

SAFEGUARD™ H2O

Intelligent Lead Abatement System



The patent-pending SafeGuard H2O™ is an innovative approach for addressing lead contamination in drinking water supplies. SafeGuard H2O is an economical, reliable and intelligent lead abatement system that generates a stannous ion reagent in-situ via an electrolytic process. The system also features an online lead analyzer to measure system performance in real time.

As the industry's first intelligent water treatment system, SafeGuard H2O's real-time sensing ensures system performance and that the process is optimized. Additionally, the intelligent analyzer allows the SafeGuard H2O system to effectively inhibit lead corrosion to ensure compliance with regulatory standards.



INTELLIGENT PERFORMANCE

Exciting field trials are underway to demonstrate the effectiveness of SafeGuard H2O system to provide lead remediation across systems of varying size. Stannous ions have been proven to severely inhibit new biofilm growth and remove established biofilm. Hozalski et al. (2015), detailed that a stannous chloride dose of 0.175 mg/L was sufficient to significantly reduce heterotrophic plate count levels relative to an untreated control in a pipe loop system fed treated water containing chloramines at ~2.5 mg/L as Cl₂.

Lead passivation chemicals (Zinc Orthophosphate) encourage the growth of biofilm. Additionally, chloramines that are used to reduce production of THMs, also encourage the growth of biofilm. As a result, a 'chlorine-burn' is required to remove the biofilm, leading to the elevated presence of THMs and turbidity/taste issues. The SafeGuard H2O eliminates the pitfalls of traditional lead passivation and other sources of biofilm growth that promote lead leaching in piping networks.

EPA estimates for lead service lines replacement are \$16-80Bn, SafeGuard H2O can help to reduce that cost to approximately \$4bn. As the only intelligent water treatment system, SafeGuard H2O is an affordable and reliable lead remediation technology that is helping to drive down the costs of improving the quality of US water supplies.

Aqua Metrology Systems Ltd.

1225 E. Arques Avenue, Sunnyvale, CA 94085

+1 408 523 1900

✉ info@aquametrologysystems.com

🌐 www.aquametrologysystems.com