

ADDENDUM NO. 2

TO

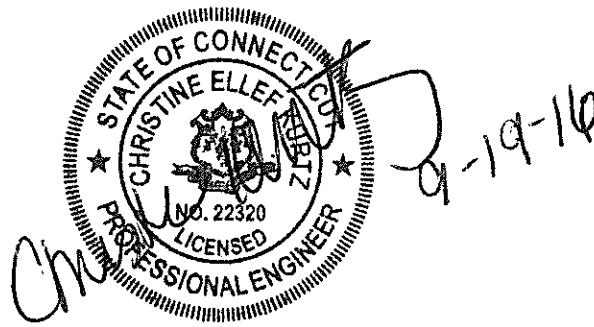
**CITY OF TORRINGTON
CONNECTICUT**

**BIDDING AND CONTRACT REQUIREMENTS
AND SPECIFICATIONS**

FOR

**WATER POLLUTION CONTROL FACILITY
BALLASTED FLOCCULATION SYSTEM
PRESELECTION BID NO. BFS-033-092216**

September 19, 2016



Prepared By:

**Wright-Pierce
169 Main Street, 700 Plaza
Middletown, Connecticut**

Phone: 860-343-8297

Fax: 860-343-9504

ADDENDUM NO. 2

CITY OF TORRINGTON, CONNECTICUT

WATER POLLUTION CONTROL FACILITY BALLASTED FLOCCULATION SYSTEM PRESELECTION BID NO. BFS-033-092216

As a point of clarification, it should be understood that the Contract Documents govern all aspects of the project. Informal discussions held over the telephone are informational only. All official changes to the Contract Documents are made only by addenda. The following changes are hereby made a part of the Contract Documents.

GENERAL

1. Sealed bids for the Ballasted Flocculation Tertiary Treatment System for the Water Pollution Control Facility Upgrade will be received by the City of Torrington at the office of the Purchasing Agent, Room 206, City Hall 140 Main Street, Torrington, CT.
2. Correction to Addendum No.1: **DELETE** “Preselection Bid No. BFS-003-092216” and **REPLACE** with “Preselection Bid No. BFS-033-092216”.
3. The following are project milestone dates:
 - a. September 22, 2016 – Pre-Selection Bid Opening
 - b. October 2017 – General Contractor Bid Opening
 - c. Potentially December 2017 – Notice of Award
 - d. 3 years after Notice to Proceed – Final Completion
4. Design of the Rapid Mix Tank and Mixers will be finalized after selection of Ballasted Flocculation manufacturer. Engineer shall coordinate with BF manufacturer to develop rapid mixing zone design sufficient for the manufacturer to provide their Process Guarantee. BF manufacture will be required to certify that the final design of the Rapid Mix Tank and Mixers are acceptable to the BF manufacturer and that the rapid mixing zone design will not adversely affect the Ballasted Flocculation Manufacture’s Performance Guarantee.
5. Terms and conditions of the Ballasted Flocculation Tertiary Treatment System will be negotiated between the Contractor and selected BF System Manufacturer.

DRAWINGS

Not used.

SPECIFICATIONS

1. Section 00020-BF INVITATION TO BID, **DELETE** “The bond shall be in accordance with Section 00610-BF, shall be submitted through the General Contractor prior to Construction Contract execution and shall be held for a period of 12 months from the date of the successful conclusion of the Extended Performance Testing, as specified in Section

11200-BF.” and **REPLACE** with “The bond shall be in accordance with Section 00610-BF, shall be submitted through the General Contractor within 10 days of Construction Contract execution and shall remain in effect until successful conclusion of the Performance Test, as specified in Section 11200-BF.”

