



## From The Director

The Michigan Public Service Commission (MPSC) is hosting a community utility forum on Tuesday, November 8, 2011 at 6:00 p.m. The MPSC is the state agency with regulatory responsibilities for energy, telecommunications, and some video / cable. THE MPSC does not have regulatory authority over municipal water and sewer authorities., therefore this event will not address water and sewer bills. This event will allow you to:

- ◆ Meet with an MPSC Commissioner,
- ◆ Learn about electric and natural gas rates,
- ◆ Discuss telephone service updates, and
- ◆ Voice utility-related questions.

Local utility service providers and assistance organizations will be present to speak with attendees.

To make the most of this opportunity, please bring your utility bills, shut off notices, tax information, and proof of any other assistance you receive.

The forum takes place at the Parkridge Community Center, 591 Armstrong Drive, Ypsilanti, Michigan 48197. For questions, please contact the MPSC at 800-292-9555 or by visiting [www.michigan.gov/mpsc](http://www.michigan.gov/mpsc).

- YCUA Director

**Visit our website at [www.ycua.org](http://www.ycua.org) for**

**more information on these and other topics.**

## City Meter Change Out Program

The meter change out program in the City of Ypsilanti is virtually complete and has resulted in the upgrade of 636 manual-read meters to the new MXU radio-read units.

With the radio-read system, YCUA personnel will no longer need to enter customers' yards and will be able to get more meter readings with greater accuracy and speed, thus eliminating the need for estimated bills and resulting in more accurate billing for our customers.

YCUA thanks its customers for their assistance in the completion of this important project.

## What Can Be Safely Released Into A Sewer?

YCUA is responsible for maintaining over 300 miles of sanitary sewers. A sanitary sewer is a separate underground system that is specifically designed for transporting sewage from houses and commercial buildings to our wastewater treatment plant. The YCUA collection system is not intended to convey storm water runoff from parking lots, roads, or homes. The improper release of materials into the sanitary sewer can cause serious damage to your private drainage system. The improper release of materials into the sanitary sewer can also adversely impact the environment as a result of a sewage backup or interfere with the proper operation of the YCUA collection system and/or wastewater treatment plant. Although the YCUA has various programs for maintaining these systems, we view our customers as the first line of defense when protecting these vital infrastructures within our community.

The following information can help everyone within our community make better decisions when disposing of various materials.

YCUA requests that the following items not be released into the sewer system and can be safely disposed of with your household solid waste:

- ◆ Fats, oils, and greases from cooking
- ◆ Baby wipes and diapers
- ◆ Rags, towels, sponges, or napkins
- ◆ Egg shells, coffee grinds, or food wrappers
- ◆ Produce stickers
- ◆ Cotton swabs or feminine hygiene products
- ◆ Syringes
- ◆ Toys
- ◆ Rubber or plastic products
- ◆ Aquarium gravel
- ◆ Kitty litter
- ◆ Hair
- ◆ Undergarments

The following products should not be released into the sewer system and are not accepted through our community's solid waste collection:

- ◆ Oil-based products such as transmission fluids, motor oils, or non-latex based paints
- ◆ Antifreeze
- ◆ Pharmaceuticals
- ◆ Fertilizers, pesticides, and herbicides

Please refer to [www.ycua.org](http://www.ycua.org) for proper disposal options for these products.

## It's Time To Winterize!

The time to prepare your home for winter is before the freezing temperatures and snow arrive. Follow these tips to help prevent frozen pipes in your home:

1. Disconnect outdoor hoses and make sure hose bibs are not dripping.
2. Insulate pipes in unheated areas or seal off unheated areas.
3. Find your water meter shutoff so if a break does occur, you can turn off your water service quickly.
4. If you have an in-ground sprinkler system, contact your dealer about scheduling an appointment to have your system thoroughly winterized.
5. If your home's water will be turned off for winter, there should be heat to protect the meter as well as the plumbing.
6. YCUA always recommends that customers winterize their homes just in case there is a complete power outage.

## Annual Hydrant Inspections

This time each year, YCUA winterizes the over 3,000 hydrants in its system and checks their operation for fire protection. The procedure involves an employee completing an inspection of the internal workings of each fire hydrant, making repairs and getting water out of the hydrant barrels to prevent freezing. YCUA will also flush or run each fire hydrant to insure that it will operate properly during an emergency. As part of this process, each hydrant is tagged with ribbon to indicate that the winterization has been completed and, to make sure there is no confusion as to whether they were done, the color of the ribbon changes each year. This year, the color green was chosen.

