

Purchasing Department

140 Stonewall Avenue West, Ste 204 Fayetteville, GA 30214 Phone: 770-305-5420 www.fayettecountyga.gov

September 30, 2019

Subject: ITB #1598-B: SFWTP Chlorine Dioxide Generation System - Addendum #1

Gentlemen/Ladies:

Below, please find responses to questions, clarification, or additional information for the above referenced Invitation to Bid. You will need to consider this information when preparing your bid.

1. Is there an allotted time we can shut down the system?

No specific time limit is identified. Contractor should refer to Section 01 31 13, Project Coordination, Paragraph 1.03 for requirements to maintain the existing chlorine dioxide generation and feed system in operation while installing the new system and Paragraph 1.04 for requirements to coordinate any shut-downs with the Owner.

- 2. Is the chlorine generator supplier having issues with the specifications?
 - a) Is the max production rate 169 or 116 lbs/day? (1.01 vs. 2.02 A. 3)

The design max production rate is 116 lb/d. The reason for the 169 lb/d is because during design we were told the smallest generator model that can accommodate our max production rate was the model with 169 lb/d capacity.

b) We'll need to know if there is additional pressure loss in the 85 feet to ClO2 piping to the injection point. This is needed to select the edcutor size and style. The 8 gpm flow will only be valid if we have no more than 18 psi BP at the exit of the machine. Thus also potentially affecting our booster pump selection. (2.02 C.)

We would not exceed 18 psi BP at the exit of the generator with 8 gpm of carrier water.

c) For selection of booster pump size, we'll need to verify plant supply water pressure. The plant water supply pressure is 80 psi.

d) The analyzer "loop" is depicted upside down in your drawings.

We believe this is referring to the piping configuration shown on 20-D-03, Section B. The piping for the analyzer is shown above the process line. It should be under the line to maintain full pipe.

e) PT-210-8 (backpressure transmitter) is not part of the AD-8 machine design. It's only incorporated in instances where we use a discharge side ClO2 pump.

The PT can be deleted if not needed.

f) I believe the P&ID indicates that the booster pump speed control coming from the generator CP. This is not the case, rather the VFD will again be integral to the Grundfos CRE pump. (Power requirements TDB)

The speed signal is not required. Please see drawing modifications below.

A. <u>Drawings</u>

Drawing 08-N-01:

- 1. <u>Delete</u> the SPEED signal between CP-210 and AFD-211-2. Drawing 20-E-03:
- In the Wiring Diagram, <u>delete</u> the 'A1' signal between CP-210 and AFD-211-2.

3. Will the sidewalk be at the same level it is now?

The existing sidewalk is to be demolished to install new below-grade roof drain piping that connects to the existing down-comers from the Chemical Building's roof drain system. The only definitive area where the sidewalk will be at the same level now is at the connection of the existing stairs. This should be ~820'. (Note: the FFE of the Chemical Building is 821.50.) If the sidewalks were to follow existing grade, the containment structure footing would possibly be exposed on the north and east side. The sidewalk alongside the existing building should be at the same height as the proposed footing. If there is fill needed, there shouldn't be much needed

4. Do the civil drawings show grading around the containment structure?

For the grading of the site, the civil drawing only indicates the slope and FFE's of the structure for elevation reference. Existing contours provided by the original design drawings (see attached .pdf for the 2 ft contours of the site); because of the size of the project, a survey was not required/requested.

5. Will the existing sidewalk be at the bottom of the slab?

The existing sidewalk is to be demolished to install new below-grade roof drain piping that connects to the existing down-comers from the Chemical Building's roof drain system. The intent is that the sidewalk is at the same elevation as the slab of the containment structure (820.0) all around the containment structure, and then slopes or steps as needed to meet the FFE at the fill station of 818.0

6. Can we waste the material on-site?

Per Section 31 23 16, Paragraph 3.08,A, disposal of waste material is to be off-site.

Is the List of Project References (00 21 13 13.1.3) different than the Bidder's Business References
which is part of the Bidder's Qualification Form (00 11 56.01)? If so please identify what information
is being requested.

They are the same.

8. Where is the PLC (programmable logic controller) cabinet?

The PLC cabinet is located in the Chemical Building's electrical room. See Drawing 20-E-01.

9. The FRP Purate tank does not show a ladder cage in the drawings nor is it required in the specification; given the height from the containment floor to the top of the tank vertical wall a cage is most likely required by OSHA and certainly recommended; please clarify the requirement.
Fall protection is not required on a fixed ladder unless it is 24 feet high or greater. Additionally, OSHA no longer permits cages as a means of ladder fall protection.