2. Section 00100-BF INSTRUCTION TO BIDDERS / ARTICLE 9 PERFORMANCE BOND, **DELETE** “The bond shall be in accordance with Section 00610-BF, shall be submitted through the General Contractor prior to Construction Contract execution and shall be held for a period of 12 months from the date of the successful conclusion of the Extended Performance Testing, as specified in Section 11200-BF.” and **REPLACE** with “The bond shall be in accordance with Section 00610-BF, shall be submitted through the General Contractor within 10 days of Construction Contract execution and shall remain in effect until successful conclusion of the Performance Test, as specified in Section 11200-BF.”
3. Section 00310-BF BID FORM on first page, under “THIS BID SUBMITTED TO:” **DELETE** “Engineering Department” and **REPLACE** with “Purchasing Department, Room 206”
4. Section 00310-BF BID FORM / Item 1 **DELETE** “sixty (60)” and **REPLACE** with “ninety (90)”
5. Section 00310-BF BID FORM / Item 8.7 **DELETE** line 7 “Fixed pricing for Maintenance Service Agreement completed in its entirety” and **REPLACE** with “Not used.”
6. Section 11200 / Part 1 GENERAL / 1.2 QUALITY ASSURANCE / Paragraph I **DELETE** “At least one of the demonstrated wastewater system installations shall have a single train design of greater than 14 MGD.” And **REPLACE** with “At least one of the demonstrated wastewater system installations shall have a design flow of 14 MGD or greater.”
7. Section 11200 / Part 2 PRODUCTS / 2.1 / Paragraph J under Coagulation Tank Hydraulic Retention Time **DELETE** 2.3 and **REPLACE** with “as determined by manufacturer”.
8. Section 11200 / Part 2 PRODUCTS / 2.3 CLARIFIER EQUIPMENT / Paragraph A.7 **ADD** “up to” before 0.50 rpm.
9. Section 11200 / Part 2 PRODUCTS / 2.5 EFFLUENT COLLECTION SYSTEM / Paragraph A.1 **ADD** line “or approved equal” after “...Glass-Steel.”
10. Section 11200 / Part 2 PRODUCTS / 2.5 EFFLUENT COLLECTION SYSTEM / Paragraph B.1 **ADD** line “or approved equal” after “...Glass-Steel.”
11. Section 11200 / Part 2 PRODUCTS / 2.7 BALLAST RECOVERY **DELETE** references to “sand” and **REPLACE** with “ballast”.
12. Section 11200 / Part 2 PRODUCTS / 2.7 BALLAST RECOVERY / Paragraph A.1.a **DELETE** “rated > 250 gpm capacity” and **REPLACE** with “rated per manufacturer determined capacity”
13. Section 11200 / Part 2 PRODUCTS / 2.7 BALLAST RECOVERY / Paragraph A.1.h, A.1.i and A1.j **ADD** “connection stub” after the word piping
14. Section 11200 / Part 2 PRODUCTS / 2.7 BALLAST RECOVERY / Paragraph B.1 **ADD** line “j. Motor and Gearbox” with subsection “i. Manufacturer: Nord or approved equal”
15. Section 11200 / Part 2 PRODUCTS / 2.13 VALVES / Paragraph A **ADD** “3. Isolation Plug Valves – 2 per pump”
16. Section 11200 / Part 2 PRODUCTS / 2.13 VALVES **ADD** Paragraph D “D. Plug Valves
1. All eccentric plug valves shall be industrial resilient seated type with ANSI class 125/150 flat face through bolting flanges. Plug valves shall be provided with cast iron wafer type

bodies, acrylonitrile-butadiene packing, neoprene resilient seat material, manual lever or hand wheel actuated. Plug valves shall be PEC plug valves as manufactured by DeZurik or equal.”

