

January 8, 2004

Water Docket  
Environmental Protection Agency, Mail Code 4101T  
1200 Pennsylvania Avenue, N.W.  
Washington, D.C. 20460

Subject: Long-Term 2 Enhanced Surface Water Treatment Rule, Proposed Rule  
68  
Federal Register 47639, Docket No. OW-2002-0039

Dear Sir or Madam:

The City of Akron appreciates the opportunity to review and comment on the proposed Long-Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR). We have reviewed the proposed rule language and associated guidance and have provided comments on the following key items:

1. The requirements for many of the microbial toolbox options are too restrictive and will prevent utilities, like Akron, who have been proactive in implementing these options from receiving appropriate *Cryptosporidium* removal credits.
2. It is unreasonable for EPA to require utilities currently practicing effective watershed protection to "amend and strengthen" their existing programs to receive the 0.5-log *Cryptosporidium* removal credit. The 0.5 log removal credit should be applied due to existence of a current effective program.
3. It is preferred that the proposed credits for individual filter performance and combined filter performance remain separate, since combining them into one toolbox option may prevent utilities, like Akron, from receiving any *Cryptosporidium* removal credit for enhanced filtration.

More detailed discussions regarding our concerns with these issues are attached. We appreciate your review and consideration of our concerns regarding these critical issues. If you have any questions regarding these comments please contact me at (330) 375-2627.

Sincerely,

Michael L. McGlinchy, P.E.  
Public Utilities Bureau Manager

MLM:BM:cw  
Attachments

## **Microbial Toolbox, Application and Demonstration, General**

The FACA discussions leading to the Agreement-in-Principle focused on the multiple benefits achieved by the microbial toolbox options, such as reduction in the concentrations of other contaminants (e.g., disinfection byproduct precursors) and reduction in pathogens other than *Cryptosporidium*. The FACA committee developed the microbial toolbox to provide alternatives to ultraviolet (UV) disinfection, and to promote drinking water treatment technologies with a broader range of water quality benefits.

Akron believes the microbial toolbox provides alternatives to UV disinfection; however, in its current state, the rule is too prescriptive in its dealing with many of the microbial toolbox options. As such, it will be difficult for many utilities already employing toolbox options to receive the recommended log removal credit.

By focusing solely on additional removal or inactivation of *Cryptosporidium*, to the exclusion of the additional collateral benefits associated with many of the toolbox options, EPA has essentially biased the toolbox toward UV disinfection. It seems to us that the implementation and demonstration requirements for many of the toolbox options are too onerous and costly to implement. EPA should adopt a strategy that encourages rather than discourages the use of toolbox options other than UV disinfection.

It is our belief that EPA should first enumerate those benefits, other than the reduction in *Cryptosporidium*, associated with each of the toolbox options. EPA should then re-evaluate available data, including data submitted to the docket, on toolbox technologies with the objective of assigning sound, operationally-achievable treatment credits for *Cryptosporidium*, particularly where utilities have proactively implemented such technologies to improve public health protection.

## **Watershed Control Program Credit**

Akron commends EPA for acknowledging that a well-planned watershed protection program can be an effective barrier to *Cryptosporidium*. However, EPA has not clearly identified the other benefits, such as reduction in disinfection byproduct precursors and suspended solids, protection against bacteria, viruses and other pathogenic organisms, and protection from other chemical contaminants introduced to the water supply either intentionally or unintentionally. EPA should enumerate these additional benefits in the final rule.

The current requirements to receive the 0.5-log *Cryptosporidium* removal credit for watershed protection are onerous and punitive for those utilities such as Akron that have been proactive in implementing watershed protection. It is

unreasonable to require systems with an effective watershed control program already in place to "...amend and strengthen their programs to get the log removal credit."

The City of Akron has protected its source waters, the Upper Cuyahoga River, since 1911 when acquisition of property along the river and principal tributaries began. This program has since evolved to include a much wider array of protection tools requiring administration, staff, supplies, equipment and funding. What began as early action to acquire and protect environmentally sensitive lands, now includes the implementation of best management practices on Akron-owned land, public education programs, monitoring and reporting of pollution, organization and involvement with watershed-based stakeholder groups and cooperation with other units of government, organizations and private landowners within the watershed of the Upper Cuyahoga River.

Akron currently owns approximately 12% of the 207 square mile watershed and manages it to promote natural land cover that includes mature forestland and wetlands. This type of land cover provides protection of the natural resource base, filtration of airborne and waterborne pollutants, moderation of stormwater runoff and continuity of river flow. Akron owns 36.3 miles of river frontage, equal to approximately 31% of the 117.1 total river miles along the East Branch, West Branch and mainstem of the Upper Cuyahoga River.

