



Agenda Commentary

Item Title/ Subject: Disinfectant Plan for Water System

Staff Source: City Manager, Steve Hewitt

Date: Nov. 16, 2012

History/Background Information:

Areas of our Water Distribution System struggle to maintain Chlorine levels due to low flow. To keep the water safe for consumption, the City has practiced Flushing Hydrants, which resolves the concerns on a temporary basis. Staff must do this nearly every day to maintain safe levels. Thousands of Gallons of Water is wasted.

Subject Summary:

Clinton (as many communities) has some older metal water lines that have sediment built up (mostly iron residue). Flushing causes much of this sediment to break apart which creates the discolored water and bad taste (however it is safe). This will travel throughout our system. It is impossible to replace all the lines tomorrow and locating the worst issue is an on-going daily operation. The Goal is to treat the water at the locations needed with a Chlorine Booster. To have this put in place, it requires an Engineering report and plan of action. PEC can provide this and we hope to obtain a permit and place a booster at the needed location to resolve the water quality issue and cause some relief with the discoloration issue.

Recommendation:

The contract proposal from PEC is within my authorization capability as a City Manager to authorize. However, I want the Council and the Community to be aware that we are working towards a resolution. Other issues have contributed to the problem (drought, temperatures, and the 100% Foss Water chemical combination in our lines).

Staff (Severn Trent and City PWA Director) will be providing an update of what actions/steps are being taken and this one element.

Staff recommends (this is required for DEQ permitting) the approval of this contract. This will conserve water (stop with the waste of flushing) and help the sediment discoloration, and chlorine disinfection levels will be resolved.

This project could take more than 6 months waiting for DEQ permitting authorization.

Price/Cost: Not to Exceed \$9000.00

November 8, 2012



City of Clinton
415 Gary Blvd
Clinton, OK 73601

Attention: Mr. Steve Hewitt, City Manager

Reference: East Clinton Disinfectant Residual Optimization Study
PEC Project No. 12K14-6994

Dear Mr. Hewitt:

This letter is written to serve as an agreement between the City of Clinton, Oklahoma, (OWNER) and Professional Engineering Consultants, P.A. (PEC) to perform professional services to assist the City of Clinton in developing methods to maximize disinfectant residual levels in the areas identified above, hereinafter called the PROJECT.

Specifically, PEC proposes to perform the Scope of Services as outlined in Paragraph A below.

A. Scope of Services:

Task 431.a – Environmental – East Clinton Disinfectant Residual Optimization Study

1. Conduct one (1) onsite field meetings with water distribution staff to gain a better understanding of the operational function of the water distribution system.
2. Develop trip report and submit to the OWNER.
3. Evaluation of nitrification testing and results.
4. Develop distribution system nitrification evaluation technical memorandum.
5. Utilize nitrification testing data to evaluate storage tower operation and determine the potential effectiveness of mechanical mixing.
6. Utilize nitrification testing data to evaluate storage tower biofilm growth.
7. Utilize residual testing data to determine proper locations for the injection of 12.5% sodium hypochlorite, 19% aqua ammonia and/ or both.
8. Ten (10) hard copies and one (1) electronic copy of each deliverable shall be provided to the OWNER at no additional cost.
9. Present study findings to OWNER during a maximum of one (1) stakeholder workshop.
10. At the conclusion of the study, an approvable ODEQ engineering report and construction plans letter contract will be submitted to the OWNER for consideration.

B. Responsibility of OWNER:

The OWNER agrees to provide the following items pursuant to PEC accomplishing the Scope of Services outlined herein:

1. Provide available data such as water usage records, functionality of storage towers, and total chlorine residuals.
2. Physical works and all necessary lab costs associated with nitrification testing.
3. Provide other information requested by PEC to assist in the development of the final deliverable.

C. Exclusions:

The following items are specifically excluded from the Scope of Services provided by PEC:

1. Modeling of distribution system including but not limited to storage tanks.
2. Review of any CT calculations as may be required by ODEQ in accordance with the 1986 SWTR.
3. If required, variance negotiations with ODEQ.
4. Coordination with OWRB or any other financing sources to obtain funds for construction.
5. Investigation of taste/ odor issues, LCR, LTLCR, TCR, RTRC, investigations of alternative Stage 2 D/ DBP Rule (including but not limited to TOC/ DOC removal) and/ or LT2ESWTR compliance strategies, and oversight of pilot testing.
6. Evaluation and assessment of the facility security.
7. Review and recommendations of the Water Treatment Facility RMP in accordance with EPA 40 CFR Part 68.
8. Employee notification, personnel protective equipment, hazard assessment, training program, and respiratory protection program as described under OSHA 29 CFR Part 1910.
9. Notification requirements as described under EPA 40 CFR Part 370.
10. Documentation and reporting requirements as described under EPA 40 CFR Part 302, Part 355 and Part 372.
11. Notification requirements to the State Emergency Response Commission and Local Emergency Response Commission as described under EPA 40 CFR Part 355.
12. Vulnerability assessment as required under the Bioterrorism Act of 2002.
13. All associated ODEQ permitting costs.

D. Payment Provisions:

PEC proposes to perform the Scope of Services described above at a rate of 2.95 times direct labor cost, plus reimbursable expenses, for a not to exceed (NTE) amount of \$9,000.

Unless otherwise agreed upon, billings will be made monthly based on completion of the items listed above.

Taxes are not included in stated fees. OWNER shall reimburse PEC for any sales, use and value-added taxes, which apply to these services.

E. Time of Performance:

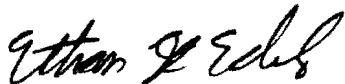
PEC proposes to begin work on the PROJECT within five (5) business days following receipt of an executed copy of this agreement and to complete the Scope of Services in accordance within thirty (30) business days, exclusive of any delays beyond the control of PEC.

This letter and the Standard Conditions attached hereto comprise the entire agreement between the OWNER and PEC. They may be altered only by written supplemental agreement agreed to by both parties. Furthermore, this agreement may be canceled by OWNER, for any reason, by providing PEC with thirty (30) day prior written notice.

Thank you for contacting us to provide professional services on the subject PROJECT. Should you have questions or need additional information, please do not hesitate to call. Return receipt of an executed copy of this letter will serve as our contract and notice to proceed with the work.

Very truly yours,

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.



Ethan J.L. Edwards, P.E.
Tulsa Division Manager/Principal

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

By: Ethan J.L. Edwards
Ethan J.L. Edwards, P.E.

Date: 11/8/12

City of Clinton, Oklahoma

By: _____

Title: _____

Date: _____

ATTEST:

By: _____