17. Section 11200 / Part 2 PRODUCTS / 2.17 PLC CONTROL PANEL / Paragraph K **ADD** the following to the end of the paragraph K “If a protocol converter is required for communication with other PLCs or the SCADA System, it shall be furnished and installed by the Division 13 System Integrator (SI). The SI shall configure and program the converter and provide the Division 11 manufacturer network addresses for the networked equipment (PLC, OIT, Managed Switch). The Division 11 manufacturer shall provide +24vdc power termination and an 8”x8” spare space clearly marked for a din-rail mounted protocol converter.”
18. Section 11200 / Part 2 PRODUCTS / 2.17 PLC CONTROL PANEL / Paragraph M in table under Manufacturer column **DELETE** “Allen Bradley, (or Equal to match the Owner's existing equipment) and **REPLACE** with “PLCs:Allen Bradley, GE RX3i, (or Equal to match the Owner's existing equipment)” and “OITs: Allen-Bradley or GE QuickPanel, or Equal”
19. Section 11200 / Part 2 PRODUCTS / 2.17 PLC CONTROL PANEL / Paragraph M in table under Manufacturer column **DELETE** “N-Tron, SixNET, Phoenix or Equal” and **REPLACE** with “MOXA, Cisco or Equal”
20. Section 11200 / Part 2 PRODUCTS / 2.17 PLC CONTROL PANEL / Paragraph M in table under Description column **DELETE** “10/100 Base T Ethernet Switch w/5 RJ-45 Ports” and **REPLACE** with “10/100/1000 Base T Ethernet Switch w/5 RJ-45 Ports”
21. Section 11200 / Part 2 PRODUCTS / 2.18 PROCESS INSTRUMENTATION / Paragraph A **DELETE** line 3 “One Secondary effluent (influent) O-phosphate meter, Hach 5500sc LR with SC200-Controller, immersion type”
22. Section 11200 / Part 2 PRODUCTS / 2.18 PROCESS INSTRUMENTATION / Paragraph A **DELETE** line 6 “One per train Settled water O-phosphate meter, Hach 5500sc LR with SC200-Controller, immersion type. “
23. Section 11200 / Part 2 PRODUCTS / 2.18 PROCESS INSTRUMENTATION / Paragraph H.3.c **DELETE** “Drinking Water” and **REPLACE** with “Wastewater”.
24. Section 11200 / Part 3 EXECUTION / Paragraph 3.6.B **ADD** “Note 3. The Performance Guarantee for the are subject to the following, the effluent TP goal of 0.29 mg/L the inlet non-reactive portion must be less than 0.09 mg/L and the effluent TP of 0.10 mg/L the inlet non-reactive portion must be less than 0.02 mg/L.”
25. Section 11200 / Part 3 EXECUTION / Paragraph 3.5.B.4 **DELETE** “The Contractor shall pay for the testing and analyses at an approved independent laboratory” and **REPLACE** with “The Contractor shall pay for the initial rounds of testing and analyses at an approved independent laboratory and the Manufacturer shall pay for any retesting and analyses for repeated test, unless repeat of testing is due to Contractors error.”
26. Section 11200 / Part 3 EXECUTION / Paragraph 3.7.D **DELETE** “Manufacturer shall provide the services of a certified independent laboratory, approved by Engineer, to conduct all required laboratory analyses during performance testing. Manufacturer shall bear all costs for tests required by this specification.” and **REPLACE** with “Contractor shall provide the services of a certified independent laboratory, approved by Engineer, to conduct all required laboratory analyses during performance testing. The Contractor shall pay for the initial rounds of testing and analyses at an approved independent laboratory and

the Manufacturer shall pay for any retesting and analyses for repeated test, unless repeat of testing is due to Contractors error.”

QUESTIONS AND ANSWERS

Q1: Paragraph 1.2.1. —There appears to be typo requiring two separate design flows (both 14 and 7MGD) for 'single train' installations. Suggest redrafting to read: "The Ballast Flocculation Tertiary Treatment System (System) Manufacturer shall be experienced in the design and construction of equipment for this purpose, and has furnished such equipment as a system, and can prove it has performed successfully for a period of not less than six (6) years. The Manufacturer has demonstrated at least three wastewater systems with design flows of at least 1 MGD that are subject to diurnal flow patterns similar to this design. At least two of the referenced wastewater systems shall have process tanks open to the atmosphere that have been successful in cold weather applications with below freezing temperatures. At least one of the demonstrated wastewater system installations shall have a design flow of 14 MGD or greater. At least one of the demonstrated wastewater system installations shall have a single train design flow of 7 MGD or greater.