10. The polypropylene sulfuric acid tank has only Polyprocessing as a named manufacturer; we would like to have Assmann-USA named as an equal utilizing their Full Drain Outlet (FDO) equipped 2500 gallon tank (see attached drawing). Please advise. (Attachment)

We are not adding additional named suppliers to the equipment specs during bid phase. In the ITB please refer to Standard General Conditions of the Construction Contract, Article 7 – Contractor's Responsibilites, 7.04 "Or Equals" and Instructions to Bidders, 00 21 -13 – 5, #10 Substitute and "Or-Equal" Items.

11. Specification Section 03 01 32 Repair of Vertical and Overhead Concrete Surfaces discusses the means by which the contractor is to surface prep and repair utilizing Repair System C; however, it does not appear that there is a very accurate way to quantify the actual area of repairs that will be required. It may be beneficial for the owner to include either an allowance or a unit price item in the bid form in order for the contractor effectively be able to price this work.

Repair of concrete will be limited to locations where existing wall attachments (such as pipe supports, panels, etc.) are removed or where equipment pads are ground down.

- 12. This PICS vendor is being added to the list because it's come to our attention that of the four named suppliers in the specifications, only one of them is planning to bid the project.
 - A. <u>Technical Specifications</u>

Section 40 90 01, Instrumentation and Control for Process Systems

- 1. Page 2, Paragraph 1.02.C; ADD the following item:
 - Southern Flow, Inc, Alpharetta, GA"
- 13. Drawing 05-C-01 (Note 2) states

"CONTRACTOR SHALL FIELD VERIFY MATERIAL, DIAMETER, AND LOCATION OF EXISTING NATURAL GAS LINE. ENGINEER APPROVAL REQUIRED FOR PROPOSED ROUTE OF RELOCATED NATURAL GAS LINE."

Please provide material and diameter of proposed natural gas line for bid purposes.

Specification Section 40 00 01, Instrumentation and Control for Process Systems

The gas line entering the building is 1-inch Schedule 40 black steel pipe (see attached photo). The specifications for the construction of the water plant required Schedule 40 galvanized steel pipe where pipe or fittings are exposed to the weather. The owner has not confirmed what is buried; therefore, the contractor shall field verify pipe material and diameter.



Page 2, Paragraph 1.02,C: ADD the following:
 Southern Flow, Inc. Alpharetta, GA"

15. Are the Chemical Fill Stations based off a certain manufacturer's design? Can a supplier or model number be provided?

No, the fill stations are not a standard product.

16. Is double containment piping needed between the bulk tank area and the chemical building where the piping will be buried?
Double containment piping is not required for the buried piping.

- 17. Can the existing natural gas underground piping be capped and abandoned in place once the new service is operational in lieu of removal?

 No.
- 18. Specification 018815 required engineer calculated, and designed pipe supports. Will this be required considering the size and quantity of piping in the project or can the product manufacture's literature be the basis for support? Manufacturer's literature may be used as the basis of support.
- 19. What schedule is the piping from the roof drains to the storm drain catch basin? Schedule 80 as specified in the Piping Schedule and Section 40 27 00.10.
- 20. The supplier of the chlorine generation has clarified a few items with their bid. Verify that these clarifications will be acceptable:

The clarifications below are acceptable.

- a. Submittals 1.03 The manufacturer supplies standard equipment only, along with standard submittal documents. PE stamped drawings are not offered. Modification or customization of documents to incorporate project specific tags/notes, compilation and organization of the submittals shall be performed by others. Anchoring details are not provided.
- b. O&M manuals and training materials are also standard. Two hard copies of the O&Ms are provided along with an electronic copy with the delivery of the equipment.
- c. Nalco/Water Solutions make no agreement to accommodate any other Specification Sections or General Project Requirements referenced in the primary Section 44 22 01 - (40 99 90, 40 90 01, 01 88 15, 26 05 01, etc.) The generator is built to Nalco standards.
- d. Service Conditions 2.02 The generator design is based on Engineer's information that the backpressure at the discharge of the generator will not exceed 18 psi at 8 gpm.
- e. Water booster pump 2.05 In the absence of inlet water pressure data in the Specification, our design basis is 85 psi, as communicated via earlier correspondence from the Engineer.
- f. Water booster pump 2.05 D. (and Engineer' P&ID) Only on/off signal provided from generator control panel. Pressure control adjusted locally on pump motor.
- g. Accessories 2.07 We provide machine weight and dimensions. Anchoring calculations and anchors are to be provided by others.
- h. Controls 2.09 H.7.a "Base" pn 2839334 is obsolete and is replaced with pn 2839185.

