

## **Encore® 700 Chemical Feed Pumps Provide Reliable Service Over 20 Years in Santa Barbara, California**

The 37 million gallon per day William B. Cater Water Treatment plant serves City of Santa Barbara with the majority of its drinking water while also supplying treated water to the districts of Montecito Water, Carpinteria Valley Water, Goleta Water, and La Cumbre Water. Constructed in 1964, the plant has been continually upgraded over the years to meet new regulations and a growing customer base. The most recent upgrade was the Advanced Water Treatment Project to add ozone pre-treatment facilities at the Cater Water Treatment Plant. Construction was completed in September 2013. The ozone project is a regional solution for the City of Santa Barbara and Montecito and Carpinteria Valley Water Districts to reliably comply with the federally-mandated Stage 2 Disinfection By-product Rule for drinking water. Amid all the changes, the plant operations staff has come to value reliability in plant systems.

One of those reliable systems are the Encore® 700 metering pumps which have been in service for almost 20 years. The Encore® 700 pump combines the ruggedness of a hydraulic diaphragm with the economy, simplicity, and serviceability of mechanical diaphragm liquid ends. Unlike solenoid or loss of motion pumps, the Encore® 700 diaphragm metering pump is driven by a rotating crankshaft where the eccentricity can be smoothly adjusted during operation. There are no return springs and the diaphragm moves with simple harmonic motion. This design provides reliability and longevity, and pump valves operate with far greater efficiency and minimal system vibration.

“The Encore® 700 pumps are indestructible and extremely reliable metering pumps during times of both low and high demand. I would recommend using these pumps to anyone.”

*Brett Wisler  
William B. Cater Water Treatment Plant*

With only minor maintenance (replacement of ball checks and oil changes every two years), the pumps have metered 12.5% sodium hypochlorite accurately since they have been installed. Sodium hypochlorite can be a challenge for any pump, but with the reliability of the hydraulic diaphragm, the Encore® 700 has eliminated pump failure. Additionally, the Encore® 700 is also the trusted pump for the plant’s primary coagulant. The primary coagulant (treatment of high levels of total organic carbon), a blend of aluminum chlorohydrate and polymer, weighs over 11 pounds per gallon and because of its unique characteristics is both corrosive to metals and viscous.



*Encore® 700 Metering Hypochlorite and Primary Coagulant in Santa Barbara, CA*



*Encore® 700 Metering Pump*