

AltaPac™ Ultrafiltration for Emergency Drinking Water Treatment

Pre-Engineered Design Offers Rapid Installation Solution

Overview

The existing packaged conventional filtration system at the city of Three Rocks water treatment plant had reached its usable life and was experiencing maintenance issues that were deemed irreparable. Fresno County was in need of a replacement emergency system that could be quickly transported and installed within a matter of weeks, with California Division of Drinking Water (CDDW) approval.

The initial approach was to provide a temporary system to meet immediate drinking water needs while the County looked for a permanent alternative. However, when WesTech confirmed the availability of an in-stock AltaPac™ Ultrafiltration Membrane Packaged System that could ship within 15 days, meet capacity needs, and provide high-quality potable water, this unit was selected for the permanent drinking water treatment system. The newly installed AltaPac™ system has achieved consistent recovery of > 96.5 percent and filtrate turbidity less than 0.05 NTU. The system requires limited operator involvement with automated daily integrity testing and weekly maintenance cleaning. The equipment was delivered to the site and fully operational 30 days after receipt of the order.

Results

15 Day

Delivery

< 0.05 NTU

Filtrate Turbidity

> 96 %

Recovery

Project Summary

Drinking Water System
for Fresno County



Location:
Fresno County, California, U.S.

Application:
Potable Water

Process:
Ultrafiltration

Capacity:
90 gpm (20.4 m³/hr)

Design Flux:
49 gfd (83.3 l/mh)



Highlights

- Challenge-testing certification through CDDW and National Science Foundation (NSF) 61
- Daily integrity testing to verify 4-log reduction of giardia and cryptosporidium
- Packaged, skid-mounted treatment system with automated controls
- Direct treatment of California Aqueduct water

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