A Publication of Advanced Engineering and Environmental Services, Inc.

REGULATORY COMPLIANCE

The Update

March 2010

AE2S Think Big. Go Beyond.

Stage 2 DBPR Consecutive Systems

The US Environmental Protection Agency (USEPA) has published a guidance manual to assist consecutive systems in understanding and meeting the requirements of the Stage 2 Disinfectants and Disinfection By-Products Rule (DBPR). A consecutive system is defined as a public water system that receives some or all of its finished water from one or more wholesale systems.

Consecutive systems that use a disinfectant other than ultraviolet (UV) light or that deliver water from another system that has been treated with a disinfectant other than UV light are subject to the Stage 2 DBPR. Prior to promulgation of the Stage 2 DBPR, consecutive systems were not specifically addressed by the Safe Drinking Water Act (SDWA) regulations.

Requirements that apply to consecutive users include Disinfection By-Product Maximum Contaminant Levels (MCLs), Initial Distribution System Evaluations (IDSEs), Stage 2 Compliance Monitoring Requirements, Disinfectant Residual Monitoring, and Operational Evaluation.

The manual can be found at http://www.epa.gov/safewater/disinfection/stage2/compliance.html or by contacting AE2S. ■

World Water Day

March 22nd will mark the 17th annual International World Water Day. World Water Day is a means of focusing attention on the importance

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USEPA Issues Small System LT2ESWTR Guidance

The USEPA has issued guidance to States on alternate indicators and *E. coli* trigger levels used to determine *Cryptosporidium (Crypto)* monitoring requirements under the Long Term 2 Enhanced Surface Water Treatment Rule (LT2) for small water systems (fewer than 10,000 people). The USEPA Office of Ground Water and Drinking Water (OGWDW) has conducted an evaluation of the LT2 monitoring data and the *E. coli* trigger levels. As currently stated under the LT2, small systems have the option of monitoring for *E. Coli* and then would only have to monitor for *Crypto* if the samples exceed trigger levels of 10 *E. Coli* per 100 milliliters (ml) for lake or reservoir sources or 50 *E. Coli* per 100 ml for stream sources.

The analysis indicated that trigger levels of 100 *E. Coli* per 100 ml for both lake or reservoir and flowing streams provide more accurate identification of systems requiring *Crypto* monitoring and compliance with the LT2. It was determined that the higher trigger level provides accurate identification of systems requiring *Crypto* monitoring and compliance with the LT2 treatment technique requirements. Based on this evaluation of the trigger levels, many small systems may be excluded from *Crypto* monitoring. Because *Crypto* sampling and testing is very expensive, it is anticipated the new guidance will collectively save small water systems millions of dollars per year. States may choose to not allow the alternative trigger to be used or may propose other alternative levels as described in the LT2; however, the general feedback from the States in our region is that there will be an effort to utilize the new guidance.

More information on this guidance can be found at http://www.awwa.org/Publications/StreamlinesArticle.cfm?ItemNumber=53907 or by contacting AE2S. ■

Ambient Water Quality Criteria for Ammonia

Under directives of the Clean Water Act, the USEPA has reviewed and revised the Draft 2009 Update Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater document. Aquatic life water quality criteria are numeric values that protect aquatic life from the harmful effects of pollutants in surface water.

Freshwater aquatic organisms should not be affected unacceptably if: 1) the one-hour average concentration of total ammonia nitrogen does not exceed the acute criterion more than once every three years; 2) the thirty-day average concentration of total ammonia nitrogen does not exceed the chronic criterion more than once every three years; and 3) the highest four-day average within the thirty-day period should not exceed 2.5 times the chronic criterion. The ammonia

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If you have any questions concerning the content of this newsletter, please contact Melissa Cassanelli, at 701-746-8087 or Melissa.Cassanelli@ae2s.com. Web site links contained in this issue are posted as clickable links at www.ae2s.com/Updatelinks.

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(World Water Day from first page)

of freshwater and advocating for the sustainable management of freshwater resources. World Water Day brings together policy makers, scientists, and other prominent groups to discuss how to address the challenges of water quality degradation around the world.

The official World Water Day event will be held in Nairobi, Kenya under the theme "Clean Water for a Healthy World". This year's campaign will focus on raising awareness about sustaining healthy ecosystems and human well-being by addressing water quality challenges in water management and raising the profile of water quality by proactively addressing pollution prevention, clean up, and restoration.

More information about World Water Day 2010 and how you can get involved can be found at http://www.worldwaterday2010.info/ or by contacting AE2S. ■

(Ambient Water Quality Criteria for Ammonia from first page)

criteria update recommends an acute criterion of 2.9 milligrams of Nitrogen per liter (mg-N/l) when mussels are present and 5.0 mg-N/l when mussels are absent. The recommended chronic criterion is 0.26 mg-N/l when mussels are present and 1.8 mg-N/l when mussels are absent. These recommendations are at a pH level of 8 and temperature of 25 degrees Celsius. As temperature decreases, invertebrates, not fish, become less sensitive to ammonia. Because ammonia is particularly toxic to freshwater mussels, USEPA updated the numeric freshwater acute and chronic aquatic life criteria for ammonia to ensure they are protective of the mussels.

The USEPA is accepting written scientific views on the draft document until April 1, 2010. To submit comments or to read the full text of the update, please visit http://www.epa.gov/waterscience/criteria/ammonia/index.html or contact AE2S. ■

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