SCOPE
Thirty minutes north of Beaumont lies a small community in South Jasper County, Texas named Buna. It is home to about 2,200 residents who spend their days working mostly in the logging and farming industries. Numerous oilfields, first discovered in 1948, lie to the west and north of Buna that further augment the local economy.

PROBLEM
Managed by the private, non-profit South Jasper Water Supply, Buna’s water system contains 91 miles of un-looped distribution pipe with historical water losses of up to 30%. A small operations team is responsible for monitoring two water plants, reading 700 meters, repairing leaks, and flushing water to control the water quality. In an effort to spend less time manually flushing hydrants and focus more time on repairing leaks to reduce non-revenue water loss, South Jasper Water Supply purchased and installed two (2) Hydro-Guard® HG-1 Basic/S Flushing Systems.

SOLUTION
The Hydro-Guard® HG-1 Basic/S Flushing System provides economical programmable, automatic flushing capabilities with either a 1- or 2-inch controlled flow diaphragm valve, making this device an excellent match for virtually any line size application in warm climates (cold climate model is also available). The HG-1 Basic/S Standard model has a removable multi-event handheld programmer that can be programmed to flush a water line multiple times a day, up to seven days a week, with flush durations from 1 minute to 4 hours. The Hydro-Guard HG-1 Basic/S unit features oversized vents for energy dissipation, to minimize erosion during discharge.
PROJECT: South Jasper County Intelligent Water Technology Project

LOCATION: South Jasper County (Buna, TX)

PRODUCTS: Hydro-Guard HG-1 Basic/S Automatic Flushing System

DISTRIBUTOR: Moody Bros.

CONCLUSION
Since installation, South Jasper County Water Supply has seen a dramatic improvement in water quality. In addition, the Hydro-Guard® HG-1 Basic/S units have reduced water consumption by 5%, lowered energy costs, and saved thousands of dollars by using less chlorine at their water plants. Rather than spending valuable man-hours manually flushing the system during the day, they have programmed the units to flush between 2 and 3 in the morning while residents are sleeping. While the units didn’t fix the water loss problem, they freed up time being spent flushing hydrants.

According to Working Supervisor Steve Harding, “Mueller builds an excellent product. With all that’s on our plate, we have used the HG-1 to knock water quality off our daily check list so we can focus on finding and fixing leaks. Before installing the Hydro-Guard units, Buna had water losses of 30%; we are now at 3-8%. Since the Hydro-Guard units allow us to precisely control the amount of flushed water, we dramatically reduced our chlorine usage. Instead of using 3 chlorine cylinders every month at $400 per cylinder, we now use 3 every 7-8 months. This means we are saving around $8,000 a year using two Hydro-Guard HG-1 units.”