

Municipal



SAMCO

Separation from the ordinary

PROJECT BRIEF

Newly Constructed Community Center Leverages SAMCO Reverse Osmosis Technology to Bring Potability to Hard Well Water

PROJECT OVERVIEW

When construction began on a new medical and community center in Western New York, developers needed a means of sourcing potable water from a brackish well. Looking to SAMCO reverse osmosis (RO) technology, the facility achieved a comprehensive solution to its drinking water needs.

OBJECTIVE

Reduce total dissolved solids (TDS) in high hardness well water in accordance with United States Environmental Protection Agency (US EPA) potability standards, including:

- National Primary Drinking Water Regulations (NPDWRs)
- National Secondary Drinking Water Regulations (NSDWRs)

SCOPE OF SERVICE

SAMCO performed comprehensive process, mechanical, and electrical design and engineering to deliver a 13 GPM RO system. Also included were system fabrication, controls integration, field installation, commission, startup training and support services.

CHALLENGES

- Stringent US EPA guidelines for drinking water purity
- Minimal operator availability

SOLUTION

In order to efficiently supply drinking water to a new medical and community center, SAMCO designed and delivered a RO system capable of producing 6000 gallons of purified water per day. Per the client's goals to meet both primary and secondary US EPA drinking water standards, the solution included bag filters, carbon filters and softeners for pretreatment, as well as chemical injection systems for chlorination, remineralization, and corrosion inhibitor dosing. To minimize operational demands, SAMCO integrated programmable logic controllers (PLC) for automated monitoring of system function, while an included operator interface and training services ensured a smooth startup.

TECHNOLOGY

SAMCO delivered a 13 GPM brackish water RO unit, including:

- Standard pressure vessels, instruments and valves
- RO membranes
- Cartridge, carbon, and bag filters
- Water softener
- Remineralization and biocide chemical metering equipment
- High pressure pumps
- Potable water storage tank
- PLC Controls

OVERVIEW

Industry

Municipal

Location

Wheatfield, NY

Objective

Purify hard well water per US EPA NPDWRs & NSDWRs

Solution

13 GPM RO System

Need help producing potable water? Is the purity of your source water an issue?
Contact us today at SamcoTech.com • askengineers@samcotech.com • (716) 743 9000