment Plant (City) is requesting proposals (RFP) from qualified firms for the purpose of selecting a biosolids data management system, support and services. The City is seeking a system to seamlessly integrate with its existing "Material ManagerTM" database.

B. Current Practices

The Moccasin Bend WWTP (MBWWTP) is owned, operated, and maintained by the City as a regional treatment facility. It has a rated secondary treatment capacity of 140 MGD and currently averages 65 MGD. It also produces approximately 70,000 wet tons per year of Class B biosolids. All of the biosolids are land applied by a contract land applier on farm and mine reclamation sites within a 75 mile radius of the MBWWTP.

Primary sludge (PS) solids collected by the MBWWTP are gravity thickened and are thermophillic/mesophillic anaerobically digested. The stabilized solids are chemically conditioned with polymers prior to being dewatered with "high G" centrifuges. The dewatered biosolids produce a cake that is 23-26% solids. The dewatered biosolids are post-limed with lime kiln dust. This produces a product that has pH greater than 11.5 SU and cake solids of 30-35%.

Waste activated sludge (WAS) solids produced by Moccasin Bend WWTP are gravity thickened. The thickened solids are transferred to the "hot water vacuum" filter press system for dewatering. Prior to dewatering, the thickened WAS is chemically conditioned with ferric chloride and lime. The dewatered cake produces a cake that is 52-58% solids with a pH greater than 11.5 SU.

C. Land Application Program

All the biosolids produced by the MBWWTP meeting the above specifications are land applied as Class B biosolids.

The land application contractor is responsible for meeting with local agricultural extension agents; coordinating with site owners, educating with site owners, and securing the use farms and mine reclamation sites; developing and producing site books of the permitting of each site; coordinating and conducting site visits with state regulatory agencies; collecting soil samples and having laboratory analyses performed before each application; and assisting with the preparation of site and annual reports. The land application contractor is also responsible for all on site handling of biosolids at MBWWTP; loading and transportation of biosolids to application sites; application of biosolids at prescribed rates; and site and area cleanup.

D. Sampling

Weekly composite samples are collected and analyzed for solids content, pH, N, P, K, Mn, Mg, and calcium carbonate equivalence, as well as 40 CFR Part 503 metals for each of the two (2) biosolids processes. Samples from each biosolids process are tested monthly for boron and sulfur. Permit requirements may change the amount, number or frequency of the above-noted tests, as well as require additional testing not noted above. At the beginning of each month, samples are collected weekdays from each process and tested for fecal coliforms, until a total of 7 samples are obtained for each. The pH is analyzed on a representative sample of each product each day. For the filter press, a separate sample is measured for each press that is run. For the centrifuge, one sample is analyzed for each building operating.

E. Data Management

MBWWTP utilizes relational database programs based on Microsoft Access. These programs are WIMS, and ASPEN LIMS. WIMS is a product of the Hach Company, while Aspen was originally written by Telecation.

1.2 PURPOSE OF RFP

A. General

This RFP results from the City's desire to provide a cost-effective and effective solution for the management of biosolids data related to its land application program

B. Objective Of RFP

It is the objective of the City to evaluate various biosolids data management systems and select one that meets the needs of the City and regulatory agencies.

Section 2

Instructions to Proposers

2.0 INSTRUCTIONS TO PROPOSERS

2.1 INTRODUCTION

The purpose of this section is to inform prospective Proposers of the process that will take place as a result of this RFP. The information contained herein discloses all details about dates, times, and places as they pertain to this RFP.

2.2 ISSUING OFFICE

This RFP shall be governed by the laws of the State of Tennessee, and is issued for the City by the Purchasing Department of the City of Chattanooga.

2.3 RESPONSE DATE

- A. All Proposals shall be submitted no later than March 10, 2017 to the attention of:

City of Chattanooga Purchasing
Attn: Geoffrey Hipp, Buyer
101 East 11th Street, Suite G-13
Chattanooga, TN 37402

- B. Sealed Proposals to be considered shall arrive at the Issuing Office on or before the time and date referred to above.

