

Wastewater Treatment Facility



Case Study Details

DESIGN CRITERIA	INFLUENT	EFFLUENT
Total Average Dry Weather	800 m3/day	-
Total Peak Wet Weather	3,800 m3/day	-
BOD ₅	255 mg/l	10
Suspended Solids	361 mg/l	10
Total Phosphorous	9 mg/l	1
TKN in, Ammonia out	45 mg/l	3.5 / 7 (Summer/Winter)

This project was implemented to treat the municipal wastewater for the Town of Merrickville, located in Eastern Ontario. The wastewater treatment system comprised of Grinder/Screen, biological treatment ISAM and UV disinfection. The treated effluent was to be discharged to a sensitive river in the vicinity of the site.

H2FLOW EQUIPMENT INC. supplied Franklin Miller Grinder/Screen, a FLUIDYNE ISAM SBR system including PD air blowers and alum feed system and TROJAN ultraviolet disinfection unit,. It was delivered to be operated by Ontario Clean Water Agency (OCWA). H2FLOW EQUIPMENT INC also provided an aerobic digester and a Fluidyne jet mixing system with a Hayward Gordon Sludge Mixing pump and a Permastore GFS sludge holding tank as well as controls for all H2Flow supplied equipment.

The system has been operating effectively and satisfying the strict discharge limits to the receiving environment. There are many inherent benefits of the ISAM system among which the integral sludge digestion, small foot print and effective nutrient removal are the most prominent.

Engineering Consultant: AECOM

Installation Contractor: Black & MacDonald

Start-Up: December 2011