

Memo

To: City Administration/City Council

From: Mark Sollenberger/Water & Wastewater Director

Date: November 20, 2018

Re: Process Turbidimeters Phase 1 Bid/Quote Award Recommendation

This memo is to recommend that the city council award “phase 1” of the water plant’s process turbidimeters replacement program to Ambient H2O for \$5,602.00/turbidimeter or a total of \$33,612.00. The city council approved \$35,000.00 in the 2018 O&M budget to complete phase 1 of the process turbidimeters replacement program. There are a total of 14 process turbidimeters that need replaced, and the staff planned on replacing 6 turbidimeters this year (phase 1), and the remaining 8 turbidimeters (phase 2) in 2019. The health department requires continuously monitoring the water produced at the water plant for various water quality parameters, one of which is turbidity of our production water at various stages of treatment. After city council expressed concern over sole sourcing this equipment to Hach Co a couple months ago, the staff tried locating other companies who could supply process turbidimeters that would meet our requirements along with SCADA compatibility. The staff looked a two different types of turbidimeter one utilizes a laser, and the other a LED light source. Both are approved by EPA, however there were two issues that I felt needed to be considered in my recommendation. The laser is a couple thousand dollars more per turbidimeter, and would cost more than what is budgeted. The other reason is that a laser turbidimeter would be better utilized for a nano or membrane filtration treatment system, and not a conventional filtration system like the one we have at the water plant. Our system does not require that sensitive of a turbidimeter, and would be more than what is needed. So with this in mind it is my recommendation to make a change from the existing tungsten light turbidimeters that were manufactured by Hach Co. and move to a new LED process turbidimeter supplied by Ambient H2O which is headquartered in Colorado, and who represents the Lovibond PTV 2000 turbidimeter. The cost and specifications for this LED process turbidimeter does meet the requirements of our budget and equipment specifications.

My recommendation is to award phase 1 of the “process turbidimeters replacement program” to Ambient H2O with the bid/quote of \$ 32,617.48 for 6 LED process turbidimeters. I have included below a quote/bid tab for your review. Thank you in advance for considering this request.

<u>Vendor</u>	<u>Price ea LED/Laser</u>	<u>Total Bid LED</u>	<u>Total Bid Laser</u>
George Fischer	no bid	no bid	no bid
Xylem	no bid	no bid	no bid
Aqua Summit	(The equipment bid did not meet bid specifications for LED or Laser)		
Ambient H2O	\$5,602.00/\$7,402.00	\$33,612.00	\$ 44,412.00
Hach Company	no bid/\$7, 556.74	no bid	\$ 45,340.44