The Holly Water Treatment Plant is comprised of two zones, North and South, and is located in Fort Worth, Texas. It was the first treatment plant constructed in Fort Worth, responsible for serving approximately one million customers.

The Holly Water Treatment Plant needed a Mass Notification System (MNS) that was able to:
- Broadcast real-time information to personnel and building occupants during emergency situations
- Provide information about what to do in response to a threat
- Reduce the risk of mass casualties in the event of a natural disaster or inclement weather
- Alleviate general emergency notification concerns

To reduce risk of mass casualties, the treatment plant implemented a MNS with a timely means of notifying plant occupants of threats and direction on what should be done in response in an efficient manner. The plant also had the responsibility to meet MNS industry standards and codes.

The Holly Water Treatment Plant selected Cooper Notification’s indoor and outdoor WAVES (Wireless Audio Visual Emergency System) as its complete MNS. In an emergency, this system enables the treatment plant to protect, alert and inform personnel by rapidly broadcasting live and recorded voice messages throughout all the buildings, building entrances and grounds of the treatment plant. WAVES also allows the Holly Water Treatment Plant emergency managers to alert only the affected areas using zones and sub zones; they can send the right message to the right person without causing panic or disturbing those who are unaffected by the threat.

“Our last drill was a satisfactory drill. We received many positive comments from both Production as well as Field Operations as to the ease with which the WAVES Alert Notification System made completing this evacuation drill,” Juan Reyes, Security Manager, Holly Water Treatment Plant.

WAVES has been installed in both the North and South zones of the Holly Water Treatment Plant. The system has been installed in more than 45 areas in 29 buildings, including the chemical buildings, administration buildings, engineering buildings, field operations buildings, and at both plant entrances.

The components of the MNS include an Integrated Base Station (IBS), the primary control station for the MNS, an indoor building communications system, a network of 31 secure WAVES transceivers based on digital Frequency Hopping Spread Spectrum (FHSS) technology at 2.4 GHz, speaker towers and audio and visual devices. The system is capable of two-way status monitoring, controls voice, tone and visual communications and includes uninterrupted power supplies.

The WAVES base station can send messages to one building or multiple buildings as well as to outdoor speakers. The indoor building communications system includes 17 Autonomous Control Units (ACU) installed throughout both plants. The ACU is an Individual Building Emergency Communications System, which provides supervised emergency voice communications, paging, background music and messaging. The ACU can be controlled and monitored by the campus-wide WAVES MNS. It also integrates with fire alarm systems and provides a signal for temporary deactivation.
Holly Water Treatment Plant - Fort Worth, Texas

The treatment plant has a variation of 300 horn loudspeakers, eight High Power Speaker Towers, 190 strobes and seven Light-emitting Diode Display (LED) signs installed throughout the plants. The loudspeakers provide high-intelligibility voice and signal transmission in medium-power indoor and outdoor public address, security and emergency applications. The High Power Speaker Towers are designed for wide-area mass notification, covering large areas with crisp, intelligible voice, tone and siren warnings. The strobes are synchronized with speaker operations when used in conjunction with an ACU, or can be synchronized with other strobes. The strobes also meet the National Fire Alarm Code (NFPA 72) requirements. The seven indoor and outdoor LED digital display signs installed are capable of producing red, green or amber text and graphics.

The WAVES MNS met all of the Holly Water Treatment Plant’s requirements, including the standards and codes requirements, some of which include the Americans with Disabilities Act (ADA), National Fire Alarm Code (NFPA 72), Life Safety Code (NFPA 101) and the National Electrical Code (NFPA 70).

“(MadahCom) has been there for us when we needed them with customer support as well as showing up in person to take care of our needs,” Juan Reyes, Security Manager, Holly Water Treatment Plant. “The system has effectively been providing real-time information to all plant occupants in emergency situations since 2006.”