



CASE STUDY

Newterra Deploys Modular Water Plant for Wembley's 1,400 Residents

A remote municipality's existing system was failing, so the community needed an urgent replacement solution.

Market Served: Small Remote Community
Application: Decentralized Potable Water Treatment
Location: Wembley, Alberta (Canada)
Challenge: Emergency Replacement System
Solution/Service: Potable Water Plant

Summary

Wembley is a quiet, peaceful northern Alberta town located 20 km west of Grande Prairie and surrounded by rich farmland. When the town installed a well to supplement the drinking water supply for its 1,400 residents, it learned the new supply source was unusable due to its high iron and manganese content. The municipality's existing potable water system was failing, so the community needed an urgent replacement solution.

The Challenge

Being a remote community with no access to water supply from neighboring grids, the small community was forced to have potable water trucked on an interim basis, while they searched for the best solution to remedy this and provide safe drinking water for its residents.

Fortunately, a local Newterra Field Service Technician advised the community of Newterra offerings in modular, rapidly deployed potable water and wastewater treatments systems that have deployed in remote Canadian Mining and Exploration sites thought out Northern Canada.

With the previous system's failure, there was no time to wait for a traditional "bricks & mortar" structure to be built so the community and associates deemed it essential to have a pre-packaged plant that would arrive on-site, pre-tested for rapid deployment.

The Solution

Newterra offered an optimal solution in a matter of days – a containerized potable water system for the municipality that consisted of two, independent 39,625 GPD (150 m³/day) treatment systems running in parallel. Each is contained in a 40' container.

To address iron and manganese issues, the process includes dosing of potassium permanganate or sodium hypochlorite, aeration in a break tank, greensand and cartridge filtration and a high recovery (>85%) reverse osmosis system. The system was designed, built and installed within two months and shipped and commissioned within a week.

Proven Technology for Safe & Reliable Potable Water Treatment

Newterra's modular, scalable systems are ideal for small municipalities and private and commercial developments. Newterra's "building block" design enables modular units adaptable to diverse technologies, easily scalable with additional units as needed. Self-contained systems offer a cost-effective means to enhance existing water treatment plant capacity.

Newterra offers many options including **Self-Contained Systems, Skid-Mounted Systems, or Custom Systems & Structures**; all shipped ready for quick on-site assembly and commissioning.

What's Your Unique Water Question?

Contact us at [+1 800.420.4056](tel:+1800.420.4056) to solve your most challenging water issue.



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Water & Wastewater Systems!



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