

Nitrogen Removal in Centrate, EWRP

Project Number: 13-409-3P

Service Area: North

Location: Egan WRP

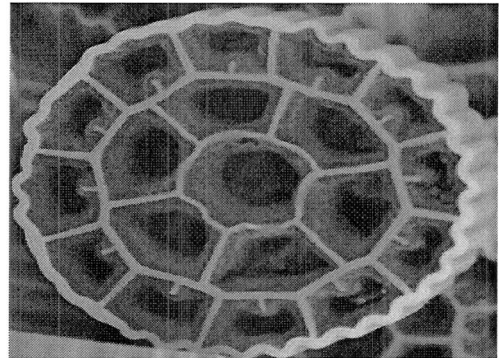
Engineering Consultant: Veolia Water Solutions & Technologies North America, Inc.

General Contractor: Various

Estimated Construction Cost: \$3,500,000

Contract Award Date: March 19, 2015

Substantial Completion Date: September 15, 2015*



Project Description: Partial nitrification-denitrification of centrate at the Egan WRP using ANITA™ Mox Moving Bed Biofilm Reactors. The process uses significantly less energy compared to conventional nitrogen removal.

Veolia will supply technical support, equipment, and seeded media at an estimated cost of \$4,420,000 in the Capital Improvements Bond Fund. Job order contracting (JOC) work has been completed for mixer bridge installation, drumfilter supports, and reactor tank modifications, at a total cost of \$682,400 from the Construction Fund. An upcoming contract for work related to equipment installation, de-classification of the thickener building, and equalization tank coating shall be awarded for an estimated cost of \$3,500,000 from the Capital Improvements Bond Fund for a total estimated contractor cost of \$8,602,400. The estimated cost for in-house trades labor and materials is \$320,000 in the Corporate Fund.

Project Justification: The Egan WRP treats sludge from the Egan and Kirie WRPs. The centrate from this process is pumped into a gravity sewer, comingled with combined sewage, and treated at the O'Brien WRP roughly 20 miles from the source. This operational strategy is inefficient, causes considerable odors and corrosion in the conduit that conveys the flow, and increases the load on the O'Brien WRP.

Project Status: JOC work has been completed for mixer bridge installation, drumfilter supports, and reactor tank modifications. Approximately 98 percent of contract documents for the remaining work have been prepared. It is anticipated that the contract for the equipment installation will be awarded in March 2015.

*Information shown is estimated.