

FACSIMILE TRANSMITTAL

From: Patrick H. Allman

To: David Schuman, Global Tech

Daniel Whalen, Global Tech

Fax #: E-MAILED

Re: SODIUM HYPOCHLORITE SOLUTION FOR THE CITY OF RIVIERA BEACH WTP

Date: March 22, 2021

Pages: 2, including this cover sheet.

Daniel/David.

As a follow-up to our site meeting last week. Odyssey is pleased to provide the following proposal to supply a temporary sodium hypochlorite system and product supply to the City of Riviera Beach Water Treatment Plant (WTP) to support an on-going construction project at the WTP. The WTP makes approximately 7.5 MGD and the average chlorine usage is approximately 550 ppd. The plant currently feeds chlorine gas in a water solution to the following injection points: (1) Clearwell: (2) North Softener (pre and weirs): and (3) South/Middle Softener (pre and weirs). There is an injection point on the discharge side of the High Service Pumps but it is not used. For purposes of the temporary system, we agreed to three feed points: (1) North Softener inlet box; (2) South/Middle Softener inlet box; and (3) Post injection point. Odyssey proposes to furnish a "turn-key" solution as follows (Global Tech agreed to do any required Health Department notifications/permitting):

- <u>Tanks</u> Odyssey will furnish and install two 6.550-gallon Assmann HDLPE double-walled tanks. The tanks measure 10' in diameter and are 186" tall. The tanks have a 24" sage surge manway, 4" u-vent and 2" fill line on the top. The tanks have a reverse sight-glass to show tank level. The bottom sidewall fitting is a 2" titanium double-flanged fitting. We will hookup an isolation valve tied to a short section of flexible PVC piping tied to another 2" valve which will be tied to a common header to the feed pumps.
- Feed Equipment Odyssey will furnish and supply two Blue Planet Environmental skids. One skid is an enclosed duplex pump skid containing two Prominent Sigma I pumps rated for 17 gph/a 102 psi. The skid has sliding acrylic doors for access and the doors are removable for maintenance. This skid will be dedicated to the clearwell. The second skid is a triplex pump skid which will contain three Prominent Sigma II pumps rated for 28.8 gph/a/145 psi. One pump will dedicated to the north softener raw water line, another to the south/middle softener raw water line and the third an installed spare. All of the pumps will be operated in manual similar to how the operators are currently manually adjusting the rotameters. The pumps are capable of being paced from a 4/20 ma signal.
- Piping All piping shall be Schedule 80 PVC. All valves are Asahi Type 21 ball valves. All pipe supports shall be SS316. Odyssey will supply the piping from the tanks to the feed equipment and from the feed equipment to the three injection points. The piping to the injection points shall consist of a 2" containment piping containing ½" PVC tubing inside the piping.

from the desk of...

Patrick H. Allman General Manager

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- <u>Electrical/Control Wiring</u>: Odyssey will run 120 VAC electrical power from a spare 20-Amp circuit in the Operator's Building for each of the pump skids.
- Sodium Hypochlorite Supply Odyssey proposes to have the City of Riviera Beach piggyback the City of Tallahassee sodium hypochlorite contract at a delivered price of \$.595 per gallon. This contract was recently renewed and expires on 2/14/2022. We separately sent you a separate proposal for this work.
- <u>Training</u> Odyssey will provide two 2-hour classes for the operators and an additional "hands-on" training that they require.
- O&M Manuals Odyssey will provide the operators with O&M manuals which include pump settings that correspond to ppd of chlorine gas.

Based on our site visit, we agreed that the two tanks will be placed on the west side of the Operator's Building against the wall. This area is accessible for chemical deliveries as it is currently being used for ammonia gas deliveries and as the pathway for lime deliveries. The two pump skids will be placed in the 5' wide outdoor hallway on the west side of the Operator's Building. The hallway separates the Operator's Building from the bulk storage tanks. The injection lines will run north from the pump skids and split to go to the three injection points. We recognize that we may need to re-route the lines to accommodate the on-going construction. The two raw water injection lines will have a new saddle and a quill I have attached a drawing showing the proposed equipment layout. Odyssey agrees to run ½" OD PVC tubing inside 2" Schedule 80 PVC containment piping. The piping runs are as follows: (1) North Softener Raw Water Pipe – 370'; (2) South/Middle Softener Raw Water Pipe – 135'); and (3) Clearwell – 170'. We will split the tubing connection inside a pull box for the North Softener on the north side of the building just south of the middle softener.

The following is the cost of the leased system:

- Installation Cost \$19,100
- Monthly Lease \$2,150 per month (this would by payable on the first day of each month if the equipment is installed). If we install the equipment and it is operational after the 15th of the month, the first month is free.
- Removal Cost \$1,900

We can do the work on a week's notice but would prefer two weeks' notice. As you know. Odyssey is a licensed plumbing and general contractor who specializes in chemical system design, permitting, equipment supply, installation and service work. We have installed over 3,000 chemical systems in Florida including the following chemical systems in Palm Beach County: (1) City of Boca Raton WTP/WWTP/Booster Stations (Four); (2) City of Delray Beach WTP (One); South Central Regional WWTP (One); (3) Town of Mangonia Park (Two); (4) City of WPB WTP (Six); (5) City of WPB IBIS Booster Station (Two); (6) City of WPB ECR (Two); (7) Village of Wellington Booster Station (Two); (8) NEFCO Biosolids Facility (Three); (9) Town of Palm Beach Golf Course (Two); and (10) Village of Tequesta (Four) just to name a few. Thanks for your consideration. Pat.

Thanks for your consideration. Please do not hesitate to contact me at (800) ODYSSEY or cellular (813) 335-3444 if I can provide any more information or be of any further assistance. Additional information is available on our website at www.odysseymanufacturing.com. Pat.

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