Nick Tymchenko
US EPA Region 3

215-814-2022
tymchenko.nick@epa.gov

National AWOP

An AWOP is a multi-state effort in which states work together to develop and implement individual state programs to optimize particle removal and disinfection capabilities of conventional surface water treatment plants in each respective state. AWOP is designed to provide state drinking water staff tools to assist water systems to work toward optimizing their existing treatment processes in an effort to increase public health protection. It also helps prioritize state resources by identifying systems that would benefit the most from assistance.

EPA HQ and the Technical Support Center (TSC) are currently coordinating AWOP activities with US EPA Regions 3, 4, 6, and 10, for 21 states.

Within EPA Region 3, MD, PA, VA, and WV voluntarily participate in AWOP. DE does not due to its limited inventory of surface water PWSs. Quarterly meetings have been held since 2003 with meeting locations rotating throughout the Region. Each state tailors their respective optimization program in a way that best meets their needs; however, it is based on the AWOP model of Status Component, Targeted Performance Improvement Component, and the Maintenance Component. The ultimate goal of AWOP is achieving optimized performance of existing facilities at surface water treatment plants by maximizing a state's limited resources to best protect public health. Optimization is discussed in terms of treated water turbidities as optimized particle removal corresponds directly to increased pathogen removal. When plant filters are operated at or near optimal conditions (0.1 NTU, 95% of the time), they can achieve in the vicinity of 3-logs (or more) removal of the protozoa *Cryptosporidium.*

The Region 3 AWOP began a series of Performance Based Training (PBT) sessions for operators from five PWSs in 2006. Plants from PA, MD, WV, and VA are represented. PBT, one of the AWOP tools, is a 15-month long program that teaches plant operators leadership skills and problem solving techniques to assist them in optimizing plant performance. MD, PA, VA, and WV drinking water program staff serve as facilitators to each of these plants. The facilitators work with the systems between PBT sessions (5 in all) by providing advice and coaching to ensure the operators complete their assignments prior to the next session

Recent / Upcoming Region 3 AWOP events

January 9-10, 2007	Region 3 AWOP Planning Meeting and PBT Session 3 Training – Winchester, VA
April 17-18, 2007	Region 3 AWOP Planning Meeting and PBT Session 4 – Hagerstown, MD
July 31 – August 2, 2007	Second National AWOP Meeting in Cincinnati, OH
August 14-15, 2007	Region 3 AWOP Planning Meeting and PBT Session 5

Each Region 3 state is providing continuing education units (CEUs) to the operators who are participating in the PBT sessions. During the quarterly meeting, the Penn State University Technical Assistance Center (TAC) provided information on how it will be able to assist in streamlining CEU approval through reciprocity agreements with other state universities.

State AWOP

Nick Tymchenko 215-814-2022
US EPA Region 3 tymchenko.nick@epa.gov

As discussed earlier, Region 3 states tailor their optimization program to meet their needs. Each state's status component is based on their own criteria that provide the most value for staff to prioritize the state's surface water plants.

Nick Tymchenko
US EPA Region 3

215-814-2022
tymchenko.nick@epa.gov

West Virginia Department of Health (WVDHHR)
AWOP Goals:

- WV will likely implement PBT, state wide, upon completion of the current multi-state PBT. Collaboration with the WV Rural Water Association trainers, possibly retired water operators, and state agency personnel is anticipated.
- The 95th percentile combined filter effluents (CFE) turbidities and the individual T/F/M component of the 2005 Capacity Development scores will be added to the yearly AWOP spreadsheet. This spreadsheet is generated by the district staff and summarizes the AWOP data on for each year.

Successes:

- In 2007, five seminars are being presented at different locations state-wide highlighting "filter optimization & optimization, and the current status of the WV-AWOP program", six hours total.
- WV provides the overall state status component rankings to individual systems. This includes: the overall ranking (1 thru 127), the appropriate "Public Health Risk Category" (high/moderate/low), the yearly (OAS software) TurbOPT graph, and a copy of the annual report.
- 2006 data will be summarized by March, 2007 in an annual report. WVDHHR staff are coordinating for a PWS attendance at R3-PBT – *Charles Town Water Dept. which serves 18,500 people.*

Opportunities for "tie-in" to Capacity Development and DWSRF programs

FIGURE 3: AWOP ACTIVITIES ELIGIBLE FOR DWSRF SET-ASIDE FUNDING

AWOP Activity	DWSRF Set-Aside Category			
	Administration & Technical Assistance to Systems	Small System Technical Assistance	State Program Management	Local Assistance & Other State Programs
Program Management (data entry, reporting, travel)			✓	
Conducting CPEs*	✓	✓	✓	✓
PBT Facilitation*	✓	✓	✓	✓
Equipment for CPEs & PBTs			✓	