A1: See revisions to this paragraph in Specification section above.

Q2: Paragraph 2.3.B — Evoqua intends on furnishing a clarifier drive which will be sized in accordance with our clarifier dimensions (as indicated by the table in Paragraph 2.1.J). We would prefer that an electric TEFC motor with mechanical torque limiters will also be acceptable (in lieu of the hydraulic design as mentioned in the RFP).

A2: An electric TEFC motor with mechanical torque limiters will be acceptable.

Q3: Paragraph 2.1.A.7. differs from Paragraph 2.9. Please clarify manufacturer's ballast supply requirements.

A3: The manufacturer shall supply ballast to initially charge the system, replenish any ballast lost through the commissioning and performance testing of the system and sufficient spare ballast to replenish all ballast lost during the first 30 days of operation following successful completion of the performance testing.

Q4: Paragraph 2.7.B. — Add Magnetic Drum Separator motor and gearbox manufacturer" Nord".

A4: The specification will be changed to add "Nord or approved equal" as manufacturer of Magnetic Drum Separator motor and gearbox.

Q5: Paragraph 2.18.A. — Are heated enclosures required for all instruments? Where are pipe traps required?

A5: The manufacturers scope of supply for the process instrumentation equipment is as listed below. The Contractor shall provide a NEMA 4X polycarbonate enclosure with clear window cover for each manufacturer instrument supplied. The enclosures shall be provided with heaters, a local circuit breaker, power and signal surge suppression, pipe traps and spare parts.

Q6: Paragraph 2.18.B. — Are turbidity analyzers to be used for reporting or process control only?

A6: Turbidity analyzers are to be used for process control.

Q7: Paragraph 2.18.H.3.c. — Replace "Drinking Water" with "Waste Water" for flow meter application.

A7: This will be changed.

Q8: Paragraph 3.6.B. — In the Performance Requirements table, influent flow is listed as " ≥ 7.0 " MGD leaving no limit to the flow for guaranteed performance. Should influent flow be listed as " ≤ 7.0 " MGD? Perhaps the $>$ sign was inadvertently used instead of the $<$ sign?

A8: At ADF of 7.0 MGD, the TP shall not exceed 0.1 mg/l.

Q9: Paragraph 3.7.G. — Is turbidity a required test parameter for samples?

A9: Yes.

Q10: "...The bond shall be in accordance with Section 00610-BF, shall be submitted through the General Contractor prior to Construction Contract execution and shall be held for a period of 12 months from the date of the successful conclusion of Extended Performance Testing, as specified in Section 11200-BF." This conflicts with 11200 1.2-j "...The Performance Bond shall remain in effect until successful completion of the Performance Test". Which duration of the performance bond is correct?

A10: The performance bond requirements in Section 11200-BF are correct. The Advertisement to Bidders will be changed.

Q11: Article 3.01 To be considered a responsive Bidder, the BF System Manufacturer shall have obtained at least one set of Bidding Documents from the Issuing Office. A BF System Manufacturer will not be preselected unless a record for the 'purchase' of at least one set of Bidding Documents exists in the Issuing Office. To meet this requirement and to establish the record of purchase, a prospective Bidder must 'purchase' Bidding Documents using the name that is to appear in the Bid Documents. Please confirm if SUEZ has met this requirement. Also, the invitation to bid and the bid form conflict with this and indicate we need 'paper' bid documents to be considered responsive. We only purchased the electronic copy for \$50. Does this meet the requirement?

A11: Obtaining an electronic copy of the "Bidding Documents" is sufficient to satisfy the requirements. Registered plan holders for the ballasted flocculation project, as of this addendum, include: BAU/Hopkins, Evoqua Water Technologies, Suez Treatment Services and Veolia.

