

I E S W T R

Background on the Interim Enhanced Surface Water Treatment Rule (IESWTR):

The IESWTR was finalized in December 1998 at the same time as the Stage 1 D/DBP Rule. The IESWTR expands upon the requirements of the Surface Water Treatment Rule.

The IESWTR applies to systems using surface water or ground water under the direct influence (GWUDI) of surface water that serve 10,000 or more people. Compliance with the requirements of the IESWTR was required by January 1, 2002, with the exception of the disinfection profiling, which was initiated in 1999.

For surface water and GWUDI systems serving less than 10,000 people, compliance with the Long-Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR) is required by January 11, 2005. The LT1ESWTR extends the requirements of the IESWTR to smaller systems.



IMPORTANT DATES

Finalized Date: December 1998
Compliance Date: January 2002

Insight Into the Regulation:

Major Components of the IESWTR Include:

Disinfection Profiling and Benchmarking: Disinfection profiling is a process through which a water system and the State can together ensure that microbial protection is not compromised as a result of implementing requirements for compliance with the Stage 1 D/DBP Rule. There are 3 steps to disinfection profiling and benchmarking:

1. Determine applicability (quarterly TTHM/HAA5 analyses);
2. Profiling – one year of daily data collection; and
3. Benchmarking and consultation.

The disinfection profile methodology is depicted on the back of this flyer.

Requirement for 2-log Cryptosporidium removal: Systems that are required to filter under the SWTR are required to achieve at least 2-log Cryptosporidium removal under the IESWTR. Systems that use conventional or direct filtration and comply with the increased effluent turbidity standards also specified in the IESWTR and meet the design and operating conditions specified by the State comply with this requirement. For systems that use slow sand or diatomaceous earth, the 2-log removal requirement is met if they are in compliance with existing turbidity performance standards under the SWTR.

Combined effluent turbidity requirements: The turbidity level of representative samples of a conventional or direct filtration system's combined filter effluent must be less than or equal to 0.3 NTU in at least 95 percent of the measurements taken each month. In addition, the turbidity level of representative combined filter effluent samples must not exceed 1 NTU at any time. These requirements are based on measurements of the combined filter effluent taken at four-hour intervals.

(Continued)

I E S W T R

Major Components Continued:

Individual filter monitoring: Systems using conventional or direct filtration and subject to the IESWTR must conduct continuous effluent turbidity monitoring for each individual filter. The results of this monitoring must be recorded every 15 minutes. Systems using filtration methods other than conventional or direct filtration are not required to monitor individual effluent turbidity at this time. However, the EPA recommends that they do so.

Sanitary Surveys: The states must conduct sanitary surveys on surface water or ground water systems under the direct influence of surface water regardless of size. These surveys must be completed once every three years for community public water systems and once every five years for non-community public water systems. There are eight components to the sanitary surveys: source; treatment; distribution system; finished water storage, pumps, pump facilities, and controls; monitoring, reporting, and data verification; system management and operation; and operator compliance with State requirements.

Covers for new finished water reservoirs: The IESWTR specifies that all new reservoirs, holding tanks, or other storage facilities for finished water for which construction begins after February 16, 1999 must be covered. This does not apply to existing finished water reservoirs constructed prior to February 1999.

Inclusion of Cryptosporidium in watershed requirements for unfiltered systems: For systems that use surface water or ground water under the direct influence of surface water and do not filter, Cryptosporidium control provisions are to be implemented in the same manner as those previously in place for Giardia lamblia and viruses. Although monitoring requirements are not currently in place for the watershed protection program, the systems are currently required to develop State-approved techniques for eliminating or minimizing the impacts of point and non-point sources of pathogenic contamination from Giardia and viruses. Under the IESWTR, these techniques must also consider the potential presence of Cryptosporidium in the watershed.

Disinfection Profiling Method

