

**MEMORANDUM**

**TO:** File

**FROM:** G. Austin Marrs, P.E. – RWSA Senior Civil Engineer

**DATE:** March 28, 2023

**SUBJECT:** Sole Source Procurement Determination – VA Code Section 2.2-4303.E  
Total Phosphorus Analyzer for SFRR-RMR Nutrient Study

**CC:** Bill Mawyer, Lonnie Wood, Jennifer Whitaker, David Tungate, Daniel Campbell,  
Greg Marrs

The purpose of this memorandum is to provide a determination regarding the suitability of sole source procurement for the purchase of an online total phosphorus analyzer, including any appurtenances and service.

The Rivanna Water & Sewer Authority (RWSA) is planning the future construction of a raw water transfer system that will allow for water to be transferred from the South Fork Rivanna Reservoir (SFRR) to the Ragged Mountain Reservoir (RMR). Over the past several years, RWSA has been studying the water quality of both reservoirs in an effort to determine the applicable conditions where water can be transferred and whether or not water from SFRR requires pretreatment prior to transfer.

As the study progresses, the need for a real-time total phosphorus (TP) analyzer has become apparent. Real-time monitoring of the TP levels in SFRR will be important to understand the incoming water quality and will allow staff to make informed operational decisions. The process to measure TP via traditional laboratory means is time consuming and results are not immediate. An online analyzer will provide TP measurements on a timelier basis, so operators of the transfer system can make decisions quickly. RWSA intends to purchase an analyzer at this time to confirm the reliability of such units moving forward and complete its study efforts.

Hach has recently unveiled its EZ-series of analyzers, which are capable of measuring TP down to 5 ppb in real-time. While other manufacturers do make real-time analyzers to measure TP, none are capable of measurements to this level, which is anticipated to be lower than the TP limits that will dictate operations of the transfer system.

In addition, RWSA has used Hach products extensively at its water and wastewater treatment plants, to include dozens of installations. These sensors and analyzers are all serviced under an annual maintenance agreement with Hach. Hach is familiar with RWSA's sites and personnel, and this analyzer would be added to the existing maintenance agreement moving forward, providing a costs savings for RWSA and a consistency of operations and maintenance.

In summary, sole source procurement is necessitated by the following:

- Hach is the only company that manufactures an analyzer that is advertised to achieve the necessary TP limits.
- RWSA has numerous Hach analyzers and samplers across its water and wastewater Treatment Plants. Hach is familiar with RWSA's staff, as well as protocols and procedures.
- RWSA has an existing maintenance agreement with Hach. The TP analyzer discussed herein will be added to this agreement, allowing RWSA to achieve a cost savings.

Sole Source procurement is permitted under the Virginia Public Procurement Act, Section 2.2-4303.E upon a determination, in writing, that the goods or services required are practicably available from only one source. After discussion and review with RWSA staff, it is apparent that the TP analyzer outlined above can only be provided by one source in the necessary timeframe, the Hach Company.

This document serves as the written determination required by Section 2.2-4303.E for a sole source procurement and has been reviewed by the Authority. Once approved by the Authority's Executive Director, the Authority will begin negotiations with the Hach Company for procurement of the TP analyzer, along with all necessary appurtenances and maintenance. Upon the successful completion of the negotiations, the Authority will post a notice on its website detailing the sole source procurement.

APPROVED BY:

  
Bill Mawyer, Executive Director

DATE:

4/3/2023