



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 8 2016

OFFICE OF WATER

MEMORANDUM

SUBJECT: Long Term 2 Enhanced Surface Water Treatment Rule
Second Round Source Water Monitoring and Bin Placement

FROM: Anita Thompkins, Division Director
Drinking Water Protection Division
Office of Ground Water and Drinking Water

A handwritten signature in blue ink, appearing to read "Anita Thompkins".

TO: Regional Branch Chiefs, Regions I-X

The Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) applies to all public water systems served by a surface water source or public water systems served by a ground water source under the direct influence of surface water. The LT2ESWTR requires source water monitoring for *Cryptosporidium* for public water systems serving at least 10,000 persons. Public water system serving less than 10,000 persons must monitor their sources for *E.coli* or a state-approved alternate indicator. *Cryptosporidium* monitoring is required for public water systems if they exceed trigger levels for *E.coli* or a state-approved indicator. The LT2ESWTR requires two rounds of source water monitoring separated by a period of six years. Based on *Cryptosporidium* levels found in source water monitoring, systems are placed in one of four "bins". Public Water systems in Bin 2 and higher are required to provide additional treatment for *Cryptosporidium* treatment. These public water systems must select from treatment options identified in the LT2ESTWR "Microbial Toolbox".

All public water systems subject to the LT2ESWTR should now be in compliance with any treatment requirements based on the first round of source water monitoring unless the state allowed an extension for capital improvements. The LT2ESWTR requires a second round of source water monitoring six years after the completion of the first round of sampling. As with the first round of source water monitoring, public water systems are placed in an LT2ESWTR treatment bin based on source water monitoring results. Systems currently providing 5.5 log *Cryptosporidium* treatment, or committing to provide that treatment before their LT2ESWTR Round 2 treatment compliance date, are not required to conduct source water monitoring.

EPA believes that the second round of source monitoring is necessary to determine if the treatment required as a result of the first round is still appropriate and meeting the treatment requirements of the regulation. Under the special primacy requirements of the LT2ESWTR, 142.16 (n)(2), states are

required to address changes in watershed conditions that may require additional treatment or source water monitoring as part of the sanitary survey process.

The LT2ESWTR requirements do not address a situation where the second round of monitoring results in a lower treatment bin placement from the first round of monitoring. Given that the first round of source monitoring results may represent an underestimate of *Cryptosporidium* levels due to method-recovery and temporal-variability challenges and given that the first round results indicate that the source is vulnerable to contamination, EPA believes that reducing LT2ESWTR treatment requirements based on the second round of monitoring is not consistent with the LT2ESWTR and the Stage 2 M/DBP Federal Advisory Committee recommendations. However, if a SDWA primacy agency chooses to consider a reduction in LT2ESWTR treatment requirements, EPA believes that a decision to allow a reduction in the *Cryptosporidium* treatment levels provided should not be based solely on the results of the second round of LT2ESWTR source water monitoring. Any decisions should be based on a weight of evidence process evaluating documented changes in watershed conditions and activities, removal and/or active management of potential sources of *Cryptosporidium*, relocation of source water intakes, ongoing state sanitary surveys of watershed conditions and other identified factors that would be expected to reduce *Cryptosporidium* levels in the source water on a long-term basis and should be supported with continuing source monitoring for *Cryptosporidium*.

The LT2ESWTR watershed protection tool removal credit is based on a continuing program of watershed management and source protection addressing potential source of *Cryptosporidium*. A system that no longer meets the watershed tool requirements would be required to meet LT2ESWTR source water monitoring and any applicable treatment requirements. A system providing 5.5 log *Cryptosporidium* treatment in lieu of source water monitoring that no longer provides that treatment or commits to, but then fails to provide, that treatment would also be subject to those requirements.

If you have additional questions or concerns, please contact me or have your staff contact Maria Lopez Carbo, Chief, Drinking Water Protection Branch, Office of Ground Water and Drinking Water, lopez-carbo.maria@epa.gov.

Cc: M-DBP Workgroup Members
Regions I-X

Jim Taft, Executive Director, Association of State Drinking Water Administrators