

City of Austin, Texas Installs a Total of 4,500 Pounds-Per-Day of On- Site Hypochlorite Capacity Using the Microclor™ OSHG System



With 100 years of service history, Austin Water has seen enormous change in its 540 square miles of service area. Planning for the next 100 years has city and utility planners considering a diversity of sources, system resilience, and sustainability while being mindful of conservation goals. In the city's newest water treatment plant, WTP4, Austin Water was able to combine those planning elements into a state-of-the-art treatment plant. The plant, which is located on Lake Travis, is capable of treating 50 million gallons a day (MGD) with the ability to expand to 300 MGD.

Increasingly, modern water plants are being designed to move away from chlorine gas as a water disinfectant due to safety and regulatory concerns. In the case of Austin Water's WTP4, the utility felt that on-site generation of hypochlorite (bleach) met the ethic of their 100 year forward view. The generation of 0.8% bleach with only salt and electricity is both sustainable and provides resilience versus trucked-in commercial concentrated bleach. With the Microclor® OSHG vertically arranged multi-cell design, the utility staff and the design engineer (Carollo Engineers) were able to design-in the safety of passively vented by- product hydrogen and operational reliability. Each of the three Microclor® skids is designed for a nominal 1,500 pounds-per-day (PPD) chlorine output with each skid having five vertical cells per array. If any particular cell has a problem, it can easily be removed and the skid can remain in operation at roughly 80% capacity.



WTP4-During Construction

"The treatment plant...use(s) a new process that creates non-hazardous chlorine molecules on-site from a simple, safe chemical reaction process. No chlorine or ammonia will arrive on tanker trucks." – Austin Water



Three 1,500 PPD Microclor® OSHG skids



Hypochlorite (Bleach) Storage Tanks