

SAFEGUARD™ H2O THM

Intelligent Spray Aeration System for Real-Time THM Monitoring & Control

SafeGuard™ H2O is a fully automated and consistently reliable trihalomethane (THM) treatment system that incorporates online, continuous, real-time THM monitoring with active spray aeration to bring utilities a highly accurate and cost-effective solution to meet disinfection byproduct (DBP) regulatory compliance and ensure public safety.

SafeGuard H2O is the only THM treatment system to guarantee up to an 80% reduction along with affordable operation for the control of THMs and the ability to understand, in real-time, THM and THM Formation Potential (THM-FP) levels.

Supported by real-time THM and THM-FP data made available through the onboard THM-100™ online analyzer, SafeGuard provides the operational certainty necessary to ensure a truly effective reservoir management strategy. The accuracy and reliability of the THM-100 analyzer enables consistent, year round treatment results, independent of seasonal changes.

By continuously monitoring the quality of water leaving the reservoir on its way to the consumer, SafeGuard H2O can ensure the presence of THMs is reduced to a level that when that water reaches the consumer's tap it is safe to drink.

Real-time, continuous data of the performance of the SafeGuard H2O system can be streamed to the water treatment plant's operators to provide them with the confidence that the aeration system is working as required and warn of any operational issues.

The design of the advanced SafeGuard H2O THM treatment system has been optimized to have no moving or electric parts within the reservoir. This also reduces considerably installation and maintenance costs since all possible maintenance items reside outside the tank.

With SafeGuard H2O utilities have a cost-effective, accurate and reliable solution for THM control.

SafeGuard™ H2O THM Features & Benefits

Continuous Performance Control

- Fully integrated with real-time THM and THM-FP monitoring and predictive analytics
- Intelligent system design supports regulatory compliance
- Automation and remote performance monitoring for unattended sites
- Enhanced consumer confidence in drinking water quality and safety

Easy to Install, Operate and Maintain

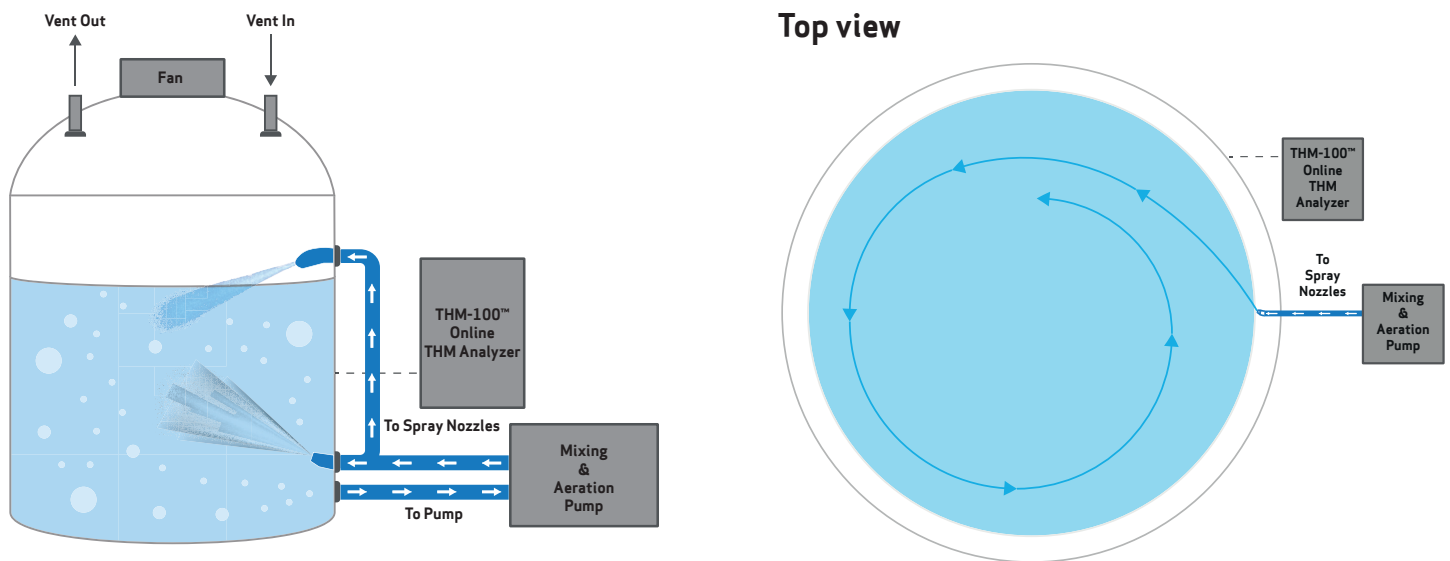
- Automated operation
- Uses existing system pressures
- No moving or electric parts used inside the reservoir
- Full service (24hr) monitoring, maintenance and support program ensures high system integrity and peace of mind

Cost-effective

- Designed to address specific reservoir needs
- Advanced performance and monitoring helps control operating costs



SAFEGUARD™ H2O THM Application Overview



When raw or treated water that contains organic material is disinfected with chlorine, THM precursors are produced. While the disinfected water travels from the water treatment plant to the consumer the reaction of organics with residual chlorine continues and some pre-formed DBPs progressively break down into THMs. A failure to reduce the presence of THMs once they have been created places the utility at risk for violation of regulatory compliance at the customers' taps and threatens consumers' health.

SafeGuard H2O helps utilities to ensure the presence of THMs is reduced to a level that when that water reaches the consumer's tap it is safe to drink. This consistently reliable intelligent spray aeration system prevents stagnation, thermal stratification, and short circuiting in reservoirs and distribution systems.

SafeGuard H2O uses the online THM analyzer, THM-100™, to better adjust to incoming water quality, manage treatment processes and reservoir quality 24/7, achieve regulatory compliance and ensure system THM and THM-FP are at levels needed to ensure the protection of public health. The THM-100 analyzer acts as the 'brains' of the aeration system, providing operational certainty for a cost-effective reservoir management control strategy.