Customer Success Story

Location: US

Municipality raises the bar with upgraded AMI solution

Facilities look to AMI to upgrade their water treatment systems with modern and sustainable solutions.

Challenge

The client, a large municipality, was undergoing significant water system infrastructure upgrades to ensure a reliable and high-quality water supply for its facilities.

The project required the installation of a Nanofiltration (NF) water treatment system, complete with pre-treatment and post-treatment systems.

Water is sourced from a well. The NF system would need to operate 8-12 hours per day with a minimum recovery of 80%.

The NF system had to fit within a climate-controlled building and be designed to withstand temperatures between 50-100 degrees F.

Additionally, the system needed to fit within the building's limited footprint including width and height restrictions.

Solution

Applied Membranes engineered, built, and commissioned a state-of-the-art NF water treatment system producing **150 GPM (34 m3/h)**, and meeting all specifications and QA standards.

The package NF system was built as a single skid assembly, including valves, piping, instrumentation, and controls.

The blending process was designed for controlled combination of treated and untreated water, along with precise injection of chemicals, to achieve the desired water quality.

This ensured that the water meets all local drinking water standards and provides a reliable and high-quality water supply.

Key Features:

- Carbon filters
- Calcite filters
- Antiscalant
- Chemical injection system
- Programmable Logic Controller (PLC)

Results

The AMI NF system provided a reliable supply of high-quality water for the municipality.

Quality: AMI system met all quality assurance standards, and rigorous testing was conducted to ensure optimal performance. Water recovery measured at 80%, demonstrating efficiency in water usage.

Custom design: AMI system was designed to fit seamlessly into the building while providing access for maintenance.

Minimized operator supervision: System start-up and shut-down processes were initiated by the storage tank level, requiring no operator supervision. Additionally, the system incorporated flush cycles upon re-start and before shutdown.

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