

Marystown Water Treatment Plant



TYPE: Design-Build

SECTOR: Municipal Infrastructure

YEAR: 2010 - 2012

CLIENT: Town of Marystown / EXP Services

LOCATION: Marystown, NL



With approximately 5000 residents, Marystown is the largest community on the Burin Peninsula. The municipality's Clam Pond water source was high in organics and colour that heavily stained residential fixtures. More importantly, the water was high in potentially harmful chlorination by-products, including trihalomethanes (THMs) and haloacetic acids (HAAs).

Treatment Process

Gravity clarification tanks followed by microfiltration (MF) membrane polishing.

Scope of Work

Cahill was selected to design, build, and commission a new water treatment system, providing the following turn-key design-build services:

- Process design and equipment layouts.
- Electrical, instrumentation, and control system design.
- Mechanical, Process, Electrical, and Instrumentation (MPEI) fit-up.
- Commissioning and startup.
- Performance verification.

Highlights

- Multi-disciplinary design-build engineering services, commissioning, process disinfection, start-up and performance verification managed by Cahill Technical.
- Pipe spool fabrication by Cahill Fabrication.
- MPEI Fit-up by Cahill Construction.
- Safe, clean drinking water that meets Canadian Drinking Water Quality (CDWQ) Guidelines.



Quick Facts

- Dual redundant process treatment trains.
- Design average flow: 158 L/s (1250 usgpm) per train.
- Modular construction: fabrication offsite to minimize costs.