2.4 PROPOSAL FORMAT

- A. Quantity and Format

Two (2) hard copies and one (1) electronic copy in MS Word format on a CD of the Proposal shall be submitted. All Proposals shall be submitted in a sealed envelope or box marked **"Proposal(s) for BIOSOLIDS DATA MANAGEMENT SYSTEM FOR MOCCASIN BEND WWTP, CITY OF CHATTANOOGA, TENNESEE"**. The original and copies of the Proposal shall be indexed with tabs for each section of the Proposal and shall follow the content outline in **Section 3**.

- B. Implied Requirements

All products and services not specifically mentioned in this RFP, but which are necessary to provide the functional capabilities described by the Proposer, shall be included in the proposal.

- C. Proposer-Supplied Materials

Any material submitted by a Proposer shall become the property of the City unless otherwise requested at the time of submission. Any material considered confidential in nature shall be so marked.

D. Incurring Costs

The City shall not be liable for any cost incurred by Proposers prior to the issuance of a contract purchase agreement for the proposed biosolids data management system and will not pay for information solicited or obtained.

E. Economy of Preparation

Proposals shall be prepared simply and economically. Proposals shall provide a straightforward and concise description of the biosolids data management system proposal. Colorful bindings, displays, promotional materials, etc. are not desired. Emphasis shall be placed on clarity and content. Lengthy proposals may be viewed as attempts to obfuscate issues and may be rejected.

2.5 PROPOSAL WITHDRAWAL PROCEDURE

Proposals may be withdrawn up until the date and time set above for opening of proposals. Any proposal not so withdrawn shall, upon opening, constitute an irrevocable offer for a period of ninety (90) days to provide the services set forth in the proposal or until one of the proposals has been accepted and a contract has been executed between the City and the successful Proposer.

2.6 RESERVATION OF CITY RIGHTS

- A. The City reserves the right to request clarification of information submitted and to request additional information of one or more Proposers.
- B. The City reserves the right to negotiate this contract for the work covered by this RFP with the next most qualified finalist if the successful finalist does not execute a contract within fifteen (15) days after submission of a contract by the CITY. The City reserves the right to negotiate all elements that comprise the selected Proposer's proposal.
- C. The City reserves the right, after opening the proposals or at any other point during the selection process, to reject any or all proposals, modify or postpone the proposed project, evaluate any alternatives offered or accept the proposal that, in the City's sole judgment, is in its best interest.
- D. The City reserves the right to terminate the contract if the Contractor fails to perform the work described herein or provide timely payment of revenues due the City upon giving the Contractor a 30 (thirty) day written notice of the intention to do so.
- E. The Proposer shall comply with rules and conditions found in the City of Chattanooga, Purchasing Department's "General Conditions and Instructions to Bidders" that are apart of this RFP for the equipment or services specified herein.

2.7 ADDITIONAL REQUESTS FOR INFORMATION

Requests for information or clarification will be received until February 17, 2017. Such requests should be sent shall be sent to:

City of Chattanooga Purchasing
Attn: Geoffrey Hipp, Buyer
101 East 11th Street, Suite G-13
Chattanooga, TN 37402
or
e-mail: ghipp@chattanooga.gov

The City specifically requests that any contact concerning this Request for Proposal to be made exclusively with the Buyer until selection has been completed. Failure to honor this request will be negatively viewed in the selection process.

Section 3

Proposal Contents

3.1 GENERAL INFORMATION

The Proposer shall provide the following general information:

- A. Identify the name, address, telephone, and facsimile numbers of the Proposer and the principal contact person.
- B. Identify the type of firm or organization and describe the entity that will serve as the contracting party.
- C. Provide the history, ownership, organization, and background of the Proposer.

3.2 QUALIFICATIONS AND EXPERIENCE

The Proposer shall provide the following regarding technical qualifications and experience dealing with biosolids data management systems:

A. General Experience

Provide a summary of the experience of the Proposer's Project Team working together on or with biosolids data management system projects.

