

Daphne Utilities, Alabama, Enjoys More Than Seven Years of On-Site Sodium Hypochlorite Production from Process Solutions, Inc. Microclor® System



Located along the eastern shore of Mobile Bay, scenic Daphne, Alabama boasts one of the most proactive and progressive utilities in the country. Daphne Utilities which operates the gas, water and wastewater systems for the area's roughly 20,000 inhabitants has been winning awards for excellence since its founding in 1953. In late 2007, the utility embarked on the design of a new water plant to be located adjacent to a local high school.

Having the opportunity to start from a clean sheet of paper, the utility examined disinfection strategies other than gas chlorine which had been used successfully in the past. The proximity of the high school to the plant underscored the need to heavily weight safety and community relations in considering alternative disinfection strategies. As with all decisions, cost was a factor, but the utility maintained a long term view and considered "cost effectiveness" or measuring cost against all other factors as the critical criteria.

Daphne Utilities ultimately chose to proceed with on-site sodium-hypochlorite generation (OSHG) for a disinfection strategy. Despite the higher initial cost versus gas chlorine, the ease of using electricity and salt to produce a 0.8% solution of disinfecting bleach was too simple to ignore. The drastically reduced threat of a mishap for both operators and the community in general also carried tremendous weight. Daphne selected Process Solutions, Inc. to supply a 100 pound per day Microclor® OSHG system.

After seven years of operation, the Microclor® system has proven itself in terms of reliability and safety. The system has only required about \$100 per year to maintain (dilute acid cleaning of electrolytic cells and calibration) performance. The clear, vertically oriented cells and the system's open architecture allows for easy inspection and simplifies any minor maintenance required. Furthermore, operators appreciate the fact that no special hazardous materials training or equipment is required (other than safety glasses and gloves) to work around the Microclor® system. Cost effective and safe – "making bleach made easy".



Daphne Utility operators adding salt and operating the Microclor® OSHG

"To me, Microclor® is the top of the line on-site generation system on the market due to low maintenance and it being very user friendly" Larry English, Water Quality Manager, Daphne Utilities