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METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Karen E. Jeff
EXECUTIVE SECRETARY

October 18, 1994

To: Board of Directors (Special Committee on Water Quality and Environmental Compliance--Information)
From: General Manager (Engineering and Operations Committee--Information)
Subject: Domestic Water Treatment System for Metropolitan's Desert Pumping Plants

Report

The Surface Water Treatment Rule (SWTR) is a requirement of the Federal Safe Drinking Water Act Amendments of 1986. The State of California Department of Health Services (CDHS) developed a State version of the SWTR and established a compliance date of June 1993.

When the Federal SWTR was promulgated, on June 29, 1989, it was determined that the existing pressure filters at the Desert pumping plants would not meet the new requirements. As a result Metropolitan staff evaluated conventional, nanofiltration, and microfiltration package plants to replace the existing treatment systems. Based on these evaluations, it was determined that the best overall package plant, in terms of performance and economy was a new, relatively unproven microfiltration system manufactured by Memcor.

After extensive testing to prove their efficiency and cost effectiveness, five microfiltration units were purchased from Memcor for approximately \$350,000. The units were installed between November 1993 and March 1994 to bring the Desert water systems into full compliance with the SWTR to ensure that Metropolitan employees receive water that meets drinking water standards.

Since the units were installed they have operated on a day-to-day basis with very limited operator involvement, except with regard to the membrane chemical cleaning process (performed once every 4 to 12 weeks). The units have met all expectations regarding the quality of the treated water.

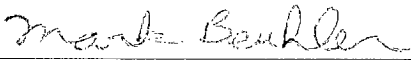
The implementation of this project required input and resources from the Engineering, Operations, and Water Quality Divisions to complete this project in a timely and cost effective manner. The completion of this project is significant for Metropolitan's member agencies and small water systems throughout California because it showed that a new technology for small systems is efficient, cost effective, and simple to operate when compared to conventional treatment.

Recommendation

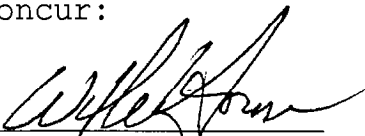
For information only.

John R. Wodraska
General Manager

Submitted By:


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JDK:wt