

Improving the City's Waste Water Treatment Plant

The Wastewater Treatment Plant was originally built in the early 1970's and had improvements made in the late 70's, 80's and 90's. To stay in line with new technology and the city's population growth, the aging facility needed to be upgraded and expanded.

The overall performance of the treatment plant, as well as the remaining capacity and condition of key equipment and processes was evaluated between 2002 and 2004. The Wastewater Treatment Plant Facility Plan determined that the existing facility would need significant improvements to meet changes in regulatory requirements as well as future capacity needs.

Between 2004 and 2009, the City embarked on an extended process to determine the most efficient and cost effective method of financing and constructing the needed improvements. Very detailed scoping and design criteria documents were prepared, and the City decided to move forward with a "Design – Build – Operate" (DBO) method of performance using a single Contractor, as opposed to the traditional design, then build, then operate process. Part of the reasoning for this decision was the fact that the plant needed to continue to operate in compliance with the current discharge permit while major portions of the site were dismantled and replaced. Placing the responsibility for all operations at the site on a single Contractor made logistical sense, and allowed the City to focus on technical criteria instead of multiple contractual issues.

In July 2011, after approximately two years of proposal solicitation, proposal review, and negotiations, the City selected CH2M-Hill as the DBO Contractor. CH2M-Hill took over operational control in September 2011. Design was completed in February 2012, and construction efforts were completed in April 2014.

Overall plant capacity was expanded from 2.25 Million Gallons per Day (MGD) to 4 MGD, with piping sizes and the overall layout designed for a future capacity of 7 MGD. Improvements were made to the headworks, aeration basins, settling basins, clarifiers, biosolids processing, and filtration and disinfection processes. Other key improvements included changes to the odor control system, adding cooling towers to meet temperature regulations, and changing the bio-solids handling process from a "Class B" product to a "Class A" product.

To help pay for the improvements, the City increased sewer rates. Sewer rates are based on water usage during the winter months when the water usage excludes outdoor watering. In addition, system development charges, which are impact fees developers pay when they receive a building permit, will be re-evaluated.