

September 14, 2009

ADDENDUM NO. 1

RE: City of Rocky Ford
Water Treatment Plant Improvements
050-015

FROM: City of Rocky Ford, Colorado
Dan Hyatt – City Manager
203 S. Main
Rocky Ford, CO 81067

TO: Plan Holders

This addendum forms a part of the contract documents and modifies the original Bidding Documents dated May 18, 20089 generally identified as the Water Treatment Plant Improvements, as noted below.

Bidders shall acknowledge receipt of this addendum in the space provided on the Bid Form (Section 00410-1). Failure to acknowledge receipt of this addendum may subject the bidder to disqualification.

This addendum consists of 9 pages, including the following attachments:

- A new Advertisement for Bids (00100), establishing the following date as coordinated with Joe Kost, Area Director of Rural Development Area Office, Los Animas, CO.

Bid Opening Date: October 20, 2009
Bid Opening Time: 11:00 a.m. (Local Time)
Bid Opening Location: City Hall, 203 S. Main Rocky Ford, CO

- Appendix A – Permits and Approvals which includes the following letters of approval from the Colorado Department of Health and Environment:

Changes to Specifications:

1. Section 00200 – Article 3 – Qualifications of Bidders
Add Subsection 3.01.D
 - D. The Bidder shall take affirmative steps to assure that small, minority and women’s businesses are used, when possible, in procuring all subcontractors and sources of supplies, equipment and shall to the extent practicable procure goods and services from labor surplus area firms. Each Bidder shall submit, as part of its bid package a written statement evidencing that Bidder has taken affirmative steps to utilize small, minority and women’s businesses. Affirmative steps are set forth in Article 18.06 of the Standard General Conditions (00710) and consist of
 - (1) Including qualified small, minority and women’s business on solicitation lists.
 - (2) Assuring that small, minority and women’s businesses are solicited whenever they are potential sources.
 - (3) Dividing total requirements when economically feasible, into small tasks or quantities to permit maximum participation of small, minority, and women’s businesses.
 - (4) Establishing delivery schedules, where the requirements of the work permit, which will encourage participation by small, minority and women’s businesses.
 - (5) Using services and assistance of the Small Business Administration and the Minority Business Development Agency of the U.S. Department of Commerce.
 - (6) Requiring each party to a subcontract to take affirmative steps as indicated.
 - (7) Procure goods and services from labor surplus area firms.
2. Section 00200 – Article 5 – Pre-Bid Conference
Revise Section 5.01
 - 5.01 A Pre-Bid conference will be held at **1:00 p.m. on October 6, 2009 at the Rocky Ford City Hall, 203 S. Main Street Rocky Ford, CO 81067.** Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.
3. Section 00200 – Article 14 – Basis of Bid: Comparison of Bids
Remove Section 14.02 in its Entirety

Advertisement for Bids

City of Rocky Ford, Colorado

Owner

203 S. Main, Rocky Ford, Colorado 81067

Address

Separate sealed Bids for the construction of:

The Water Treatment Plant Improvements for the City of Rocky Ford, Colorado: Major elements of the work include miscellaneous piping improvements, clarification improvements (addition of plate settlers), filter improvements (replacement of filter blocks and media, addition of air scour, and piping improvements), a building addition, addition of ultraviolet disinfection reactors, chemical feed improvements, as well as SCADA and Instrumentation Improvements etc.

Will be received by

The City of Rocky Ford, or associated project representative

at the office of

The City of Rocky Ford, 203 S. Main Rocky Ford, Colorado 81067.

Until **11:00 a.m.**, (Local Time) **October 20, 2009** and then at said office publicly opened and read aloud.

The Contract Documents may be examined at the following locations.

City of Rocky Ford
203 S. Main
Rocky Ford, Colorado 81067

TST Inc. of Denver
9222 Teddy Lane
Lone Tree, Colorado 80124
(303) 792-0557

Additionally Contract Documents will be forwarded to the following Plan Rooms, for the public during the bidding process:

ISQFT Plan Room
308 W. Fillmore Street #101
Colorado Springs, CO 80204
(800) 364-2059

MHC-AGC Dodge Plan Room
1114 W. 7th St. , Suite 100
Denver, CO 80204
(303) 584-6711

Copies of the Contract Documents may be obtained at the Issuing Office, TST Inc. of Denver, located at 9222 Teddy Lane Lone Tree, Colorado 80124 upon payment of \$75.00 for each set.

