AV PROVIDES INTERIM TREATMENT City of Woodbury Continues to Expand Clean Drinking Water Availability

BACKGROUND

The City of Woodbury, MN previously worked to provide an expedited plan and to construct a temporary Water Treatment Plant—completed in 2020 and expanded in 2022—to serve the community with drinking water from six wells meeting current state of Minnesota guidance values for PFAS.

In 2023, after receiving water quality results, it was determined that each of three additional well locations would need interim treatment systems. The City and their consulting engineering team members at AE2S and Jacobs Engineering worked through a design for the interim facilities and looked to bid and secure three treatment systems. Submittal and fabrication lead times, in addition to price, were contributing factors in the City's releases of a Request for Proposal to equipment suppliers.

PROJECT DETAILS

Upon evaluation of the proposal packages received, AqueoUS Vets[®] and the City of Woodbury entered into a contract to provide three AV Model PF12-1440 systems with shop drawing submittal due dates and fabrication lead times that would fit within the construction timeline. The City of Woodbury contracted with Rice Lake Construction to install the systems. Installation supervision was provided by an AqueoUS Vets service technician for the startup of the system. AqueoUS Vets provided classroom Operations and Maintenance training for the City of Woodbury water utility staff to assist in the development of familiarity with the AqueoUS Vets equipment provided.

The City began operating interim treatment at the three well sites in February of 2024. The interim treatment will be used until the permanent water treatment plant currently under construction is operational, likely in 2028.

PROJECT LOCATION Woodbury, MN

PROJECT TYPE Bid **PROJECT PHASE** Complete

AV SCOPE OF WORK (6) AV PF12-1440 Vessels **END USER** The City of Woodbury

GENERAL CONTRACTOR Rice Lake Construction







"The AqueousUS Vets – City of Woodbury partnership was critical in supporting the design, construction, and on-lining of the three interim facilities. The successful timely completion of these three facilities will help the City of Woodbury bridge the gap between now and the on-lining of its permanent treatment facility to address PFAS impacts in the communities drinking water supply." -Jim Westerman, Assistant Public Works Director, Woodbury, MN

The three interim wellhead treatment plants help the city meet new Environmental Protection Agency and Minnesota Department of Health regulations and guidance values released in 2024 until the City of Woordbury's permanent water treatment plant is constructed and online.

KEY GAC SYSTEM DESIGN & OPERATIONAL PARAMETERS	INTERIM WELL VALUES
Number of Systems/Vessels per System	3/2
Operating Configuration	Parallel/Lead-Lag
Carbon Capacity/Volume per Vessel ft ³	1,598
Media Type	Coal
Design Flow Rate/Site	1,000 gpm
Hydraulic Loading	8.8 gpm/ft ²
Empty Bed Contact Time per Vessel	12 Minutes
Underdrain	Septa/External Ring Header
Overall System Height to Top of Pipe	26'-3 5/8"