- Spare Parts 2.12 A.7. Current back pressure valve is 3/4" Griffco BPG075P1V.
- j. The Pressure Transmitter (PT 210-8) on the Engineer's P&ID is not part of the designated generator model and is not to be provided.

ceived by (Name):	Company	

Note: If this addendum is not returned to the Fayette County Purchasing Department or if it is returned not signed, responding individuals, companies or other organizations will still be responsible for the requirements of this addendum and the specifications or changes herein.

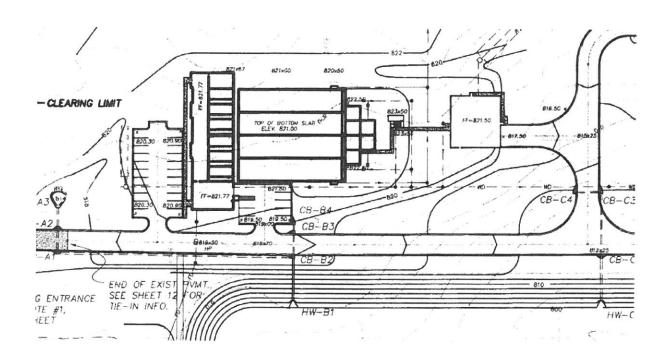
The opening date for this ITB has not changed. **The opening time and date is 3pm, Friday, October 4, 2019.** Bids must be received by the Purchasing Department at the address above, Suite 204, at or before the opening date and time.

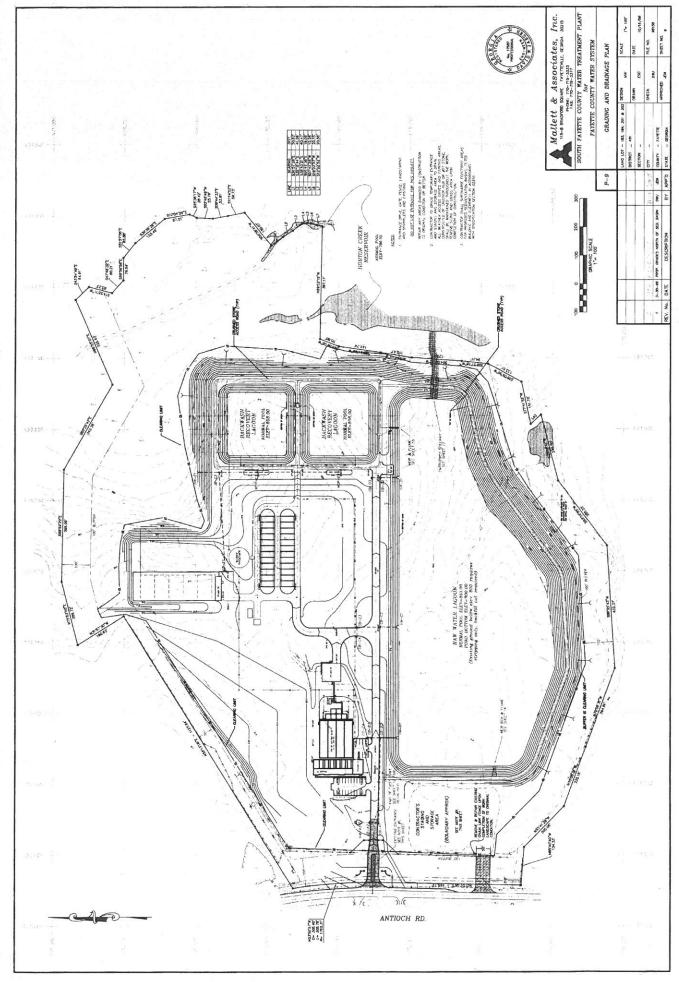
The deadline for inquiries has passed, so the Purchasing Department will not be able to accept any additional questions after this time.

If you have questions, please contact Natasha Duggan, Contract Administrator at (770) 305-5150 fax (770) 719-5534 or email at nduggan@fayettecountyga.gov.

Sincerely,

Ted L. Burgess Director of Purchasing





Question #10

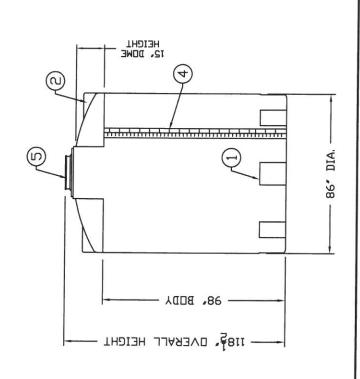
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