Area residents should be advised that as crews flush hydrants, there may be some discoloration of the water. If you experience rust-colored water, simply run the cold water tap for a few minutes to let the water clear. Please keep in mind, not to wash any light colored clothing until the water is running clear. The rust coloring is caused by a natural build up of minerals in the water system. Some natural mineral deposits are stirred up in the water pipes when fire hydrants are first turned on.

The fire hydrant inspection program helps insure that all our fire hydrants are ready in the event of an emergency. If you have any questions about the program please contact YCUA Director of Service Operations Jeff Castro at 734-484-4600 ext. 305.

## Odor Control Efforts at YCUA

The most common odorous substance in sewage / wastewater is hydrogen sulfide, known as a rotten egg odor. When the YCUA wastewater treatment plant began operation in February 1982, there was no odor control and most of the wastewater treatment tanks had no covering. When YCUA started receiving odor complaints in the mid 1990s, the influent well where raw sewage first comes into the plant was covered and ductwork installed that conveyed the foul air to an activated carbon system for treatment.

When this system was found to be insufficient, a headwork odor control facility was constructed in the year 2000 at a cost of \$2.2 million. This system has proven to be effective at controlling odor from the headworks processes.

In the year 1999, YCUA started planning and designing a WWTP Expansion and Improvement Project. The project expanded the wastewater treatment plant from the original 28.9 million gallon per day capacity to 45.9 million gallons per day capacity, which recently was reevaluated and rated at 51.2 million gallons per day capacity. The design committee, with the YCUA Board's concurrence, planned odor control for all odorous processes that didn't have odor control and the goal was no odor beyond the fence line of the wastewater treatment plant. The design committee originally specified a biofilter as the odor control technology for the wastewater treatment plant expansion and improvement project. A biofilter is a container of media that is either natural (woodchips) or synthetic (stone like) that is maintained at conditions that promote the growth of microorganisms onto the media. The foul air is blown into the biofilter and the microorganisms utilize the odorous substances as a food source thereby removing the odorous substances from the foul air stream.

The design committee was presented with a relatively new odor control technology referred to as air ionization. Air ionization was a simpler process and the air ionization systems are positioned near the source. Air ionization involves passing fresh air across ionizing tubes, which resulted in positive and negative oxygen atoms being created. The positive and negative oxygen atoms are mixed with the foul air, thereby changing the odorous substances to substances that are not odorous. Several members of the design committee toured facilities that were utilizing air ionization and were experiencing effective odor control. The design committee decided to change from biofilter to air ionization for the processes that needed odor control at a cost of approximately \$1.2 million.

Once installed and operating the air ionization systems were evaluated for their effectiveness at odor control and was found to not meet the specifications of the purchase agreement. YCUA eventually recovered approximately \$700,000 from the manufacturer and was allowed to keep all of the air ionization equipment. A committee was formed to determine the next type of odor control technology for the processes that had air ionization odor control. The committee decided to conduct a pilot study to evaluate odor control by injecting foul air into the existing aeration basins at the wastewater treatment plant.

The wastewater treatment plant aeration basins contain liquid that consist of wastewater and a culture of microorganisms the solution is called mixed liquor. The mixed liquor is teeming with microorganisms such as bacteria, stalked ciliated protozoa, flagellated protozoa, rotifers, paramecium, and nematodes. This is similar to a biofilter. The mixed liquor is the secondary treatment process at the YCUA wastewater treatment plant and the microorganisms do a phenomenal job at removing the dissolved solids and odors by eating them out of the wastewater. The pilot study has proven this technology to be effective at removing the odor from the foul air that is injected into it. The committee is in the final design stage of the project. The project is expected to be ready for bidding in the fall 2011 with an expected construction completion and operable in the summer 2012 at an estimated cost of \$1 million to \$2 million.

YCUA customers are encouraged to continue to call with any concerns regarding odor so that when the new odor control system is in place, YCUA can judge the effectiveness as determined by a reduction or elimination of odor complaints. YCUA also offers group tours of the YCUA wastewater treatment plant.

As the charge is to have no odors beyond the WWTP fence line, YCUA will continue to determine the source of the odor and develop a plan of action.