


# PSI WATER TECHNOLOGIES

A cleanwater1 Company

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February 19, 2024

Sweetwater Authority  
100 Lakeview Avenue  
Spring Valley, California 91977  
Attn: Justin Brazil,  
Director of Water Quality

## RE: Monoclor® Residual Control System

Dear Mr. Brazil:

PSI Water Technologies, Inc. (PSI) proposes to provide a Monoclor® Residual Control Systems (RCS) to Sweetwater Authority for its 18MG Bonita Valley Reservoir project. The Monoclor® RCS is designed, manufactured and supplied by PSI of Milpitas, California.

The Monoclor® RCS utilizes proprietary algorithms to monitor and control the flow and quantities of chemicals used for controlling disinfectant residuals in potable water storage tanks. The control algorithm employed in any given Monoclor® RCS is determined based upon the requirements and configurations of the customer's water distribution system. Currently, PSI and its sister company, the PAX Water Technologies division of UGSI Chemical Feed, Inc., hold patents and patent applications (see [www.psipatents.com](http://www.psipatents.com)) covering the following control algorithms:

- U.S. Patent No. 10,766,796 – provides a system and method for automatically controlling chloramine concentrations in a water storage tank by dosing chlorine or both chlorine and ammonia into the tank based upon the chloramine concentration level in the tank after initially dosing only chlorine or both chlorine and ammonia.
- U.S. Patent No. 10,800,685 – provides a system and method for automatically controlling chloramine concentrations in a water storage tank by dosing chlorine or both chlorine and ammonia into the tank based upon the rate of change in chloramine concentration after initially dosing only chlorine or both chlorine and ammonia into the tank.
- U.S. Patent No. 10,836,659 – provides a system and method for automatically controlling chloramine concentrations in a water storage tank by dosing chlorine or both chlorine and ammonia into the tank based upon the rate of change in oxidation-reduction potentials (ORP) after initially dosing only chlorine or both chlorine and ammonia into the tank. It also provides a system and a method for automatically controlling chloramine concentrations in a water storage tank by dosing chlorine or both chlorine and ammonia into the tank based on an average rate of change in total chlorine concentration and/or an average rate of change in ORP, as determined from two or more water samples taken from the tank at different times.

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PSI holds the exclusive rights to the algorithms covered by the referenced patents and additional patent applications referenced at [www.psipatents.com](http://www.psipatents.com) and is the sole manufacturer of residual management systems utilizing the above-described algorithms.

There is no other residual management system on the market that can execute the complex tasks performed by the Monoclor<sup>®</sup> RCS:

- Providing a completely mixed and chemically homogeneous body of water;
- Determining tank total chlorine levels, ORP, pH and temperature;
- Using the above analysis in a chemical dosing algorithm to automatically add the appropriate amount of ammonia and chlorine to reach the tank's desired residual set-point;
- Dosing the chemicals accurately into the tank; and
- Managing the described dosing strategy in the dynamic environment of a tank as it cycles and changes water volume throughout the normal daily operating cycle.

If you have further questions, please contact Raymond Kaesbauer at (619) 890-3581.

PSI Water Technologies, Inc.

DocuSigned by:

*Guy Chadwell*

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Guy Chadwell  
Vice President