



**PSI Water Technologies**  
A UGSI SOLUTIONS COMPANY

# MAKE DISINFECTANT RESIDUAL MANAGEMENT BORING AGAIN

**MONOCLOR<sup>®</sup> RCS**  
*Disinfectant Residual Management*

# Monoclor® RCS Disinfectant Residual Management

*Distribution system water quality is a primary factor in balancing regulatory compliance and customer satisfaction. Operators must carefully regulate disinfectant residual while reducing the potential for disinfection byproduct formation. Traditional tools to manage disinfectant levels in the distribution system have been costly, time consuming and inadequate, until now.*

*By combining powerful tank mixing, advanced water quality sensors, an automated chemical dosing system and feedback loop, the Monoclor® RCS integrates four discrete functions to maintain disinfectant residual set-points:*

- Mix: Achieve complete disinfection homogenization, maintain chemical and thermal equilibrium
- Monitor: Analyze and respond to changing tank conditions in real time
- Intervene: Dose disinfectant to achieve the desired disinfectant residual set-point
- Maintain: Monitor tank equilibrium in real time to automatically respond to changing tank conditions

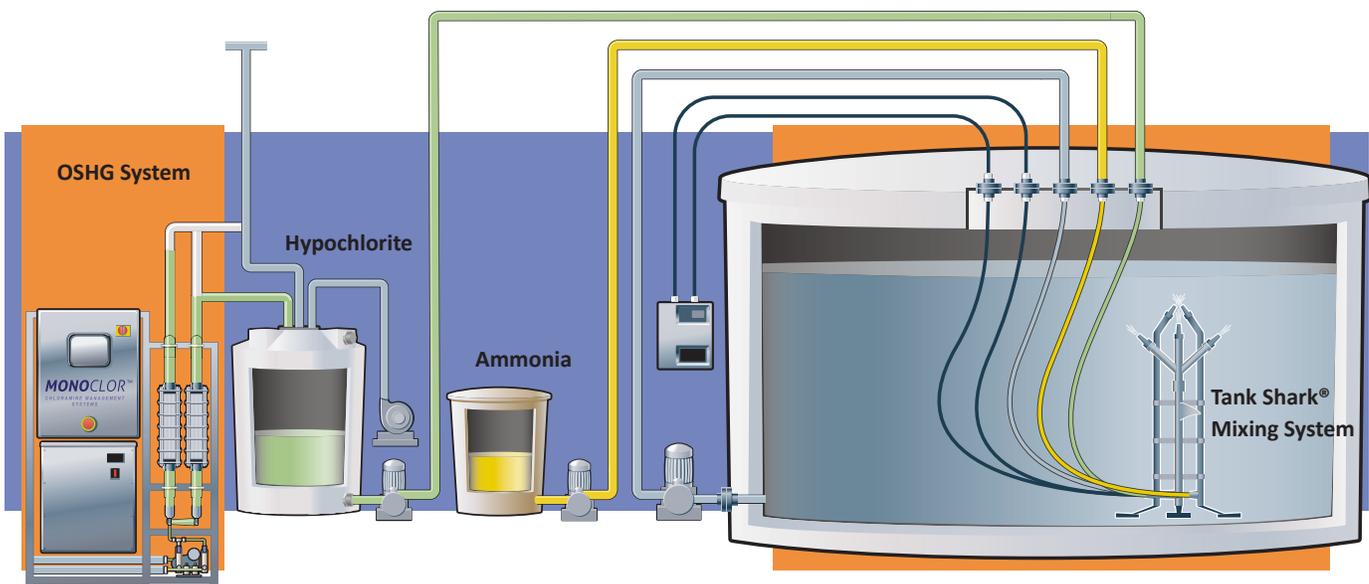
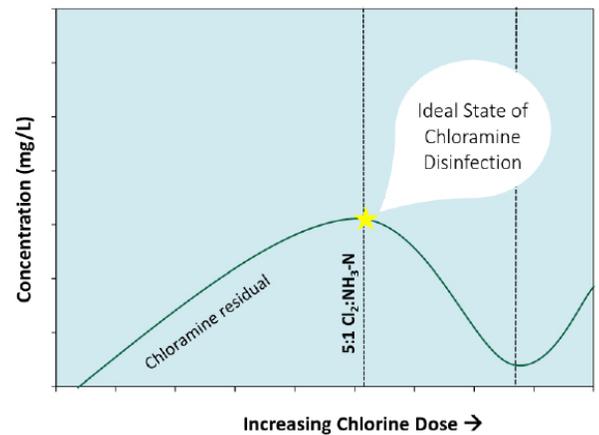
## Benefits of Monoclor® RCS:

- Powerful mixing for rapid disinfectant homogenization
- Integrates with liquid, gas or OSHG
- Real-time sampling and analysis
- Data logging and remote monitoring
- Mobile systems available for disaster preparedness

## Features:

- Targeted disinfectant control without a treatment plant upgrade
- Built-in multi-operational fail safes, alarm redundancy
- Quick reaction to imported water upsets/quality changes
- Reduces flushing and nitrification events
- Ideal for retail systems without treatment capabilities
- Provides dosing option for wholesalers with problematic zones

## Breakpoint Curve



# Control Distribution Water Quality

*“ We used to struggle with water age in this part of our system, but the RCS has made our water age problems essentially go bye-bye. It’s like a little treatment plant. We’re controlling the water.*

