

## DEMONSTRATION OF 4-LOG TREATMENT OF VIRUSES INFORMATION SHEET

In 2009, Pennsylvania's Chapter 109 Safe Drinking Water regulations were revised to incorporate the Federal Groundwater Rule. A key component of these revisions requires that all community water systems maintain at least 4-log treatment of viruses for each entry point served by groundwater sources.

Community water systems are required to demonstrate and provide at least 4-log treatment of viruses according to the following schedule:

Population Served	4-Log Treatment Submission Deadline	Begin Approved 4-Log Treatment
Greater than 500	October 1, 2010	April 1, 2011
100 - 500	October 1, 2011	April 1, 2012
Less than 100	October 1, 2012	April 1, 2013

Non-community water systems **are not required** to demonstrate and provide 4-log treatment of viruses however; non-community water systems may respond to *E. coli*-positive source water samples by demonstrating and providing 4-log treatment of viruses as their corrective action. A non-community water supply may also choose to avoid triggered monitoring requirements by demonstrating and providing 4-log treatment of viruses and beginning compliance monitoring.

The key to achieving 4-log treatment of viruses is having adequate disinfectant contact time prior to the water being delivered to the first user. The contact time calculation is dependent on the baffling factor assigned to the treatment tanks or the segment of the water supply system providing the disinfectant contact time.