

# Case Study

Asphodel-Norwood WWTP  
Ontario, Canada

## Wastewater Treatment Facility (Average Flow: 1,500 m<sup>3</sup>/day)



Engineering Consultant: TSH (AECOM)  
Installation Contractor: APLUS Contractors Inc.  
Start-Up Year: 2009

DESIGN CRITERIA:	INFLUENT:	EFFLUENT:
Total Average Dry Weather Flow	1,500 m <sup>3</sup> /day	-
Total Peak Wet Weather Flow	4,970 m <sup>3</sup> /day	-
BOD <sub>5</sub>	224 mg/l	7.3
Suspended Solid	252 mg/l	7.3
Total Phosphorous	8 mg/l	0.29
Total Ammonia-N	25 mg/l	0.9-3.2 (Summer-Winter)

This project was implemented to treat the municipal wastewater for the Township of Asphodel-Norwood located in central-eastern Ontario. The wastewater treatment system comprised of screening, biological treatment, tertiary filtration and disinfection. The treated effluent was to be discharged to a very sensitive river in the vicinity of the site.

H2FLOW EQUIPMENT INC. supplied a FLUIDYNE ISAM SBR system including alum feed system followed by a DYNASAND filters for tertiary filtration, a TROJAN ultraviolet disinfection unit, and HIBON PD air blowers. It was delivered as a design-build project in co-operation with Ontario Clean Water Agency (OCWA). H2FLOW EQUIPMENT INC also provided controls for the instrumentation.

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.