

REGULATORY UPDATE: WINTER 2005/2006

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SAFE DRINKING WATER ACT FINAL SCHEDULE SET FOR M/DBP REGULATIONS

The Stage 2 Disinfection Byproduct (DBP) Rule and the Long-term (2) Enhanced Surface Water Treatment Rule (LT2ESWTR) were proposed for public comment in August 2003. Under the 1996 Amendments to the Safe Drinking Water Act, EPA was required to promulgate final rules by May 2002.

Two environmental groups, the Natural Resources Defense Council and the San Francisco Bay Area Physicians for Social Responsibility, filed a complaint in federal court regarding EPA's missing the SDWA deadline for these two rules. As a result of that complaint, in November 2005 EPA signed a consent decree with the U.S. District Court in Washington DC to promulgate the Stage 2 DBP Rule and the LT2ESWTR by December 15th. Once signed by the EPA Administrator, both of the rules will be sent to the U.S. Government Printing Office to be printed in the *Federal Register*. The actual date of *Federal Register* printing will trigger implementation and compliance schedules.

Full compliance with the various requirements of these two rules will be required 6 years after publication in the *Federal Register*. However, once the final rules are published there are requirements of immediate interest for drinking water utilities. These include the requirement to prepare and submit an Initial Distribution System Evaluation (IDSE) plan and the requirement for large surface water systems to conduct source water monitoring for *Cryptosporidium*.

In November 2005 the Washington DC office of the American Water Works Association (AWWA) released a regulatory alert regarding these two rules. The following presents highlights from the AWWA alert:

1. Highlights for the Stage 2 DBP Rule:
 - a. Systems serving greater than 100,000 people (and their consecutive systems) will submit their Initial Distribution System Evaluation (IDSE) plan 6 months after publication of the final regulation. (Systems serving 50,000 to 100,000 people will submit their IDSE plan 12 months after the final rule.)
 - b. In their IDSE plan utilities will indicate whether they will conduct 12 months of monitoring or whether they will pursue an alternate approach (e.g., use of a hydraulic or water quality model).
 - c. The final regulation will base the number of IDSE samples (and ultimately the number of required compliance samples) on population served and not on the number of treatment plants as is the current requirement.
 - d. The State Primacy Agency and/or the EPA Regional Office will have 12 months to review

and approve the IDSE plan (this is a new requirement not included in the proposed Stage 2 DBP Rule).

- e. After approval, utilities have 12 months to conduct the IDSE (monitoring or use of a hydraulic model).
 - f. Utilities will then have 3 months to prepare their final report with their recommendations (and justifications) for new DBP sampling locations.
 - g. EPA plans to develop a web-based "IDSE tool."
 - h. AWWA plans to hold webcasts on IDSE requirements.
2. Highlights for the LT2ESWTR:
 - a. Surface water systems and groundwater under the direct influence of surface water systems serving greater than 100,000 people will begin 24 months of cryptosporidium source water monitoring 6 months after publication of final rule. (Under the proposed LT2ESWTR, the population cutoff for the initial group of utilities required to conduct source water monitoring was 10,000 people or more, and not 100,000 people.)
 - b. Surface water systems and groundwater under the direct influence of surface water systems serving 50,000-100,000 people will begin source water monitoring 12 months after publication of the final rule.

EPA WEBCASTS ON D/DBP RULES

EPA has scheduled four webcasts for January 2006 regarding the Stage 2 DBP Rule and the LT2ESWTR. The four dates and topics are as follows:

1. January 17, 2006 – Stage 2 DBP Rule and LT2ESWTR: Overview of the New Rules
2. January 19, 2006 – IPMC, DCTS and IDSE Tools*: What are they and how can they help with early implementation activities?
3. January 24, 2006 – Stage 2 DBP Rule and LT2ESWTR: Overview of the new rules
4. January 26, 2006 – IPMC, DCTS and IDSE Tools: What are they and how can they help with early implementation activities.

* IPMC = Information Processing and Management System; DCTS = Data Collection and Tracking System

Additional information and registration for the webcasts are presented at the following EPA website:

<http://www.epa.gov/safewater/lt2/redirect.html>

GROUNDWATER RULE

In the same consent decree addressing the Stage 2 DBP Rule and the LT2ESWTR, EPA also agreed to publish a final GWR by August 2006. The GWR was proposed in May 2000. The following presents highlights from the proposed GWR:

