

Partners in PA

Partnership for Safe Water Update

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The SPOTLIGHT is on: Westmoreland County's Indian Creek Water Filtration Plant



The Department of Environmental Protection (DEP) and the PA Section AWWA (PA AWWA) recently recognized the Municipal Authority of Westmoreland County's Indian Creek Water Filtration Plant staff with the "Director's Award for completing the third phase of the Partnership for Safe Water program. The Indian Creek water filtration plant joined the PfSW program in 2002, and is one of only a handful of water plants in the country to complete this phase of the Partnership. Presently, the water system provides drinking water service to approximately 181,919 people.

Pictured below in celebration of Westmoreland's accomplishment are:



(L-R): Renee Diehl, DEP Sanitarian; Erwin Elma, Water Quality Supervisor; Brian Beskitt, Water Quality Superintendent; Kay Frederick, DEP; Donald Rusitti, MAWC Board Chairman; Jack Ashton, Operations Manager/Production; Ken Goyak, **Production Supervisor**



(L-R): Kate O'Neill, PfSW Representative; Donald Rusitti, MAWC Board Chair; Chris Kerr, MAWC Manager

Partnership for Safe Water Program... still growing

Gettysburg Municipal Authority joined the Partnership for Safe Water. Continuous improvement is the mindset at Gettysburg that has resulted in an accomplished record of high quality finished water. Given these characteristics, their thoughts on joining the Partnership are very interesting.

Mark Guise, Manager for the Gettysburg Municipal Authority, states that they're ready to,"...use the guidance and tools of the PfSW to take a well run plant and further optimize it."

The Partnership for Safe Water welcomes Gettysburg. Your professionalism and sense of purpose are very appreciated.

Downingtown Municipal Authority Gets Down to Business

Downingtown Municipal Authority continues to successfully complete work on their Phase IV portion of the Partnership for Safe Water Program. After working through Phase I through III the Authority felt it was time to move forward with Phase IV. "We recognize that the Phase IV level is not for everyone, but our staff has always been committed to the programs goals and quite frankly we enjoy a challenge", said John Lichman, Executive Director, Downingtown Municipal Authority. And guite a challenge it is.

The Authority has been collecting and analyzing individual filter data in an effort to further improve individual filter and combined filter results. At this level of review the Partnership is focused on the premise that the plant performance is only as good as its worst filter. To prevent Cryptosporidium from passing through the plant, the worst filter must be optimized for this purpose. The filter profiles generated from this review allow the operators the opportunity to investigate filter operations throughout the entire filter run. "Having these profiles has generated enthusiasm with the staff resulting in new recommendations on things such as backwash procedures, valve adjustments and filter run times, just to mention a few."

Indeed, the individual filter profile is iust one of the many new requirements and goals outlined in the Phase IV



Guidelines. The PA-AWWA section has prepared a Phase IV Guidelines and Sample Report package, which provides a step-bystep sample, intended to help the user navigate the Phase IV requirements. Please contact your Partnership for Safe Water representative to discuss this next step in the Partnership program, known as the Phase IV "Excellence in Water Treatment".



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Plants Seeking Phase IV must register with AWWA!

All plants that are actively pursuing the requirements of Phase IV to achieve the "Excellence in Water Treatment Award" must register prior to submitting an award application. It is highly recommended that plants' register before they even begin to collect the documentation needed to attain Phase IV. Registration must occur at least three months prior to submitting a Phase IV application. Registration is FREE and the form is included with the Phase IV application. The Phase IV application can be found at http://www.awwa.org/Resources/PartnershipforSafeWater.cfm?ItemNumber=34452&navI temNumber=33974.

You're Invited to the Partnership for Safe Water Mixer Wednesday, May 6, 2009 * 4:30 PM - 5:15 PM • Exhibit Hall Lobby

The Partnership for Safe Water program is still going strong in PA! Pennsylvania accounts for almost 30% of the nation's total Partnership membership. Partnership filter plants serve almost 5.8 million customers in Pennsylvania.

Representatives from the Pennsylvania Department of Environmental Protection and PA Section Officers will be acknowledging accomplishments of the past year, as a testimonial for their efforts in striving to produce the best water quality possible, a custom-made and engraved Phase III Crystal Glass Water Drop Award will be presented to several Partnership for Safe Water members who have recently successfully completed their Phase III.

Light refreshments will be served.... it's a great way to "warm up" for the Exhibit Hall Opening!

All those dedicated to optimizing filter plant performance are invited to come and celebrate PA's success with the Partnership program.

Treatment Tips

Calculating the Filter Backwash Rate

Here is a simple way of calculating the filter backwash rate. Measure down from the backwash trough and make a mark at 1 foot. You also need a stopwatch or timer (must indicated tenths of a second). Lower the level in the filter but not below the surface of the media. Start the backwash and record the time it takes for the water to rise from the 1-foot mark to the overflow trough. Then calculate the backwash rate (gpm/ft2) as follows.

Backwash rate (gpm/ft2) = (7.48 gal/cu ft x 60 sec/min x 1 ft)/time in seconds

Example: It took 25 seconds for the water to rise 1 ft. = $(7.48 \times 60)/25 = 17.9 \text{ gpm/ft2}$ This method does not require that you know the surface area of the filter. It is simple enough that you can repeat it from time to time to ensure that your backwash rate remains constant.

Converting ml/min to gal/day -

When calibrating a chemical feed pump most operators get a result in milliliters per minute. This is convenient when calculating the dosage in mg/liter. But most operators also need to keep track of chemical usage so they can reorder more or make another batch for the day tank. So you need to convert the ml/min chemical feed to a daily number of gallons of chemical used.

3,785 ml/gallon

1,440 min/day

So, # ml/min x 1,440 min/day + 3,785 ml/gal + # gal/day

Example: A chemical feed pump is delivering 150 ml/min. How many gallons per day of chemical are used? 150 ml/min x 1,440 min/day div 3,785 ml/gal = 57.1 gal/day

Update Your Partnership Info

Send any changes to your Partnership contact information to Debby Qualls at dqualls@awwa.org. If we don't have the correct information you may miss out on upcoming program improvements. Be sure to include current e-mail address if available.



PfSW Members Benefit From WebOAS Enhancement

Developed by the Pennsylvania Department of Environmental Protection, WebOAS is an internet based application that water suppliers can use to submit important raw, settled, and filtered turbidity data. WebOAS is located the state website www.depgreenport.state.pa.us. WebOAS summarizes turbidity performance data and creates valuable trends called the "Treatment Barrier Performance Summary" (summary sheet). The Area Wide Optimization Program (AWOP) and the Partnership for Safe Water (PfSW) are both national optimization programs that use separate yet important software tools. AWOP uses WebOAS and the PfSW uses the PfSW software. In the past, if water systems wanted to use both software programs, they would need to do double data entry into each software program. To solve the double data entry problem, a recent enhancement was made to WebOAS that allows WebOAS users to enter their data one time into WebOAS; then WebOAS will automatically download the turbidity data into the PfSW software. Currently, 149 filter plants serving about 2.9 million people are participating in the WebOAS data submittal. For WebOAS information, contact Kevin Anderson at 717-772-2261.

Use the Phase III Report Template

A template is now available for preparing a Phase III completion report. This tool was developed by our Regional Partners at the Pennsylvania Department of Environmental Protection and provided to the *Partnership* for our members.

The template is posted for download on the *Partnership* website: www.partnership forsafewater.org under the Program Requirements tab.