Q12: *In 11200 Ballasted Flocculation Tertiary Treatment, 1.4-F* A maximum allowable footprint of 3200 SF for the tertiary process building and tankage is required. Please elaborate on the 3200 ft² requirement. Is this just the BF tank footprint or does it include chemical feeds, the UV system, etc.?

A12: The maximum allowable footprint of 3200 SF is for the ballasted flocculation tanks (coagulation through settling tanks) and does not apply to the UV system, chemical feed/storage areas, influent/effluent channels or other associated tertiary process buildings.

Q13: *In 11200 Ballasted Flocculation Tertiary Treatment, 2.1-B.J* The Design table states effluent phosphorus at 13.3 MGD is 0.2 mg/L. We believe this to be incorrect. Section 3.6 implies 0.1 mg/L should be met. Please confirm the requirement is 0.1 mg/L at 13.3 MGD per unit.

A13: The system shall be design to meet an effluent quality for Total Phosphorus of <0.1 mg/L at the plant average flow of 7.00 MGD. At the maximum month flow of 13.30MG the system shall only be required to meet an effluent quality for Total Phosphorous of <0.2 mg/L.

Q14: *In 11200 Ballasted Flocculation Tertiary Treatment, 2.3-E.1* The sludge drive gearbox shall be manufactured by DBS; the sludge rake assembly shall be assembled by Clearstream Environmental, or equivalent. Please delete the 'Clearstream Environmental' requirement, our scraper is designed by SUEZ engineers.

A14: The documents allow for equivalent vendors. No changes will be made to this part of the specification.

Q15: *In 11200 Ballasted Flocculation Tertiary Treatment, 2.5-A.1 Material:* Manufactured from 304 stainless steel or fiberglass reinforced polymer concrete by Glass-Steel. Please delete "by Glass-Steel". There are many FRP trough vendors, is there a technical rational for this vendor?

A15: Equivalent manufacturers of collection troughs are acceptable.

Q16: *In 11200 Ballasted Flocculation Tertiary Treatment, 3.6 Performance Guarantee table* says Influent Flow ≥ 7 MGD. It is our interpretation that the performance guarantee criteria only applies to the flow range 7-13.3 MGD and that the basin must be able to have a hydraulic capacity of 25.76 MGD. Please change the influent flow value in the table from " ≥ 7 MGD" to "7-13.3 MGD"

A16: At ADF of 7.0 MGD, the TP shall not exceed 0.1 mg/l.

Q17: *Regarding 11200-2.10 COAGULANT FEED SYSTEM,* Will the Communications from the Ballasted Flocculation Control Panel and Coagulant Feed System be via Allen Bradley TCP/IP Ethernet?

A17: Undetermined at this time. Division 13 System Integrator may provide Allen-Bradley or GE PLC, or Equal. If a protocol converter is required for communication with other PLCs or the SCADA System, it shall be furnished and installed by the Division 13 System Integrator (SI). The SI shall configure and program the converter and provide the Division 11 manufacturer network addresses for the networked equipment (PLC, OIT, Managed Switch). The Division 11 manufacturer shall provide +24vdc power termination and an 8"x8" spare space clearly marked for a din-rail mounted protocol converter.

Q18: *Regarding 11200-2.11 POLYMER FEED SYSTEM,* It is understood the Polymer Feed System is to be supplied and controlled by others; however, Section 11200-2.16.N.2 notes for CP-6E (Actiflo Control Panel) to initiate Chem Pump Run Command and Speed. Please clarify if these signals will be via hardwired connection or via Ethernet.

A18: Actiflo Control Panel is now designated as CP-6H. The signals may be issued via Communication Network.

Q19: *Regarding 11200-2.11 POLYMER FEED SYSTEM,* Will the Communications from the Ballasted Flocculation Control Panel and Coagulant Feed System be via Allen Bradley TCP/IP Ethernet?

