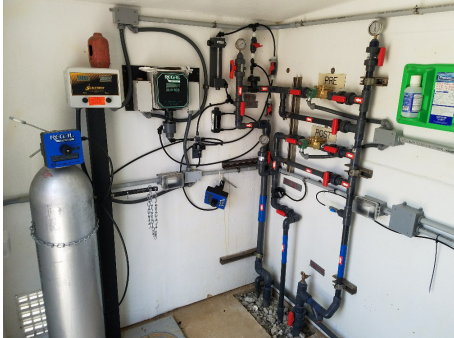


Central Bowie County Water Supply Corporation DeKalb Pump Station Modifications



Central Bowie County Water Supply Corporation was experiencing difficulties maintaining a chloramine disinfectant residual at the far ends of their distribution system – over 20 miles away. CBCWSC operators had to spend many hours and millions of gallons of water flushing to bring residual levels up to minimum TCEQ requirements.

Purchased water received from their supplier was difficult to boost; due to the fact that the flowrates varied hour-to-hour and day-to-day from 0 to 600 gallons per minute. The chloramine residual in the purchased water varied from 1.8 mg/l to 3.6 mg/l. The huge variation in flowrate combined with the 100% variation in disinfection residual made it extremely difficult for the operators to set their manual chlorination equipment to boost their chlorine. Furthermore, the Corporation had no way to feed ammonia to boost the chloramines.

Hayter Engineering was hired to address this problem. Hayter designed a flow-paced chlorine feed system based upon the signal output from a new flow meter. The signal from the new flow meter also regulated a flow-paced chemical feed system for adding liquid ammonium sulfate (LAS) to combine with the chlorine to form chloramines.

Additional yard piping and ground tank inlet and outlet piping was installed to eliminate the existing short-circuiting that resulted from a single inlet / outlet pipe arrangement.

As a result, flushing that used to be in the range of 3 million gallons per month has been reduced to about 30,000 gallons – a reduction of 99%.

This project was completed in 2018

CLIENT

Central Bowie County Water Supply Corporation (CBCWSC)

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CONSTRUCTION COST

\$270,700.00

SERVICES PROVIDED

Design Surveys
Design Plans & Specifications
Construction Bid & Award
Construction Review