B. Design Experience

If applicable, provide a summary of the engineering and design experience of the Project team working together for the development and implementation of biosolids data management projects.

The information submitted shall demonstrate experience with project design and software development as reflected on completed projects.

C. Regulatory Compliance and Permitting Experience

Provide a summary of the experience of the Project team working together with regulatory compliance of biosolids data management projects.

D. Project Team Members Experience

Provide resumes of the Proposer's Project Team including the Project Manager and all key technical personnel for biosolids data management projects and/or other projects as applicable to their proposal.

E. Previous Experience With Similar Projects

The Biosolids Management Database System (Application) shall have demonstrated performance and reliability based on the number of active Application installations and a minimum number of years of continuous Application usage (minimum of two years by 5 users).

Provide a list of at least five (5) biosolids data management projects or similar type project(s) during the past two (2) years. Include name of each project, description of each project, location of each project, and name, address and phone number of owner's contact person.

3.3 PROPOSAL SCOPE OF WORK

A. General Scope of Work

1. The Proposer shall provide all labor, benefits, equipment, materials, insurance, transportation, and other related services required in connection with the development and implementation of the City's biosolids data management system.
2. The Proposer shall meet all necessary biosolids data requirements from all federal, state, and local regulatory agencies related to the land application disposal of the City's biosolids.
3. The Proposer shall format all reports and certifications as required by all applicable EPA and/or State regulations for land application.

B. Specific Scope of Work

1. The Proposer shall provide a biosolids data management system software application (Application) that will seamlessly assimilate the City's biosolids handling, transportation and land application program both at the MBWWTP and Land application contractor's remote office.
2. The Application shall be developed using Microsoft's Access relational database software version 2000 or later.
3. The Proposer shall provide any 3rd Party software necessary to make the Application work efficiently and effectively.
4. The Proposer shall provide a minimum of four (4) licenses for the Application and free support for the first year.
5. The Application shall include the capability to print/archive data output in the following file formats:
 - a. pdf (Adobe Acrobat); and
 - b. snp (Microsoft Snapshot)
6. The Application shall have the following functional (i.e. computational and data storage) capabilities:

- a. Calculate and track Cumulative Pollutant Loading Rate (CPLR) in accordance with USEPA guidance found in "A Guide for Land Appliers on the Requirements of the Federal Standards for the Use of Disposal of Sewage Sludge, 40 CFR Part 503", Appendix B, *Worksheet for Tracking Cumulative Pollutant Loading Rates* (EPA/831-B-93-002b), December, 1994) and that satisfies the City's requirements.
 - b. Calculate by Tennessee Department of Environment and Conservation (TDEC), Alabama of Environmental Management (ADEM), and Georgia Environmental Protection Department (GEPD) protocol the biosolids nitrogen loading rate using crop type, crop yield goal, biosolids analytical results and application method data while accounting for other applied nitrogen sources;
 - c. Calculate, pending final guidance from TDEC, ADEM, and GEPD biosolids loading rate based upon crop phosphorus requirements and indexed phosphorus source availability;
 - d. Ability to import data electronically from external sources (e.g. analytical laboratory data; biosolids production data, and contractor land application data) provided an appropriate data importing format can be provided by the external source;
 - e. Provide the opportunity to manually establish a baseline CPLR for any land application site field;
 - f. Calculate and track CPLR automatically based on Application-stored biosolids analytical results and biosolids field application event data; and
 - g. Track biosolids nutrient application on the basis of Calendar Year (twelve consecutive months beginning in January and ending in December) and Crop Year (the Calendar Year in which a crop is harvested which may be different than the Calendar Year in which it is planted).
7. The Application shall have the following electronic data reporting capabilities:
- a. Be customized to present data in a format acceptable to the Tennessee Department of Environment and Conservation (TDEC), Alabama Department of Environmental Management (ADEM), Georgia Environmental Protection Division (GEPD) and the United States Environmental Protection Agency (USEPA) providing information to satisfy annual operating reporting requirements;

