

Water Lines

MOUNT PLEASANT WATERWORKS

MountPleasantWaterworks.com



October/November 2010



Mount Pleasant Waterworks Celebrates 75 Years of Environmental Excellence—Our Beginning



The Mount Pleasant Water System

Plans for establishing a waterworks system for the Town of Mount Pleasant were inaugurated in September, 1933 while T.G. McCants was mayor. Mayor McCants died during the planning stages, and Mayor W. L. Erckmann saw the project to completion. James E. Gibson (manager and engineer of the Charleston Water System) prepared plans and cost estimates for a system that would supply 160,000 gallons of water per day. On November 15, 1934, in a special Town election, the following question was on the ballot: "Shall the Town of Mount Pleasant, Charleston County, South Carolina, construct and operate a system of water works, and issue self liquidating bonds of the Town of Mount Pleasant, to the amount of fifty-seven thousand (\$57,000.00) Dollars..." Following the favorable vote by the citizens of Mount Pleasant (102 ballots in favor and no ballots against), an application was made to the State Public Works Administration (PWA) Board. The federal government (PWA) agreed to underwrite the \$75,000 cost to construct a plant through a grant of \$18,000 and by issuing \$57,000 in bonds (bearing four percent interest).

In October 1935, the Commission began formal operation of a water distribution system from three wells (with a combined capacity of 160,000 gallons per day) with automatic electric pumps, one 100,000 gallon elevated storage tank and one 300,000 gallon steel storage tank which also served as an emergency supply for fire fighting. The distribution system consisted of 5.8 miles of 2, 6 and 8-inch mains and 21 fire hydrants. At the end of 1935, a total of 179 water meters had been installed to serve the Town's population. The number of customers grew and with it the need for water. MPW continued to provide adequate water service by extending water lines as the area grew.

In 1990, the commission acquired Bulls Bay Rural Community Water District. Following that, MPW was the state's first utility to use high-tech Reverse Osmosis treatment. In 1996, MPW was the first utility in South Carolina to place an aquifer storage and recovery (ASR) well into operation. MPW started receiving supplemental treated surface water from Charleston CPW in 1997.

Wastewater System

The public wastewater system began operating in 1942 with an untreated discharge to Charleston Harbor. Expansion took place as the town grew. In the early 1960's, the Commission contracted an engineering firm to design a wastewater collection system expansion under the PL 660 Federal program. In

1969, construction began on the first primary treatment facility capable of processing 1.4 million gallons per day (MGD). The facility and collection system were completed and operations started in June of 1970. This facility was a contact stabilization secondary treatment plant and the first form of wastewater treatment in Mount Pleasant.

In 1976 under Public Law 92-500 EPA Federal Grants Program, the facility was expanded from 1.4 MGD to 3.7 MGD with the addition of flow equalization and converting to conventional activated sludge treatment process. At the same time, four small package plants were taken out of service and flow from these plants was diverted to the expanded Center Street Wastewater Treatment Plant. In 1984 it was determined this facility was not to be expanded beyond its present capacity. Therefore, the master plan was developed at the request of the Commissioners to determine how wastewater treatment would be provided beyond the Center Street Plant service area. The Commission purchased 90 acres of land on which future facilities would be built. In 1986, the Commission saw growth starting to take place outside the existing town limits and beyond the sewer service area. In order to stop the proliferation of sewer package treatment plants and to protect the environment, the Commission requested and received from the State of South Carolina the service area expanding from the Wando River to Sewee Road.

An outfall line was constructed in 1989, which has a capacity of 17 MGD. All MPW's treated wastewater is discharged through the outfall line 4,700 feet into Charleston Harbor in the Rebellion Reach Channel for maximum dilution. A second wastewater treatment plant at Rifle Range Road began operations in May 1994, adding 2.4 MGD treatment capacity to the Commission's system. This plant also made it possible to eliminate the remaining discharges in the Mount Pleasant service area and serve 1,000 residents previously on septic tanks. The plant's aeration system achieves a higher level of treatment than required by the Clean Water Act and the Department of Health and Environmental Control's discharge permit.

A water reuse system was incorporated to minimize the need for potable water in plant operations. The Rifle Range Road Wastewater Treatment Plant is equipped with the first East Cooper septage receiving station, which will process waste from septic tank trucks, portable toilets and travel trailers. All features promote a safer, cleaner water environment.

OSMO's TIPS

Properly Discard of Cooking Oils and Fats

When poured down a kitchen sink, grease from cooking oils and fats cool and adhere to pipes like glue. That's bad for a homeowner, who ends up with clogged drains and an expensive plumbing job.




Keep Drains Clean to Keep Costs Down

The Commission spends more than \$25,000 yearly to respond to grease blockages in the collection system.

Much of the grease residue from home plumbing makes its way through the wastewater collection system, where it clogs vital pump stations. Ultimately, the residue ends up at the wastewater treatment plant and drives up operating costs.

Grease also causes undesirable bacterial growth. These bacteria impede the efficient treatment plant process.

The DO's and DON'T'S of Cooking Oil and Grease Disposal

-  NEVER put grease or used cooking oil down the drain.
-  DO place grease in a safe container and store it in the refrigerator so it will solidify. Then discard the container in household garbage.
-  For turkey fryer oil, MPW recommends letting the used oil cool, then use a funnel to pour the oil back into its original container. Use the secure cap. Discard with regular household garbage.

The MPW Commission Newsletter, Water Lines, is produced in-house and mailed to customers each month with bills and statements. Current and past issues can also be viewed and downloaded from our website.

Learn to Be Water Wise



Fall Preparation Tips

When cool temperatures prevail throughout the day (mid 60's), it's time to:

- Turn off your irrigation system. Watering during fall and winter months isn't necessary since most lawn grasses, especially centipede, go dormant.
- Cover your swimming pool. Even during fall and winter months, uncovered pools lose large amounts of water to evaporation. An uncovered pool can lose more than 1,500 gallons of water each month, depending on weather conditions, sun exposure and water temperature. Covers help reduce water loss by as much as 90-percent and many brands also provide excellent safety ratings.
- Drain and insulate your water heater. Insulated water heaters reduce energy costs. If you drain your water heater, you will get rid of the sediment that can reduce the life of the heating elements and improve overall efficiency.



MOUNT PLEASANT CHILDREN'S DAY FESTIVAL, FUN FOR THE WHOLE FAMILY!

Hey Kids! Come join the family fun on Sunday, October 17th, when the Town of Mount Pleasant hosts the annual Children's Day Festival at Park West.

There will be plenty of food, fun, attractions and games, including Mount Pleasant Waterworks' obstacle course. Be sure to visit our H2O2GO mobile water dispenser to stay hydrated with cool refreshing water from Mount Pleasant Waterworks.



GO PAPERLESS,

Sign Up For Electronic Billing This Month
Want to reduce your incoming mail and help keep your water bill at an affordable rate? Electronic billing through Mount Pleasant Waterworks' Easy Pay system is easy to use. After you sign up you will receive a monthly email when your bill is available to be viewed. Electronic billing saves MPW money and that keeps your water and wastewater bill the second lowest in the tri-county area.

To go paperless today, visit our website and sign up for Easy Pay Online.



MPW Operations Center
1619 Rifle Range Road
Monday-Friday 8 a.m.-5 p.m.
884-9626 (phone)
customerservice@mpwonline.com
Email requests will be processed the following business day.

The MPW Operations Center will be closed on
Thursday, November 25
And
Friday, November 26

If you have a water or wastewater emergency, call 884-9626. Our answering service will page on-call personnel.