Daniel R Hyatt
City Manager

APPENDIX A

PERMITS AND APPROVALS

STATE OF COLORADO

Bill Ritter, Jr., Governor
James B. Martin, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.
Denver, Colorado 80246-1530
Phone: (303) 692-2000
TDD Line (303) 691-7700
Located in Glendale, Colorado
<http://www.csphe.state.co.us>

Laboratory Services Division
8100 Lowry Blvd.
Denver, Colorado 80230-6928
(303) 692-8090



Colorado Department
of Public Health
and Environment

July 9, 2007

Daniel R. Hyatt
City of Rocky Ford
P.O. Box 471
Rocky Ford, CO 81067

Subject: Water Treatment Plant Improvements Approval; City of Rocky Ford;
(PWSID #CO0145600); Otero County

Dear Mr. Hyatt:

The Water Quality Control Division (the Division) has received and reviewed the plans and specifications for the above mentioned project in accordance with Article 1.11.2 of the *Colorado Primary Drinking Water Regulations (CPDWR)*. The design meets or exceeds the requirements of the *State of Colorado Design Criteria For Potable Water Systems (Design Criteria)* and is approved subject to the following performance conditions:

- To receive disinfection credit for ultraviolet (UV) treatment, the City of Rocky Ford will be required to treat at least 95% of the water delivered to the public during each month by UV reactors operating within validated conditions for the required UV dose. The two specified WEDECO UV reactors are capable of treating 3 MGD each, which is adequate for the current plant operations. If the plant operates at the maximum capacity of 5 MGD, additional reactors will be needed to provide 5 MGD of firm capacity.
- The Long Term 2 Enhanced Surface Water Treatment Rule requires PWS's to monitor their UV reactors to demonstrate that they are operating within the range of conditions that were validated for the required UV dose. At a minimum, PWS's must monitor each reactor for flow rate, lamp status, and UV intensity as measured by a UV sensor. The City of Rocky Ford is also specifying a UV Transmittance sensor for a Calculated Dose Approach as a Dose Monitoring Strategy. Please be aware that the State will require the monthly reporting of the above mentioned data to show that the reactors are operating within validated conditions.

This approval addresses the following items:

- Chemical feed system improvements including replacement of alum feed pumps and polymer feed pumps.
- Clarification Process Improvements including the addition of variable frequency drives for the flash mixers and flocculation basin turbines, plate settlers and a hoseless cable vac system for sludge removal;

Daniel R. Hyatt
City of Rocky Ford
July 9, 2007
Page 2

- Filtration Improvements including new Leopold Type SL Universal Underdrain system with IMS Cap, FilterWorx Automatic Control System, air scour system, new wash water troughs, sand and anthracite replacement;
- Chlorine Disinfection Improvements including two new chlorine gas feeders for injection at the combined filter effluent and post UV reactor location, addition of a new chlorine gas monitoring system and addition of serpentine baffling to the clearwell;
- Two (2) WEDECO BX1800 EPA Ultraviolet Disinfection reactors with a capacity of 3.00 MGD each, capable of delivering a minimum dose of 12 mJ/cm² under validation conditions. The reactors will be installed downstream of the high service pumps;
- Instrumentation and SCADA system improvements including the addition of an online influent turbidimeter, pH and temperature units, filter influent turbidimeter, and filter influent streaming current analyzer; and
- All associated piping and appurtenances.

All change orders or addenda that address treatment or piping must be submitted to this office for review and approval by the Division.

Prior to commencing routine operations, a written certification from the design engineer and the City of Rocky Ford stating that the system was constructed as approved and the operational starting date must be submitted to the Division.

In accordance with the current Colorado Operators Certification Board regulations, the City of Rocky Ford water supply system is required to be under the responsible control of a Class "B" water treatment operator and a Class "2" distribution system operator. According to our records, the plant is under the responsible charge of Mr. Tom Hamilton. Our records state that Mr. Hamilton currently holds a Class "C" water treatment plant certification and a Class 2 distribution system operator certification that expired on May 31, 2004. Mr. Hamilton will need to upgrade his water treatment certification for the surface water treatment plant and distribution system certification. Please contact Betsy Beaver, of the Facility Operator Program, at (303) 692-3503 to apply for an interim compliance schedule and for information regarding the certification process.

Approval of this project is based only upon engineering design to provide safe potable water, as required by the CPDWR and shall in no way influence local building department or local health department decisions on this project.

If construction of the treatment facility is not commenced within 365 days of this letter, the Division's approval will expire. All information will be required to be updated and resubmitted for review and approval by the Division.

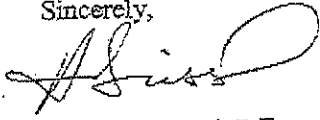
Please direct any further correspondence regarding this approval to:

Daniel R. Hyatt
City of Rocky Ford
July 9, 2007
Page 3

Heather Drissel, P.E.
Colorado Department of Public Health and Environment
Water Quality Control Division
4718 N. Elizabeth St., Suite B
Pueblo, CO 81008

If you have any questions or comments, please call me at 719-545-4650 ext. 16.

