

waterings

April 2006

Volume 1, No. 1

Upgrades at Forest Park Water

Since it opened almost 12 years ago, Forest Park Water (FPW), the Authority's treatment facility in Chalfont, has been at the leading edge of water treatment technology.

To stay that course while keeping up with more stringent Federal drinking water regulations and addressing the need to expand capacity, the North Wales and North Penn Water Authorities have embarked on an ambitious plant enhancement program.

The capacity at FPW will increase from its current level of 20 million gallons per day (MGD) to 40 MGD. However, a perhaps more significant aspect of the expansion is the replacement of its traditional sand media filtration with membrane filtration. Membrane filtration is widely regarded as the best filtration technology currently available for large scale potable water production and is considered the technology of the future.

Membranes are considered to be the finest technology available because they are much more proficient at removing particulate and pathogens from the water than were the sand media filters. Also, membranes are able to filter out microscopic particles down to the size range of bacteria and are extremely proficient at removing cryptosporidium. Finally, membranes are much less likely to be affected by changes in the quality of the raw water.

Use of the membranes will allow NWWA and NPWA to stay at the leading edge of technology by taking advantage of future improvements in the technology when it comes time to replace the membrane material.

Membrane filtration at FPW will involve the filtering of water through the walls of millions of small tubular fibers (see photo below). These fibers, which have a total surface area equal to approximately 20 acres, will all fit within the existing filter area while doubling the production capacity of the plant.

Following a significant planning and design phase which took over one year to complete, construction began early in 2005. The project, budgeted to cost approximately \$30 million, is projected for completion in early 2007.



A single membrane module which has been cut open to show its 10,000 fibers. FPW will have a total of 4,500 membrane modules once the plant expansion is complete..



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Annual System Flushing Program Set to Begin

“System flushing” is the phrase used to describe the routine procedure of operating valves and fire hydrants in the water distribution system in order to maintain the highest level of water quality.

This year, system flushing will be done between the hours of 8:00 a.m. and 4:00 p.m., Monday through Friday, beginning on March 20 and continuing through May 26.

This year’s schedule is:

Montgomery and New Britain Townships - March 20 - May 5 (including the Gwynedd Knoll and Hunt Club sections of Lower Gwynedd Township)

Upper Dublin Township - March 20 - April 7 (including the Delaware Valley Industrial Park and Llewellyn Rd., Annasmead Rd., Baker Rd., and Llanfair Rd. sections of Lower Gwynedd Township)

Whitpain Township - March 27 - May 15

Lower and Upper Gwynedd Townships & North Wales Borough - April 24 - May 26 (including Normandy Farms, Normandy Farms Estates, Windermere and Amberley Sections of Whitpain Township)

You may notice reduced pressure or cloudy water when flushing is in your area...this is expected and is not harmful. Simply let the water run from your taps until it becomes clear.

If problems persist, please call our Customer Service department at 215-699-4836 between 8:00 a.m. and 5:30 p.m. Monday - Thursday and 8:00 a.m. and 4:00 p.m. on Friday.



Q: *Does the Authority test for MTBE?*

A: MTBE, or methyl tertiary butyl ether, is a member of a group of chemicals commonly known as fuel oxygenates. They are added to gasoline to increase its oxygen content, thus making it burn more cleanly and efficiently. MTBE has been used in gasoline since 1979 as an octane enhancing replacement for lead, and in higher concentrations since the Clean Air Act of 1990 to enhance combustion and reduce tailpipe emissions. Although there are other substances available such as ethanol, MTBE is the most commonly used fuels oxygenate.

The use of MTBE has indeed yielded clean air benefits. Unfortunately, the main cause of contamination, leaking underground gasoline storage tanks, has resulted in MTBE being detected in groundwater supplies coast to coast. Small gasoline spills and improper disposal also are sources of groundwater contamination. A single gallon of gasoline containing MTBE could contaminate a very large volume of ground water.

Although not a regulated contaminant, the North Wales Water Authority realizes that MTBE contamination presents a real and growing threat to our drinking water resources. The Authority has been routinely monitoring MTBE for many years and in those areas impacted by gasoline spills or releases, has voluntarily increased monitoring frequencies. MTBE has never been detected in any water sources used by the Authority.

**Water Rings is published Quarterly to Serve our Customers in:
North Wales Borough and Lower Gwynedd, Montgomery,
New Britain, Upper Dublin, Upper Gwynedd, and Whitpain Townships.**