

Case Study

5th Wheel Truck Stop
Highway 401
Dorchester, Ontario

ISAM Sequencing Batch Reactor (SBR) 45m³/day Average, 64m³/ day Peak Flow



Engineering Consultant: BEAK (now STANTEC)
Installation Contractor: TOPSITE Year: 2001

| DESIGN CRITERIA: | EFFLUENT: |
|----------------------|-----------|
| BOD: 400 mg/l | 5 mg/l |
| TSS: 400 mg/l | 5 mg/l |
| Tot Ammonia: 30 mg/l | 1 mg/l |
| Tot. Phos: 13 mg/l | 0.3 mg/l |
| Ecoli/100: 20,000 ml | 100 ml |

5th Wheel Corp. operates several truck stops with fueling stations, restaurant, motel and service centres along Ontario Highways. For their Dorchester location, 5th Wheel Corp. required a wastewater treatment plant to meet very strict discharge limits set out by their Ministry of Environment Certificate of Approval requiring among above the listed parameters, a Total Phosphorous limit of 0.3 mg/liter.

H2FLOW EQUIPMENT INC. supplied a FLUIDYNE ISAM SBR system including alum feed system followed by a custom tertiary filter unit and a TROJAN ultraviolet disinfection unit. It was delivered as a design-build project in co-operation with TOPSITE Contracting Ltd.

The system has been operating for several years and has been consistently meeting the required discharge criteria. One of the inherent benefits of the ISAM system is the integral sludge digestion system. Sludge volume production is around 3000 gallons per month at a higher concentration than conventional treatment plants. The higher concentration of the sludge reduces hauling and disposal costs.

H2FLOW EQUIPMENT INC.