A19: Undetermined at this time. Division 13 System Integrator may provide Allen-Bradley or GE PLC, or Equal. If a protocol converter is required for communication with other PLCs or the SCADA System, it shall be furnished and installed by the Division 13 System Integrator (SI). The

SI shall configure and program the converter and provide the Division 11 manufacturer network addresses for the networked equipment (PLC, OIT, Managed Switch). The Division 11 manufacturer shall provide +24vdc power termination and an 8"x8" spare space clearly marked for a din-rail mounted protocol converter.

Q20: *Regarding 11200-2.17.F*, Would a circuit breaker be acceptable in lieu of a fuse?

A20: Yes

Q21: *Regarding 11200-2.17.M, Protocol Converter*, Please clarify what communication protocols will be handled by the referenced protocol converter.

A21: Undetermined at this time. Division 13 System Integrator may provide Allen-Bradley or GE PLC, or Equal. If a protocol converter is required for communication with other PLCs or the SCADA System, it shall be furnished and installed by the Division 13 System Integrator (SI). The SI shall configure and program the converter and provide the Division 11 manufacturer network addresses for the networked equipment (PLC, OIT, Managed Switch). The Division 11 manufacturer shall provide +24vdc power termination and an 8"x8" spare space clearly marked for a din-rail mounted protocol converter.

Q22: *Regarding 11200-2.17.M*, Please confirm the Owner's existing PLC's are Allen Bradley Compact Logix with Ethernet Communications.

A22: The Owner's existing PLCs is a GE RX3i PAC Processor. This will be demolished from the SCADA Upgrade. The Division 13 System Integrator may provide Allen-Bradley or GE PLC or Equal.

Q23: *Regarding 11200-2.17.M, Please clarify what communication protocols will be handled by the referenced protocol converter and what information will transmitted.*

A23: The Owner's existing PLCs is a GE RX3i PAC Processor. This will be demolished from the SCADA Upgrade. The Division 13 System Integrator may provide Allen-Bradley or GE PLC or Equal. Information to be transmitted is indicated in 2.17 - 1, 2, & 3.

Q24: *Regarding 11200-2.17.N.2.b.xii*, Kruger notes that Coag Pumps are to be supplied by the General Contractor, will these units have hardwired I/O to the Actiflo Control Panel? Please advise.

A24: Signals shall be transmitted over Communication Network.

Q25: *Regarding 11200-2.17.N.3.o*, Please clarify if the referenced E-Stop is field installed and equipped with status contact that is hardwired to the Actiflo PLC Control Panel.

A25: Confirmed field installed and equipped with status contact that is hardwired to the Actiflo PLC Control Panel

Q26: *Regarding 11200-2.18.A*, Please clarify the material of construction for the referenced heated enclosure. Does this heated enclosure require 120VAC and 4-20mA Surge Protection as well?

A26: The Contractor shall provide a NEMA 4X polycarbonate enclosure with clear window cover for each manufacturer instrument supplied. The enclosures shall be provided with heaters, a local circuit breaker, and power and signal surge suppression, pipe traps and spare parts.

Q27: *Regarding 11200-2.18.A*, Please clarify if the referenced pH Meter and Turbidimeter are designated for the Actiflo Influent. If so is this an open channel that can accommodate immersion style mounting of each instrument?

A27: Yes, instruments are designated for Ballasted Flocculation influent. Open channel can accommodate immersion probes.

Q28: *Regarding 11200-2.18.A.3 & 6*, This section indicates the manufacturer shall supply the influent and effluent O-phosphate meters. This contradicts Section 2.1.B which states the contractor is responsible for supplying those items. Please clarify.

A28: Contractor shall provide.

Q29: *Regarding 11200-2.18.B*, Please note Kruger typically normally provides the Hach Solitax Turbidimeter w/SC200, please consider this as a suitable alternative to the Hach 1720E. The Solitax

A29: Hach Solitax with sc/200 is acceptable. Influent is open-channel to accommodate immersion format.

