

Enhancing iron

To reduce odors in its collection system, a California utility tests an innovative approach that uses magnesium hydroxide to boost performance of ferrous chloride

Brian K. Reed and Carla D. Dillon

aced with significant cost increases and short-term supply limitations associated with the chemicals it uses to control odors in its extensive collection system, the Orange County (Calif.) Sanitation District (OCSD) has sought to diversify and optimize its approaches to odor control. In particular, OCSD routinely evaluates products and technologies to help it reduce costs, improve treatment, and work toward a more sustainable approach to odor control.

For example, OCSD is working to reduce its use of iron in odor control because of the material's volatile price. To this end, OCSD

conducted a field trial of a novel treatment approach that combined the use of ferrous chloride with magnesium hydroxide. By integrating the compounds synergistically, OCSD was able to use iron more efficiently and improve cost performance.

A critical need to control collection system odors

A regional wastewater agency serving 2.5 million people in central and north Orange County, OCSD operates and maintains two wastewater treatment plants that together treat an average of 783,500

32