Akron's Source Water Protection Program includes:

1. Land Acquisition - Akron acquires available property within the Upper Cuyahoga River watershed as funds are available. Property offered for sale to Akron is prioritized for its potential benefit to Akron's water supply and is acquired by purchase or trade considering the current appraised value. Property within the riparian corridor closest to Lake Rockwell is considered the highest priority.
2. Best Management Practices - Akron utilizes common cultural and structural BMPs on its property to maintain and improve upon water quality of the river and Akron's reservoirs.
  - a. Tree planting of about 25,000 seedlings each year reforests land which is highly erodible or not naturally regressing into forestland. Timber stand improvement on existing forestland accelerates the rate of development of a mature forest canopy.
  - b. Sediment retention basins are constructed in waterways adjacent to Akron reservoirs to capture sediment before it flows into the reservoirs. Accumulated sediment is periodically removed, spread on nearby land and promptly re-vegetated.

- c. Check dams are installed in waterways in order to reduce the velocity of in-stream flow, reducing and eliminating stream scour and allowing sedimentation to occur in controlled locations from which the sediment can later be removed.
  - d. Hazmat spill containment sites are established at strategic points to enable collection and removal of hazardous materials from the river before it flows into Lake Rockwell.
  - e. Restriction of public access to environmentally sensitive and unsafe areas.
- 3. Public Education Programs - Akron staff promote awareness of the river's water quality and Akron's use of the river through a public recreation program on large portions of Akron's property, schools within the watershed and Akron's service area as well as through other agencies and organizations including local park districts.
- 4. Watershed Monitoring - Akron Watershed Rangers monitor the entire 207 square mile watershed by road and on the river for sources of possible contaminants. Upon identifying a source of contamination, the landowner is made aware of the active contamination and referred to the local soil and water conservation district for technical and financial assistance or the source is reported to a regulatory agency, including the local health district and Ohio EPA.
- 5. Organization and Involvement with Watershed Groups - Akron was instrumental in organizing the Upper Cuyahoga River Watershed Taskforce, a stakeholder group which meets bi-monthly to discuss activities within the watershed and opportunities for members to form alliances for the benefit of the river's water quality. Members include public agencies, elected officials, private organizations and private landowners.
  - a. The Taskforce annually hosts RiverScape, a public event for landowners within the watershed to learn more about the river, its watershed, water quality, public programs to protect the river and how private land management affects the river.
  - b. Taskforce committees have constructed several demonstration projects to promote innovative conservation measures to promote water quality including a constructed wetland (CW) as an alternate for conventional home sewage disposal systems (HSDS) and several rural road runoff improvement projects to demonstrate means of improving road drainage while reducing maintenance and improving downstream water quality in the river.

- c. Taskforce members annually canoe a portion of the river to see it firsthand and gain a better appreciation for the high quality of this unique natural resource.
6. Coordination with Other Units of Government, Organizations and Private Landowners - Akron staff regularly communicate with and participate in local emergency planning committees, county soil and water conservation district planning meetings, township zoning commission meetings and with township trustees at meetings or with special joint projects.

Akron firmly believes that watershed protection can be a valuable tool for enhancing raw water quality. However, as it is written, the proposed rule and associated guidance are too prescriptive and discourage, rather than encourage, utilities to develop a watershed protection program. Furthermore, it does not reward utilities for having previously implemented an effective watershed protection program. Requiring utilities to “amend and strengthen” their existing programs to receive the 0.5-log removal credit is potentially punitive to utilities like Akron who have already done as much as they can do, and the opportunities to “amend and strengthen” their existing program are too few and too costly to implement.

EPA should develop realistic expectations for watershed protection programs. The criteria are out-of-line with the credit to be granted, and will serve as a disincentive, rather than incentive, to utilities considering watershed protection. Annual reporting and watershed sanitary survey requirements are overly burdensome and draw resources away from productive source water protection activities.

### **Enhanced Filter Performance Credits**

The rule proposes two microbial toolbox options for enhanced filter performance:

1. 0.5-log credit for combined filter effluent (CFE) turbidity less than 0.15 NTU in 95% of monthly samples.
2. 1.0-log credit for individual filter effluent (IFE) turbidity less than 0.1 NTU in 95% of maximum daily values for each filter and no consecutive readings greater than 0.3 NTU.

Systems that demonstrate compliance with the IFE criteria and claim the 1.0-log removal credit are not eligible for the CFE credit.

Akron is already doing more than is required by state and federal drinking water regulations. In addition to the turbidity requirements of the IESWTR, we have

established a CFE goal of 0.05 NTU measured as an annual average. While there are months where we would meet the IFE criteria in the proposed rule, there are also months (generally the cold weather months) where it would be difficult for us to meet the IFE criteria. If the IFE and CFE criteria were combined, we may not be eligible to receive any removal credit.

We believe there are a number of utilities that may successfully meet the CFE requirements, but might have difficulty meeting the IFE requirements. For these reasons, Akron supports keeping the combined and individual filter performance credits separate, i.e., do not require both IFE and CFE goals to be met to receive removal credit.