Q30: *Regarding 11200-2.18.B.4*, Please note that the Hach 1720E is not an immersion style turbidimeter as required per section 11200-2.18.A. Please clarify which instrument to provide. Standard design includes the Hach Solitax which has proven to be optimal for cost impact, logistics, maintenance, O&M. The Solitax Turbidimeter is available in a pipe insert format (Actiflo Influent) and immersion format (Actiflo Settling Tank).

A30: Hach Solitax with sc/200 is acceptable. Influent is open-channel to accommodate immersion format.

Q31: *Regarding 11200-2.18.E*, Please Clarify whether the Orthophosphate Analyzer will be supplied by the Ballasted Flocculation Supplier or Contractor. Will the Orthophosphate Analyzer be located outdoors or indoors? Please note that the Hach Orthophosphate unit has the following temperature rating 41 - 113 °F.

A31: Contractor shall provide.

Q32: *Regarding 11200-2.18.G*, Please note that Kruger standard is to provide E+H PMC71 pressure transmitter with a 0.5" process connection. This type of PT is standard for all ACTIFLO system designs and experience has proven it to be tried and true for clients.

A32: Acceptable. Coordinate process connection with Contractor as required.

Q33: *Regarding 11200-2.18.H.4, Is the Ballasted Flocculation Supplier responsible for any other Mag Meters other than the Ballasted Recirculation Pumps?*

A33: Ballasted Flocculation Supplier is responsible for Mag Meters required to make their system operate, except for ballasted flocculation influent flow meter, tertiary sludge flow meter, or flow meters related to coagulant and polymer feed.

Q34: *Regarding 1200-2.18.H.4.a*, Please confirm that the mentioned spool piece does not need to be supplied by Kruger, this should be supplied by the Contractor. This is optimal for the client with regard to cost impact and field execution logistics.

A34: Confirmed. Spool piece shall be provided by the Contractor.

Q35: *Regarding 11200-2.18.H.5*, Please clarify if the Ballasted Recirculation Pump Magnetic Flowmeters will be located in a area that will be designated Class 1, Division 1/2.

A35: The area is unclassified.

Q36: *Regarding 11200-2.18.H.6*, In order for the PLC to monitor the Magnetic Flowmeter Transmitter Pulse Output, wires have to be run from the Transmitter to the PLC Control Panel, please include these wires in conduit schedule.

A36: Confirmed. Will be coordinated.

Q37: *Regarding 11200-3.7*, This section seems to conflict with the specifics of the Performance Test listed in Section 11200-3.5.B. Please clarify if these are separate tests or identify which of these sections must be adhered to. Also please clarify which test will be used to measure compliance with the O&M requirements for chemical usage, power consumption, etc. Kruger is open to discussion.

A37: Separate tests. Compliance with the O&M requirements for chemical usage, power consumption shall be determined by Performance Testing outlined in 3.7 PERFORMANCE TESTING. 3.5

Q38: *Regarding 11200-3.5 and 3.7*, Within subsection 3.5.A, it notes the Owner's personnel shall operate the plant. In addition, the Manufacturer shall collect data and samples for laboratory testing, while the Contractor pays for all laboratory testing and analysis.

Within subsection 3.7.A, it notes the Contractor shall provide labor and collect data and samples and laboratory testing, while the Manufacturer shall pay for laboratory testing and analysis.

Confirm the responsibilities of parties involved with the Field Tests and Performance Tests. It is important to note that based on vast experience that optimal cost and execution logistics are generated when the contractor provides the labor and lab testing costs while the supplier aids the contractor/owner in guidance to properly complete the field and performance testing.

A38: Contractor shall provide sampling equipment needed to conduct the startup testing and Performance Testing. Contractor shall pay for initial testing and analyses for the startup testing and Performance Testing. Manufacturer shall pay for all retesting and analyses required resulting from any startup testing and Performance Testing that does not pass on the first attempt.

ATTACHMENTS

This Addendum consists of 11 pages, 11 pages in this document and 0 pages of attachments.

END OF ADDENDUM No.2