

## PROJECT PROFILE: Dallas, TX

## Integrity Municipal Systems Restores Eight Lime Slakers for the Bachman Water Treatment Plant in Dallas, TX: Almost \$1M Saved Compared to New Systems

Dallas Water Utilities (DWU) provides approximately one billion gallons per day of clean drinking water to more than 1.2 million residents from three processing facilities. Reliability is vital to DWU and its customers. To ensure 24/7reliability, DWU continuously maintains and upgrades its capabilities and equipment – all while maintaining stewardship of critical financial resources.

Since opening in 1930, the Bachman Water Treatment Plant has increased its processing capacity from 30 million gallons

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Chaise Holmgren, Operations Manager Dallas Water Utilities Bachman Treatment Plant per day to 150 million gallons per day, with the latest upgrade in 2007. Located just northwest of Dallas Love Field, the facility takes its feed water from Bachman Lake, and cleans, polishes and disinfects the water before distribution to DWU's customers.

A crucial first step in the process is the addition of lime to react with and separate organic contamination from the water. The most cost-effective way to achieve this step is to mix dry lime with water in a process called slaking. By 2012, the eight slakers at the facility had been operating efficiently for

more than 12 years but were in need of refurbishment.

DWU's Operations and Management staff had to devise a way to rapidly perform the system upgrades without disrupting plant operations and at the lowest possible cost to the agency.

Consulting with Environmental Improvements, Inc. (EI2) and its manufacturer, Integrity Municipal Systems, LLC (IMS), the Bachman team determined that factory refurbishment by EI2/ IMS met all three primary criteria: 1) low-cost, 2) minimal system disruption, and 3) rapid turn-around-time.

DWU selected industry leading contractor Archer Western to work with EI2 and IMS to complete the project. Archer Western Project Manager, Benjamin Martin, said "IMS did a fantastic job. If I didn't know better, I would have thought the units were new – not rebuilt."

The Archer Western crew removes two slakers at a time, sends them to IMS' Zeeland, MI factory where they are refurbished and returned to be reinstalled, with four cycles required to complete the project.

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Benjamin Martin, Archer Western, PM

Upon receipt of the slakers in Zeeland, the parts are inspected, disassembled and specific work orders created to ensure that no part is overlooked.

Chaise Holmgren, Operations Manager of Bachman Water Treatment Plant, said of the project: "The restored units performed just as well as new units, without the added costs. Our Operations and Maintenance personnel are satisfied with the rehabilitation."



Restored Slaker Ready for Return

## **BEFORE**



**Initial Slaker Condition** 

## **AFTER**



Reinstalled Slaker



Condition at Factory Dock



Slaker Ready for Return