- b. Compile data detailing biosolids field application activity filterable (i.e. electronically sorted) by land application site, land application site field, application event year and biosolids source;
- c. Compile data detailing the allowable biosolids loading rate for each land application site field according to the requirements in 3b above in a format acceptable to the City and/or TDEC, ADEM, and GEPD;
- d. Calculate and display the nitrogen application status for any selected land application site field by application event year using data stored in the Application;
- e. Compile the following reports that are intended to be for City use:
 - 1) Report detailing biosolids production by month and year;
 - 2) Report detailing biosolids disposition by month and year;
 - 3) Report detailing the 'real-time' nitrogen application status of each land application site field to show the amount of nitrogen applied in a Calendar Year (actual pounds per acre) against the amount that was calculated as allowable (remaining nitrogen balance in pounds per acre for the Calendar Year).
 - 4) Report detailing the nutrient and pollutant status of each land application site field in graphic and textual format.
 - 5) Report presenting a summary of soil and biosolids analytical data;
 - 6) Report summarizing land application site and land application site field information;
 - 7) Report summarizing biosolids field application events filterable by land application site, land application site field, and application year; and
 - 8) Report summarizing data used to calculate biosolids loading rate.
 - 9) Development of site books for the purpose of acquiring permits from regulatory agencies for and application on farms and other sites.

8. Training

- a. The Proposer shall provide all onsite training for the City's Application technician, end users, and support personnel required for the implementation and use of the Application software supplied making the system function properly.
- b. Training shall consist of classroom type and hands-on type training.
- c. Training shall be user friendly and developed and performed at the education level of those being trained.
- d. A minimum of 40 hours onsite training shall be provided.
- e. The Proposer shall provide an onsite training plan that includes schedules and timetables. The training plan shall include on-site training for all users of the system including but not limited to: end users, supervisors, system administrators, database managers and technical support staff.
- f. Training shall be provided on the same system and hardware to be installed.
- g. The training shall include but not be limited to all Application Software and any 3rd Party software.

9. Systems Administration

- a. The Proposer shall provide training to assist the on-site City's Application technician in isolating and resolving basic problems and provide front line support for the system.
- b. The Proposer shall provide training to assist the on-site City's Application technician with the task of administering and managing the Application. It is intended for the support staff to provide a liaison relationship between the Proposer's technical support staff and City management.

10. Project Implementation

- a. The Proposer shall provide a Project Manager who will be the point of contact for the duration of the Agreement..
- b. This Project Manager must be accessible at all times during the implementation and available on site as much as necessary in order to complete the implementation successfully, on time and on budget.

- c. The Project Manager must be knowledgeable and experienced in biosolids data management functions and in the Application.
- d. The Proposer shall provide a project implementation plan describing both the City and Proposer responsibilities.
- e. The project plan shall describe all tasks associated with the implementation of the system, including data conversion.
- f. The Project Manager shall be on site to provide needed assistance at the time the system goes live and at final installation and implementation.

11. Project Schedule

The project schedule shall include the requirement that the City be using the application in production by **90 days after the effective date of the Agreement** unless additional time is otherwise mutually agreeable to the City and the Proposer.

12. Acceptance Test Plan

- a. The Proposer shall provide a System Acceptance Test Plan to demonstrate all functionality proposed in the contract during the development of the implementation plan.
- b. The Proposer shall provide a Methodology for Corrections and Compliance of problems identified during the acceptance test. The City shall have the right to approve the acceptance test plan and related methodologies prior to implementation.
- c. The software shall operate for a minimum of 30 days of error free operation following live cut over and prior to the Final Acceptance of the system by the City.

13. Documentation

- a. The Proposer shall provide written documentation on the Application and all administrative and operational components of the system.
- b. The documentation shall be provided in both written and electronic formats.
- c. The online documentation shall make extensive use of search and indexing functionality.