Sincerely,



Heather Drissel, P.E.
Engineering Section
Water Quality Control Division

cc: Glendon W. Berrett, P.E., TST Inc. of Denver Consulting Engineers
Otero County Health Department
Betsy Beaver, WQCD-Facility Operator Program
Erica Kannely, WQCD-CADM, DW File

ec: David Knope, WQCD-ES
Suzanne Pagorek, WQCD-CADM

STATE OF COLORADO

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Colorado Department
of Public Health
and Environment

PUEBLO DISTRICT OFFICE
4718 North Elizabeth Street, Suite B
Pueblo, Colorado 81008-2054
Phone (719) 545-4650 FAX (719) 543-8441

June 9, 2009

Daniel Hyatt
City of Rocky Ford
512 N. Main St.
P.O. Box 471
Rocky Ford, CO 81067

Subject: Review and Approval for Design Approval Extension and Alternate Ultraviolet Disinfection System(s),
City of Rocky Ford, PWSID No. CO145600, Otero County

Dear Mr. Hyatt:

The Water Quality Control Division (the Division) has received and reviewed the request for a Construction Approval Extension from TST Inc. for the City of Rocky Ford in accordance with conditions from the July 9, 2007 Construction Approval letter from the Division. The request states that loan conditions from the Rural Development Administration required that alternate ultraviolet disinfection (UV) equipment be provided and that construction was not begun within 365 days of the original approval. Given that UV is an emerging technology, the Division needed to review each proposed unit to ensure that they would be capable of performing comparably to the previously approved Wedeco UV treatment equipment.

The Division understands that the Ozonia North America UV reactor was not compatible with the original piping design and has been removed from consideration. This approval letter only addresses the Siemens and Trojan UV systems. All items from the Division's March 25, 2009 letter have been satisfactorily addressed in the submittals received from TST Inc. April 15, 2009 and May 20, 2009. The alternate reactors meet the requirements of the State of Colorado Design Criteria for Potable Water Systems and the Colorado Primary Drinking Water Regulations and are hereby approved for use in this project with the following conditions:

1. UV monitoring and reporting requirements have not been finalized. Once reporting and monitoring requirements have been determined, the City of Rocky Ford will be informed in writing of the requirements for monitoring and reporting for the UV disinfection system.
2. A registered engineer on the project must furnish a letter prior to commencement of operations stating that the facilities were constructed according to plans and specifications and change orders approved by the Division. The attached "Construction Completion Certification (As-Built)" form should be submitted to satisfy this condition. This form may also be found on the internet at <http://www.cdphe.state.co.us/wq/engineering/pdf/ConstructionCompletionForm.pdf>.

Each UV treatment system is approved as an alternate with the specified operating parameters:

1. Siemens Barrier M2600 reactor (Validation Procedure: DVGW W 294, part 2, UV Intensity Setpoint Dosing Approach)
 - a. The reactor consists of 4 lamps oriented perpendicular to flow, four UV sensors, manual or automatic cleaning mechanism, and a Wallace & Tiernan control module. For flows between 0.98 MGD and 6.1 MGD, the minimum irradiance required for 3.0 log giardia and cryptosporidium inactivation is given by the equation: $E_{\min} (W/m^2) = 0.3131 \times Q (m^3/hr) + 12$ using monitoring point positions 1 and 3. A minimum irradiance of 60 W/m^2 must be maintained for flows below 0.98 MGD. At the design flow of 3 MGD, a minimum Ultraviolet Transmittance (UVT) of 91% and a minimum irradiance of 160 W/m^2 are required. Operating outside of these parameters would be considered off-specification.
2. Trojan UVSwift model 4L12 reactor (Validation Procedure: 2006 EPA UVDGM, Calculated Dose Approach)
 - a. The reactor consists of 4 lamps perpendicular to flow, four UV sensors, automatic cleaning mechanism and a control module. According to the Trojan UVSwift 4L12 validation report, the minimum MS2 Reduction Equivalent Dose (RED) required for 3.0 log Giardia and Cryptosporidium inactivation for this reactor is 24.26 mJ/cm^2 based on a UVT of 92%. This reactor is validated for a flow up to 6.5 MGD and must maintain a minimum UVT of 92%. If running at a different minimum UVT, then a different MS2 RED will need to be determined.

The remainder of the original design was not modified. The Division hereby grants an extension to the original construction approval for 365 days from the date of this letter. All other items from the construction approval (copy attached) issued July 9, 2007 remain unchanged.

Thank you for your time, cooperation and patience in this matter. If you have any questions, I can be reached at (719) 545-4650 ext. 21.

Sincerely,

Joseph C. Talbott, Jr., P.E.
Engineering Section
Water Quality Control Division

cc: Glendon W. Berrett, P.E., TST Inc. of Denver [9222 Teddy Lane Lone Tree, CO 80124]
Drinking Water File, CADM Section, WQCD-Denver
Christy Bowman, Otero County Health Department

Ec: David Dani, Drinking Water Engineer, WQCD-Denver