*Tom Barrack, Water Plant Superintendent  
Loudoun Water, Virginia*

## AUTOMATED CHEMICAL DOSING



## MOBILE SYSTEMS



## SELF-CONTAINED AND MODULAR SYSTEMS



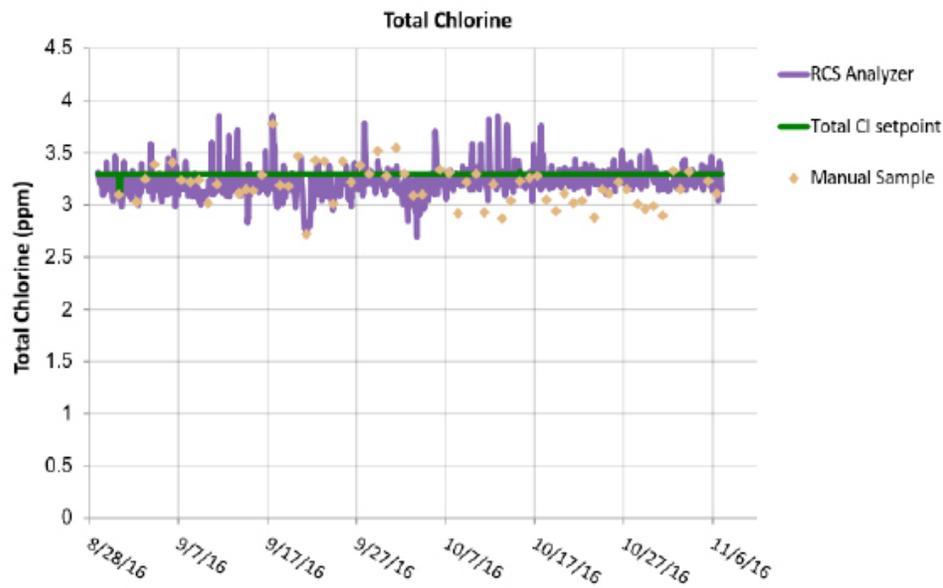
*“Ever since we installed the Monoclor® RCS, I have much more confidence that we can maintain a meaningful residual throughout our distribution system.”*

**Allan McDonald, Manager of Utility Services  
City of DeSoto, Texas**

## Success Story: Loudoun County, Virginia

Tank Size: 2.5MG  
 Tank Type: Elevated  
 Secondary Disinfectant: Chloramine

Utility staff frequently deep-cycled and flushed tanks to stay ahead of annual summer nitrification in the far end of the distribution system. PAX Water installed, commissioned and trained staff to operate the Monoclor® RCS system during a brief window during the utility's annual disinfectant switch. After system start-up, consistent, high residual levels leaving the tank allowed the county to eliminate the flushing program and begin utilizing additional tanks.



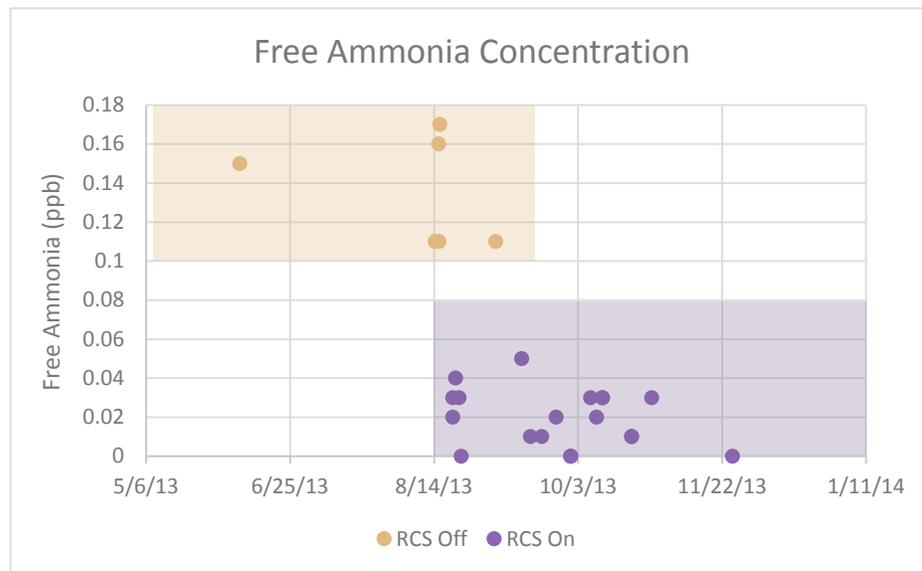
### Achieve & Maintain Tank Equilibrium

The Monoclor® RCS system utilizes the most appropriate mixer to rapidly blend disinfectant into the entire tank volume. The Monoclor® RCS system then samples the homogenized water and determines the appropriate chemical dosing strategy based on the disinfectant levels present in the reservoir. By dosing the right chemical at the right time into a completely mixed tank, the Monoclor® RCS system quickly reaches and maintains the desired residual set-point.

## Success Story: San Bruno, California

Tank Size: 400,000 gallons  
 Tank Type: Ground Storage  
 Secondary Disinfectant: Chloramine

San Bruno Water faced a tough balancing act using well water and purchased water as sources for its system. After wrestling with excess ammonia and episodes of nitrification, San Bruno utilized RCS to correct chlorine-to-ammonia ratios in its Sweeny Ridge tank, maintain a constant 2.0 ppm total chlorine residual disinfectant and reduce the risk of nitrification.



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 Rev. B

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