- Sanitary surveys are to be conducted by the State to identify significant deficiencies.
- States will assess the hydrogeologic sensitivity of a given groundwater [the proposed regulation defines groundwaters from karst, gravel, or fractured bedrock aquifer as being hydrogeologically sensitive unless protected by a hydrogeologic barrier (physical, chemical or biological barriers)].
- Groundwater systems that do not disinfect or otherwise treat to provide a 4-log reduction of viruses and draw from hydrogeologically sensitive aquifers are to conduct monthly source water microbial monitoring (either E. coli, enterococci, or coliphage monitoring as specified by the State). The State can waive the source water monitoring requirement after 12 months (based on no detects of fecal indicators, and the State determines that fecal contamination of the well is “highly” unlikely based sampling history, land use pattern, disposal practices in the recharge area, and proximity of septic tanks and other fecal contamination sources).
- Groundwater systems that do not provide 4-log reduction in viruses that detect a total coliform positive in the distribution system (under the Total Coliform Rule) must collect a source water sample within 24 hours of notification of the distribution system positive result.
- If any source water sample is positive for one of the microbial indicators, the system must notify the State by the end of the next day after the system learns of the positive result.
- Any system identified with a significant deficiency (or positive microbial samples indicating fecal contamination) must implement corrective action (eliminate the source of contamination, correct the significant deficiency, provide an alternate source water, or provide 4-log reduction of viruses) within 90 days.
- If the system is unable to address the source water contamination within 90 days, then the system must submit a proposed plan and schedule for addressing the deficiency for State approval within the 90-day period.
- Significant deficiencies are proposed to include: defect in design, operation, or maintenance, or a failure or malfunction of the source, treatment, storage, or distribution system “that the State determines to be causing, or has potential for causing the introduction of contamination into the water delivered to consumers.”
- Systems that disinfect to achieve the 4-log virus inactivation will be required to conduct compliance monitoring.

LEAD AND COPPER RULE ACTIVITIES

A second meeting of the National Drinking Water Advisory Council’s (NDWAC) Working Group on the Public Education Requirements of the Lead and Copper Rule will be held December 15-16, 2005 in Washington DC. This NDWAC Working Group is to (1) review the current public education requirements of the Lead and Copper Rule and make recommendations to improve public education to the full NDWAC; (2) develop language for communicating the risk of lead in drinking water and a suggested response to the public; and (3) define the delivery means to the public. The NDWAC established a target date of May 2006 to complete these tasks.

In October 2005 EPA released a draft document “Getting the Lead Out: A Guide for Reducing Lead in Drinking Water in Schools.” Public comment was requested by November 4, 2005.

CONTAMINANT CANDIDATE LIST (CCL)

The development of the CCL is a requirement under the SDWA and is the starting point for EPA’s evaluation of contaminants for potential regulation in drinking water. The initial CCL was published in 1998. The initial CCL contained 60 chemicals and microbiological entities. EPA reviewed 9 chemicals and microbiological entities from the initial CCL and determined that there was not sufficient reason to develop drinking water regulations.

EPA published a final Contaminant Candidate List 2 (CCL2) in February 2005. The CCL2 is essentially the 51 remaining contaminants from the initial CCL. EPA is scheduled by December 2005 to identify at least 5 constituents from the CCL2 for possible regulation. Final determinations on whether or not to pursue a regulation would then be made in 2006.

UNREGULATED CONTAMINANT MONITORING RULE (UCMR)

In August 2005 EPA proposed the UCMR2. The purpose of UCMR requirements is to obtain occurrence information for constituents that may be regulated under the SDWA. The UCMR2 proposal included 26 contaminants. It is expected that EPA will publish a final UCMR2 by June 2006. As proposed UCMR2 monitoring would occur between 2007 and 2011.

CLEAN WATER ACT

New Attempt to Develop Blending Guidance for Peak Wet Weather Events

On October 24, 2005 the Natural Resources Defense Council (NRDC) and the National Association of Clean Water Agencies (formerly known as the Association of Metropolitan Sewerage Agencies or AMSA) submitted to EPA a proposal addressing the “standard that wastewater treatment plants have to meet in order to bypass secondary treatment during peak wet weather flows.”

The 8-page proposed blending guidance is divided into two main discussions:

1. Applicability of the Bypass Regulation to Blending
2. No Feasible Alternatives Analysis Process

Under the approach the guidance, POTWs seeking approval of peak wet weather diversions as an anticipated bypass would submit a comprehensive analysis (“utility analysis”) to determine that there are “no feasible alternatives.” Such an analysis would include the following:

- a. document current treatment plant design capacity,
- b. estimate frequency, duration and volume of current wet weather diversion (and evaluate alternatives to reduce frequency, duration and volume of such occurrences and related costs,
- c. estimate the potential for future wet weather diversions (based on weather patterns, population growth and projected treatment plant and collection system changes),
- d. assess existing storage within the collection system or on-site at the treatment plant and evaluate options for enhanced utilization or expansion of that storage,
- e. evaluate technologies to provide additional treatment to peak wet weather flows (e.g.,

biological treatment, physic-chemical treatment, ballasted flocculation, deep bed filtration, membranes),

- f. evaluate extent to which POTW is maximizing ability to reduce I/I within the entire collection system,
- g. evaluate peak flow reductions through capacity, Management, Operations and Maintenance (CMOM) programs,
- h. assess community’s ability to fund peak wet weather flow improvements, and
- i. propose a protocol to monitor recombined flow at least once daily during diversions.

The intent of the guidance is that EPA (in non-authorized states) would use this guidance to facilitate NPDES permitting decisions as well as use the guidance when reviewing NPDES permits in NPDES delegated states.

EPA staff is currently reviewing the proposal. According to NACWA, the initial response from Ben Grumbles, EPA Assistant Administrator for Water, has been favorable. No timetable is available as to what EPA’s next step would be in regards to the proposal.