



ONTARIO WATER CONSORTIUM
LE CONSORTIUM POUR L'EAU DE L'ONTARIO

A PLATFORM FOR RESEARCH,
DEVELOPMENT, TESTING &
DEMONSTRATION OF WATER
TECHNOLOGIES AND SERVICES



OVERVIEW OF GUELPH FACILITY

FOR RESEARCH AND DEMONSTRATION OF WASTEWATER TECHNOLOGIES

UNIVERSITY
of GUELPH



- Located at the Guelph Wastewater Treatment Plant
- Total building footprint $\approx 3750 \text{ ft}^2$
- Access: 12'W x 12'H to main testing area; 8'W x 7'H to sludge room
- On-site parking
- Remote controlled pumps
- 5 testing stations available (Three main stations: $\approx 18' \text{ L} \times 14' \text{ W}$; Two sludge room stations: $\approx 14' \text{ L} \times 13' \text{ W}$)
- Access 24 hours per day, 7 days week

- Up to 0.16 MGD (US) of effluent delivered to the platform via 3 pipes:
 - Pipe 1: Secondary or Tertiary Effluent (50 usgpm)
 - Pipe 2: Raw Sludge (9 usgpm) or Waste Activated Sludge (20 usgpm)
 - Pipe 3: Raw Wastewater or Primary Effluent (40 usgpm)
- On-site ecotoxicology research facility
- Sample preparation space
- Winter heating and summer ventilation
- Potential for formal collaborations with researchers across OWC
- Built in partnership with University of Guelph

Each station equipped with:

- A variety of wastewater streams available via 3 pipes; wastewater availability based on a first-come, first-served basis; one stream/station.
- Dedicated power connections: 120V; 208V, 30A, 3-Phase; 600V, 30A, 3-Phase
- Data and telephone ports
- Potable water connection (1" supply line)
- Instrument air connection

Electrical Safety Authority Field Evaluation is required

Additional services available:

- Sample transport analysis
- Report preparation
- Technical assistance/trouble-shooting
- Access to bench space in analytical labs
- GC/MS
- TOC Analyzer
- Real-time PCR machine
- Respirometer
- Microplate Reader

Lab Equipment

Two newly renovated OWC Wastewater labs, located at the University of Guelph, are equipped with:

- GC/MS
- TOC Analyzer
- Real-time PCR machine
- Respirometer
- Spectrophotometer
- Microplate Reader
- Digital Fluorescence Microscope
- Millipore Water System
- Incubator/Incubator Shakers
- Bio-Safety Cabinet
- AirClean Systems Workstation
- Centrifuge
- Walk-in cold room, low and ultra-low temperature freezers for sample storage

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