

May 11, 2006

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Docket ID No. EPA-HQ-OW-2004-0014 U.S. Environmental Protection Agency Mail Code 4101T 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460 Via E-mail: OW-docket@epamail.epa.gov

RE: Notice of Data Availability; Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act

Dear Sir or Madam:

The National Association of Clean Water Agencies (NACWA) is pleased to offer the following comments on the U.S. Environmental Protection Agency's (EPA or Agency) notice of data availability, *Results of the Validation of m-ColiBlue24 Media for Enumeration of E. coli in Wastewater Effluent* (April 11, 2006; 71 *Fed. Reg.* 18329). We commend EPA for attempting to validate new procedures under the Clean Water Act (CWA) for microbiological pollutant analysis in wastewater matrices and appreciate the opportunity to review this new data supporting the approval of the m-ColiBlue24 method.

Over the past four years, NACWA has commented on several related EPA actions. These include EPA's May 2002 draft implementation guidance for the 1986 bacteria criteria, which still is not final. NACWA's comments on those Agency efforts remain valid today, especially as they regard the 1986 criteria values themselves.

NACWA's comments on the data regarding the validation of the m-ColiBlue24 method are based on comments received from its members.

### General Comments

NACWA believes that the results presented in the notice are a good, preliminary step, toward determining the suitability of this method. However, this limited study establishes the precision of the method to measure *E.coli* only under a very limited set of conditions. A customary EPA validation approach should be employed such as the procedure used to validate EPA 1603 (2005). This approach would address inter-laboratory variability, acceptance criteria, holding time variability, wastewater treatment type variability (secondary, tertiary, membrane bioreactors, etc.) and sample matrix variability.

The selection of the publicly owned treatment works (POTWs) in this case was not based on treatment technologies, the types of influents, process effectiveness, or any other factors that are of importance to POTW operations. NACWA believes the method must be proven effective over a much more inclusive set of circumstances than is indicated in this preliminary work for it to be approved for use in 40 CFR Part 136.

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# Specific Comments

**Inappropriate range of measurement:** Concentrations measured were of limited value to operators of POTWs. A method to verify compliance with NPDES standards in treated and disinfected effluents is needed. The targeted concentrations for which the validity of this method should be established are from the detection limit to the water quality standard for *E.coli* (~200 CFU/100mL). The majority of the concentrations measured and used for this validation study were one to several orders of magnitude above the range of concern for POTWs.

**Inter-laboratory variability:** A single laboratory was used to process every sample for this study. NACWA does not believe that the effectiveness of a nationally approved procedure can be established based on a single bench top study.

**Holding time variability:** Geographic distribution of POTWs resulted in the holding time extending to 30 hours in at least some cases. The holding time for EPA 1603 is six hours. The effect of this extended holding time was not evaluated or discussed.

**Low colony counts:** Colony counts were below the ideal range of 20-80 in 8 of the 11 enumerations using the m-ColiBlue24 method. Counts were lower than ideal in 5 of the 11 samples using Method 1603. Reasons were not discussed in the write-up.

**Inconsistent sample dilutions for the two methods:** For the Tullahoma, Tenn. and North Andover, Mass. enumeration tables, the sample dilutions between the two methods do not match. It would be useful to see data from all dilutions analyzed. Two to three dilutions were analyzed for all sample sets but results for only one dilution were presented.

**Sample Temperature Conditions:** The sample shipping temperature was maintained between  $0^{\circ}$ C and  $10^{\circ}$ C. This does not meet the temperature requirement of  $\leq 4^{\circ}$ C for wastewater samples.

Because of the extensive use and far-reaching implications of the 40 CFR Part 136 methods, NACWA requests that EPA address these issues before it considers approving the m-ColiBlue24 method. Please contact me at 202/833-1906 if you have any questions.

Sincerely,

Chris Hornback

Director, Regulatory Affairs