3.4 City-Supplied Services

The City will provide the following as apart of the project:

- A. The City will provide access to its WIMS and LIMS software modules.
- B. The City will provide all of the computer hardware and software operating systems recommended by the Proposer to develop and implement the biosolids data management system.
- C. The City will provide space for Proposer to perform work and training.
- D. The City will designate a person to coordinate this work with the Proposer.
- E. The City will provide copies of all related biosolids reports from MBWWTP.

3.5 Proposal Cost Summary Form

The Proposer, being familiar with the requirements of the City's Request for Proposal for a Biosolids Data Management System proposes to furnish services to the City in accordance with that request.

The summary below reflects projected City costs for the solution acquisition and implementation. Supporting detail shall be attached describing hourly rates, projected expenses, software and hardware expenses, annual support and maintenance, discounts along with any other detail that will lead to a clear understanding of the proposal.

ITEM	COST
Project Management	_____
Application (w/ four licenses)	_____
Implementation Costs of Application	_____
Data Migration/Conversion	_____
Training	_____
All Other Costs (provide detail)	_____
Annual Maintenance and Support	_____
TOTAL	_____

Note: The Proposer shall provide the following:

1. Identify and list additional City Purchase Requirements
For Hardware and Software - not supplied by the Proposer
2. Proposer's Hourly rate schedule _____
For future Additional Support

Section 4

Review and Evaluation of Proposal

4.0 REVIEW AND EVALUATION OF PROPOSAL

4.1 REVIEW COMMITTEE

A committee consisting of individuals selected by the City will receive all proposals submitted. The City, in its sole judgment, will decide if a proposal is viable.

4.2 SELECTION CRITERIA

Selection of one (1) Proposer's Biosolids Data Management System for contract negotiation will be based on an objective evaluation of the following criteria for each proposal:

- A. Price (relative value to the City compared to the cost)
- B. Overall project approach, including thoroughness, reliability, implementability, and public acceptability.
- C. Environmental and regulatory acceptability of the proposed method.
- D. Experience and capabilities of the Proposer to provide biosolids data management systems.

4.3 SELECTION OF FINALIST

After the review of the proposals by the Review Committee and formal presentations, the City may, at its sole option, elect to reject all proposals or elect to pursue the project further. An on-site demonstration may be required of the finalists. In the event that the City decides to pursue the project further, the City will select the highest ranked finalist to negotiate an agreement.

Chapter No. 817 (HB0261/SB0377). "Iran Divestment Act" enacted.

Vendor Disclosure and Acknowledgement

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to § 12-12-106.

(SIGNED)

(PRINTED NAME)

(BUSINESS NAME)

(DATE)

For further information, please see website:

https://www.tn.gov/assets/entities/generalservices/cpo/attachments/List_of_persons_pursuant_to_Tenn._Code_Ann._12-12-106,_Iran_Divestment_Act-July.pdf

Affirmative Action Plan

The City of Chattanooga is an equal opportunity employer and during the performance of this Contract, the Contractor agrees to abide by the equal opportunity goals of the City of Chattanooga as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, or handicap. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, national origin, or handicap. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, or handicap.
3. The Contractor will send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice advising said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. During the term of all construction contracts or subcontracts in excess of \$10,000 to be performed for the City of Chattanooga, the following non-discriminatory hiring practices shall be employed to provide employment opportunities for minorities and women:
 - a. All help wanted ads placed in newspapers or other publications shall contain the phrase "Equal Employment Opportunity Employer".
 - b. Seek and maintain contracts with minority groups and human relations organizations as available.
 - c. Encourage present employees to refer qualified minority group and female applicants for employment opportunities.
 - d. Use only recruitment sources which state in writing that they practice equal opportunity. Advise all recruitment sources that qualified minority group members and women will be sought for consideration for all positions when vacancies occur.

5. Minority statistics are subject to audit by City of Chattanooga staff or other governmental agency.
6. The Contractor agrees to notify the City of Chattanooga of any claim or investigation by State or Federal agencies as to discrimination.

(Signature of Contractor)

(Title and Name of Company)

(Date)